

Elwood Child Care Centre – CHS 222

ASBESTOS MANAGEMENT PLAN

46 Tennyson St, Elwood VIC 3184



Report Prepared For:

City of Port Phillip

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EXECUTIVE SUMMARY

Asbestosafe performed a Division 5 Asbestos Audit of nominated City of Port Phillip buildings on the 23rd of February 2019.

The Division Asbestos audit has been performed in accordance with the requirements of Part 4.4, Division 5 of the Victorian Occupational Health and Safety Regulations 2017.

The asbestos audit incorporated:

- Site inspections to confirm, as far as practicable, the location and condition of asbestos containing materials identified in the existing asbestos registers previously compiled by Asbestosafe;
- An assessment of the friability and condition of identified asbestos containing materials;
- Labelling of selected asbestos containing materials;
- Compilation of Asbestos Registers;
- Provision of information to assist in complying with the relevant requirements of Part 4.4 of the Victorian Occupational Health and Safety Regulations 2017.

An asbestos register for each building has been prepared and is included as Appendix A below of this report.

The building was constructed circa 1950 and was vacant at the time of inspection.

It is recommended that attention should be paid to the building materials where recommendations have been made in each item contained within the register. Refer also to photographs in each relevant register. Labelling was conducted during the site audits where asbestos was deemed to be present and was based on previous laboratory results and the knowledge and experience of our team of consultants. Samples taken at these locations were analysed at an independent NATA accredited laboratory.

Labels will now need to be removed where samples returned a negative result.

Additional information and recommendations to assist in complying with the relevant requirements of Part 4.3 of the Victorian Occupational Health and Safety Regulations 2017 are included in the report under comments & recommendations.

COMMENTS AND RECOMMENDATIONS

No asbestos was identified during the inspection.

The following specific inaccessible or restricted areas were noted during the Assessment:

- Behind ceramic wall tiles, access would have caused damage
- Above the timber ceiling, access would have caused damage
- There was restricted access to the roof due to height restrictions

Asbestosafe recommends that the following specific actions be taken as part of the overall management and control of asbestos or ACM:

- Manage and review identified and presumed ACM;
- Label all identified and presumed ACM.

Under no circumstances should unidentified potential asbestos or ACM be disturbed in any way. If unidentified potential asbestos or ACM are found within the boundaries of the subject site, then that material must either be assumed to contain asbestos and be treated with the appropriate caution based on the level of risk, or a sample should be taken and analysed. If it is assumed to contain asbestos, it is considered to be asbestos for all legal purposes.

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1. INTRODUCTION

The Division 5 asbestos audit has been performed in accordance with the requirements of Part 4.4, Division 5 of the Victorian Occupational Health and Safety Regulations 2017.

This audit incorporated:

- A site inspection and the identification, as far as practicable, of the location and type of asbestos containing materials within buildings with no existing asbestos register.
- An assessment of the friability and condition of identified asbestos containing materials.
- Labelling of selected asbestos containing materials.
- Compilation of an Asbestos Register.
- Provision of information to assist in complying with the relevant requirements of Part 4.4 of the Victorian Occupational Health and Safety Regulations 2017.

A list of all areas inspected are included in the asbestos register, sorted by building name or ID, and is presented in Appendix A.

1.2 Asbestos

The related health aspects of exposure to airborne asbestos fibres have been well documented. The inhalation of asbestos fibres is known to cause mesothelioma, lung cancer and asbestosis and other respiratory diseases. Asbestos poses a risk to health by inhalation whenever asbestos fibres become airborne and people are exposed to these fibres. Accordingly, exposure should be prevented.

Malignant mesothelioma is a cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelium cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness.

Mesothelioma was once rare, but its incidence is increasing throughout the industrial world as a result of past exposures to asbestos. Australia has the highest incidence rate in the world.

Lung cancer has been shown to be caused by all types of asbestos. The average latency period from first exposure to developing the disease ranges from 20 to 30 years. Lung cancer symptoms are rarely felt until the disease has developed to an advanced stage.

Asbestosis is a form of lung disease (pneumoconiosis) directly caused by inhaling asbestos fibres, causing a scarring (fibrosis) of the lung tissue which decreases the ability of the lungs to transfer oxygen to the blood. The latency period of asbestosis is generally between 15 and 25 years.

Asbestos poses a risk to health by inhalation whenever respirable asbestos fibres become airborne. Airborne respirable fibre concentrations can be estimated using available data (for example, monitoring reports, data from scientific literature) or past experience (for example, monitoring reports) of the process in question. In cases of doubt, it may be necessary to confirm the estimates by measurement using the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC: 3003 (2005)]*.

Exposure monitoring measures the levels of respirable fibres in the breathing zone of the worker while work is being undertaken. Exposure monitoring must be carried out by a competent person, who may include a licensed asbestos assessor or a person who has undertaken the endorsed unit of competency for licensed asbestos assessors. An occupational hygienist who has experience in asbestos exposure monitoring may also be used.

Where exposure monitoring is carried out, it is good practice to stop work and investigate the cause if the level of airborne asbestos in the breathing zone reaches half the exposure standard. Although the need for exposure air monitoring will depend on the particular circumstances, the results may assist in assessing risks associated with asbestos.

Other forms of air monitoring that are relevant to asbestos work are discussed in more detail in the approved *Code of Practice: How to Safely Remove Asbestos*. These include:

- Control monitoring for ensuring that an enclosure or other controls used during asbestos removal are effective at preventing fibres from being found outside the work area; and
- Clearance monitoring to ensure that the work area is free of asbestos fibres prior to being certified for reoccupation.

The degree of respirable asbestos fibre released and subsequent exposure is in part dependent upon the matrix material binding the asbestos and its general condition.

There are six commercial varieties of asbestos which are currently regulated the approved *Code of Practice: How to Manage and Control Asbestos in the Workplace*:

- **Actinolite** (Amphibole)
- **Amosite/Grunerite** (Amphibole) - commonly known as grey or brown asbestos
- **Anthophyllite** (Amphibole)
- **Chrysotile** (Serpentine group) - commonly known as white asbestos
- **Crocidolite** (Amphibole) - commonly known as blue asbestos
- **Tremolite**(Amphibole)

The highest health risk is associated with exposure to amphibole asbestos (all varieties with the exception of chrysotile) with crocidolite being cited as the material of greatest concern.

2. METHODOLOGY

The aim of the Asbestos Audit was to identify asbestos containing material and their associated risks to personnel while undertaking typical workplace activities. Specific aims are to:

- Assess the surveyed areas for the presence of asbestos containing materials;
- Identify, as far as practicable, the type, location, friability, condition and disturbance potential of the identified asbestos containing materials;
- Assess the risk associated with the presence of the identified asbestos containing materials; and
- Make appropriate recommendations to ensure that any risk associated with the presence of asbestos is controlled.

The Division 5 Asbestos Audit has been conducted in accordance with the general requirements of Regulation 4.4 of the 2017 Regulations.

The asbestos register is **not** intended to be used for the purpose of refurbishment or demolition works. Where refurbishment or demolition works are proposed, a review of the Asbestos Register, and where necessary revision of any control measures must be undertaken in accordance with Division 6 of the 2017 Regulations.

The areas included in this report are listed in the asbestos register contained in Appendix A.

Where required, an independent NATA accredited laboratory carried out analysis of materials suspected of containing asbestos. Certificates of analysis of samples are presented in Appendix B. During the site inspection, asbestos warning labels were fixed, where practicable.

The areas included in this report are listed in the asbestos register contained in Appendix A.

Where required, an independent NATA accredited laboratory carried out analysis of materials suspected of containing asbestos. Certificates of analysis of samples are presented in Appendix B. During the site inspection, asbestos warning labels were fixed, where practicable.

2.1 Training

The OHS Regulations state that a person conducting a business or undertaking must ensure workers who they reasonably believe may be involved in asbestos removal work in the workplace of carrying out of asbestos-related work are trained in the identification, safe handling and suitable control measure for asbestos and ACM.

The required level of training is more general than that of a qualified asbestos removalist which required workers to undertake specific units of competency.

Topics include:

- Asbestos related health risks;
- Historical uses or likely presence of asbestos or ACM;
- Processes and safe work procedures to be followed to prevent exposure;
- Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE); and
- Exposure standards and control levels for asbestos.

The OHS Regulations states a person conducting a business or undertaking must ensure that information, training, and instruction provided to a worker is suitable and adequate, having regard to:

- The nature of the work carried out by the worker;
- The nature of the risks associated with the work at the time the information, training or instruction is provided; and
- The control measures are implemented.

The person must, so far as is reasonably practicable, ensure the information, training and instruction is provided in a way that is readily understandable by any person to whom it is provided.

2.2 Record Keeping

The person with management or control of the workplace should maintain detailed records of all activities relating to asbestos works which are undertaken within the subject site, in line with all current legislation and codes of practices.

The records should include:

- Copies of the asbestos register, including updates and amendments;
- Permits to conduct works in restricted work areas;
- Induction records of contractors, visitors and employees noting the presence and location of the asbestos register for the subject site;
- Records of all asbestos related works, including maintenance and removal;
- Clearance certificates relating to asbestos works; and
- Air monitoring certificates of analysis relating to any asbestos works.

2.3 Warning Signs

The OHS Regulations states that a person with management or control of a workplace must ensure where reasonably practicable, that a label indicates the presence of asbestos or ACM. In areas where it is not practicable to label asbestos or ACM, warning signs should be installed.

The purpose of warning signs and labels are to advise all relevant people on site that asbestos or ACM has been identified or assumed to be present and that an asbestos register exists. They should be located in a position near or on a specified area where asbestos or ACM was identified or assumed to be present. All warning signs must be compliant with AS 1319-1994 – Safety Signs for the Occupational Environment. Examples of warning signs and labels can be found in **Appendix F** – Example Warning Signs and Label.

Should you require warning labels or signs, please do not hesitate to contact Asbestosafe directly.

2.5 High Risk Areas

Areas of potential high risk should not be touched or disturbed in any way. Expert advice or assistance should be sought from a suitably qualified asbestos removalists or assessor prior to any works being conducted within these areas. Such areas include but are not limited to any identified heater banks, damaged or fragmented ACM, fire doors, boiler and pipe lagging, sprayed on insulation and other areas containing friable asbestos or ACM.

All potential high-risk areas identified within the boundaries of the subject site are listed in the asbestos register in **Appendix A**. For more information relating to the management of these areas, please contact Asbestosafe directly.

2.6 Safe Work Practices

This survey is not intended to be used for the purpose of refurbishment or demolition works. Where refurbishment or demolition works are proposed, a review of the Asbestos Register, and where necessary revision of any control measures must be undertaken in accordance with Part 4.4 Division 6 of the 2017 OHS Regulations.

Working with dry asbestos or ACM should be avoided wherever possible. Techniques that prevent or minimise the generation of airborne asbestos fibres must be employed at all times. Such techniques include but are not limited to the following:

- Wetting the asbestos or ACM with surfactants or wetting agents, such as detergent water;
- The use of thickened substances, pastes or gels, including hair gel and shaving cream, to cover the surface of asbestos or ACM being worked on (these substances should be compatible with the conditions of use, including temperature, and should not pose a risk to health);
- The use of shadow vacuuming; and
- Performing the task in a controlled environment (for instance, a ventilated enclosure).

Control measures must be employed for all asbestos work or asbestos related work. The use of high-speed abrasive power and pneumatic tools is prohibited under the OHS Regulations, except where used with dust suppression/extraction controls. These controls include local exhaust ventilation (LEV) dust control hoods that attach to the tool and isolate the area being worked on from the environment, ensuring that dust is captured.

Examples of safe work practices can be found in **Appendix D** of this report.

2.8 Occupational Exposure Standards

Where occupational exposure to asbestos is likely to occur, exposure is not to exceed the National Exposure Standard (NES). Occupational exposure is measured using the Membrane Filter Method, by collecting a sample of air from the breathing zone of a person, over minimum four hours duration. The current occupational exposure standards for asbestos are:

- Chrysotile (white) asbestos – 0.1 fibres per millilitre;
- Amosite (brown) asbestos – 0.1 fibres per millilitre;
- Crocidolite (blue) asbestos – 0.1 fibres per millilitre;
- Other forms of asbestos fibres – 0.1 fibres per millilitre; and
- Any mixture of fibre types or where the composition is unknown – 0.1 fibres per millilitre;

All precautions should be taken to completely minimise dust generation and appropriate PPE and respiratory protection (RPE) should be worn at all times when disturbing asbestos or ACM or entering a high-risk area.

3. RISK ASSESSMENT AND MANAGEMENT

The information contained within this section has been provided to assist the “person who manages or controls the workplace”, “the employer” and/or “asbestos licence holder” in complying with the requirements of Chapter 4, Part 4.4 of the 2017 Regulations. It should however be noted that not all requirements of the 2017 Regulations are included. It is therefore recommended that the “person who manages or controls the workplace”, “the employer” and/or “asbestos licence holder” consult the Regulations to ensure that they are fully aware of their obligations.

Assistance in managing asbestos risk is also provided in the WorkSafe Victoria Compliance Code Managing Asbestos in Workplaces.

3.1 Determination of Risk

Asbestos presents a health hazard in that there is potential for harm to occur. Risk examines the probability of the potential harm occurring.

Asbestos exposure may occur only when free asbestos fibres of respirable dimensions are airborne such that they may be inhaled. The exposure risk increases as the number of airborne respirable asbestos fibres increases, and when the duration of time that airborne respirable asbestos fibres are present increases.

Asbestos fibres, which have been manufactured into varying materials or matrices, can be found in many working environments. Provided that the binding matrix remains stable, or that the fibres are encapsulated or undisturbed such that no significant amount of airborne asbestos fibres is produced, then asbestos containing materials are not considered to represent an exposure risk. The mere presence of asbestos containing materials, therefore, does not necessarily indicate that a health risk exists.

The National Occupational Health and Safety Commission’s (NOHSC) *Code of Practice for the Management and Control of Asbestos in Workplaces* defines “Asbestos Exposure Risk” as “the likelihood of illness or disease arising from exposure to airborne asbestos fibre”.

The 2017 Regulations require that the person who has management or control of a workplace must eliminate, so far as is reasonably practicable, the exposure of persons at the workplace to airborne asbestos fibres. Recommendations contained within this report therefore aim to ensure that airborne fibre levels are minimised to levels below the limit of detection for the recognised monitoring/analytical method of 0.01 fibres per millilitre of air, as a time weighted average. To assess the risk associated with the identified asbestos containing materials, the following factors have been considered:

- Type of matrix - type of product or binding matrix;
- Friability - potential for release of asbestos fibres into the air;
- Condition - evidence of past deterioration or damage; and
- Location - potential for future disturbance or access.

Where asbestos containing materials have been determined to represent or potentially represent an exposure risk, recommendations for removal, enclosure or encapsulation of the material have been made in order to control this risk.

3.2 Controlling Risk Associated with the Presence of Asbestos

Where it has been established that an exposure risk exists as a result of asbestos in the workplace, those with management or control of the workplace, and/or employers and self-employed persons within the workplace are obliged to implement control measures to eliminate the risk. If it is not reasonably practicable to eliminate the risk, the risk must be reduced so far as reasonably practicable.

The hierarchy of controls, which should be implemented, is as follows:

1. Elimination of the risk: by removing the affected asbestos containing materials wherever practicable;
2. Encapsulation/Sealing: if elimination is not practicable or if a risk still remains after partial elimination, then affected asbestos should be encapsulated or sealed to minimise the possibility of fibre release; or
3. Personal Protective Equipment: if elimination and encapsulation/sealing is not practicable or if a risk still remains, then the risk of personal exposures to asbestos fibres should be eliminated or minimised as far as practicable using personal protective equipment.

3.3 Inaccessible Areas

Specific locations within the surveyed areas, which were inaccessible at the time of the survey, have been detailed, as far as practicable, within the Asbestos Register. In general, inaccessible areas may include, but are not limited to:

- Sub-floor areas;
- Ceiling/roof cavities;
- Wall cavities and plumbing ducts;
- Electrical equipment;
- Internal sections of air conditioning and water heating systems;
- Plant equipment; and
- Shafts, voids and service risers.
-

As required by regulation 4.4 of the 2017 Regulations if there is uncertainty (based on reasonable grounds) as to whether asbestos is present, or if there are inaccessible areas that are likely to contain asbestos, the person who manages or controls the workplace must:

- (a) Presume that asbestos is present; or
- (b) Arrange for analysis of a sample to be undertaken.

In the event that future access is required into such areas, a further assessment to confirm the presence or absence of asbestos is recommended.

Any works, which may cause penetration into areas not previously accessible, should be conducted under controlled conditions. Confirmation of the presence/absence of asbestos in the previously inaccessible area should be undertaken in accordance with Division 6 of the 2017 Regulations.

3.4 Asbestos Airborne Fibre Monitoring

The 2017 Regulations requires that the person with management or control of the workplace 'ensure that a determination of an employee's exposure to airborne asbestos fibres in the workplace is carried out if there is uncertainty (based on reasonable grounds) as to whether the asbestos exposure standard has been exceeded.'

Based on the current condition of the asbestos containing materials located and given the findings of the associated risk assessment, airborne asbestos fibre monitoring is not currently considered necessary.

These control levels are occupational hygiene 'best practice' and are not health-based standards.

Control level	Control/Action
<0.01 fibres/ml	Continue with control measures
≥0.01 fibres/ml	Review control measures
≥0.02 fibres/ml	Stop removal work and find cause

3.5 Review of Asbestos Register & Control Measures

The 2017 Regulations requires that the Asbestos Register be revised, where necessary, if:

- There is a change in the condition of the asbestos containing material: or
- Asbestos containing material has been removed, enclosed or sealed.

The 2017 OHS regulation requires that the person who manages or controls a workplace ensure that any measures implemented to control risks associated with the presence of asbestos are reviewed, and, if necessary revised:

- Before any change is made to the workplace or a building, structure, ship or plant at the workplace or a system of work that is likely to disturb or damage any asbestos; or
- After any incident occurs to which Part 5 of the Victorian Occupational Health and Safety Act 2017 applies that is associated with the presence of asbestos; or
- If, for any other reason, the risk control measures do not adequately control the risks.

Where no such occurrences as outlined above occur, the Asbestos Register must be reviewed, and where necessary revised, at least every 5 years.

3.6 Maintenance Works

Wherever possible, maintenance works should be planned in such a way that the identified asbestos containing materials are not disturbed.

Where maintenance work may result in the disturbance of the asbestos containing materials, removal of such materials is generally recommended. Where removal of the asbestos containing materials is not practicable, additional advice should be sought from Asbestosafe with regard to alternative measures that may be available to ensure that the risk of exposure to asbestos is minimised.

Where maintenance work may result in the access to previously inaccessible areas, a further assessment should be conducted to confirm the presence/absence of asbestos.

3.7 Refurbishment & Demolition Works

This report is not intended to be used for the purpose of assisting with refurbishment or demolition works. Where refurbishment or demolition works are proposed, a review of the Asbestos Register, and where necessary revision of any control measures must be undertaken in accordance with Division 6 of the 2017 Regulations.

Any asbestos containing material, which may be disturbed by total demolition, partial demolition works or during the course of refurbishment works shall be removed prior to the commencement of such works. Where removal of the asbestos containing materials is not practicable, additional advice should be sought from Asbestosafe with regard to alternative measures that may be available to ensure that the risk of exposure to asbestos is minimised.

Where areas of the building have been previously identified as inaccessible, such areas shall be assessed for asbestos containing materials prior to or during the course of the demolition works. In accordance with the Australian Standard AS 2601-2001 Demolition of Structures and current industry practice, it is also recommended that an assessment of additional potential hazardous building materials in the form of synthetic mineral fibre products, lead based paints and PCB containing electrical items also be performed prior to the commencement of refurbishment or demolition works

3.8 Asbestos Removal Works

Asbestos removal work must be carried out, as a minimum, in accordance with the requirements of Chapter 4, Part 4.4 of the 2017 Regulations. The general requirements of the Regulations are as follows:

The asbestos removal work shall be carried out by an asbestos removal licence holder (some exceptions apply to the removal of minor quantities of non-friable asbestos containing materials - see below for further details):

- The asbestos removal licence holder shall appoint a supervisor to oversee the removal work;
- The asbestos removal licence holder shall prepare a Control Plan which documents the control measures which will be implemented during the asbestos removal works;
- The asbestos removal licence holder shall provide notification to WorkSafe Victoria at least 5 days prior to removal work commencing;
- Personnel performing the asbestos removal works shall wear appropriate protective clothing and respiratory protection;
- Appropriate decontamination facilities shall be provided and decontamination procedures shall be followed at all work breaks;
- The asbestos removal work areas shall be appropriately signposted and access to asbestos removal work areas by unprotected personnel shall be restricted; and
- The asbestos removal licence holder shall ensure that asbestos waste is contained, transported and disposed of in an appropriate manner. Information regarding asbestos removal work methods may be obtained from the WorkSafe Compliance Code Removing Asbestos in Workplaces.

Specific additional general requirements for the removal of friable asbestos containing materials include, but are not limited to:

- Establishment of a sealed work enclosure with negative pressure exhaust system and wet decontamination facility;
- A visual inspection and smoke testing of the work enclosure by a competent and independent person or Occupational Hygienist prior to commencement of asbestos removal activities;
- Testing of the work enclosure by a competent and independent person or Occupational Hygienist during the asbestos removal works to ensure that a negative air pressure difference of 12 Pa (water gauge) is maintained within the asbestos work area; and

-
- Certification of completion of the asbestos removal works by a competent and independent person or Occupational Hygienist, incorporating clearance air monitoring following completion of the asbestos removal works, and again following removal of all associated enclosure apparatus and equipment.

Additional information relating to asbestos removal may be obtained from the National Occupational Health and Safety Commission Code of Practice for the Safe Removal of Asbestos, 2nd Edition, 2005.

If the removal of less than 10 square metres of non-friable asbestos containing materials is to take less than one hour in any period of seven days, removal may be performed by a non-licensed employer or self-employed person in accordance with Regulation 4.4.45 of the 2017 Regulations. Should a non-licensed employer or self-employed person perform such works, the requirements of Chapter 4, Part 4.3, Division 7, Subdivision 2 of the Regulations must be complied with, which include, but are not limited to:

- Training for personnel performing the works.
- Provision of information.
- Implementation of control measures during the removal works.
- Use and maintenance of personal protective equipment.
- Signage.
- Decontamination procedures.
- Waste containment and disposal.

3.9 The Person who Commissions the Asbestos Removal Works

The 2017 Regulations place specific duties on the person who commission's non-friable asbestos removal works. These duties include, but are not limited to:

- Informing all employers in the immediate and adjacent areas prior to work commencing.
- Arranging for a visual inspection and issue of a Clearance Certificate by an independent person at the completion of asbestos removal works, prior to the affected area being re-occupied.

In addition to the above requirements, consideration should also be given to performing control air monitoring during, and at the completion the removal of non-friable asbestos containing materials, especially in areas adjacent to the asbestos removal work, which will be occupied by unprotected personnel. Note: Analysis of air monitoring samples must be performed by an approved analyst (i.e. NATA accredited analyst / laboratory).

4. LIMITATIONS

There is no guarantee, *expressed or implied*, that all asbestos and ACM has been identified or presumed to be present within the boundaries of the subject site. Areas where samples have not been taken and analysed, including samples which have been classified as 'similar to' other samples, and areas not accessed during the audit must be investigated further and all care and caution taken in the event of future project building work, including refurbishment, removal and/or demolition work.

All measurements and quantities mentioned in this report are approximations only and should not be relied on for asbestos removal tendering purposes.

Asbestos or ACM may be present in inaccessible areas. Inaccessible areas are areas that cannot be accessed during normal daily activities or routine maintenance. Examples of inaccessible areas that may contain asbestos or ACM include, but are not limited to:

- A cavity in a building that is completely (or almost completely) enclosed and suspected of containing asbestos (based on where asbestos is located elsewhere in the building) and access is only possible through destruction of part of the walls of the cavity;
- The inner lining of an old boiler pressure vessel (information on this type of vessel suggests it contains asbestos) and the inner lining is not accessible due to the design and operation of the boiler and access can only be via partial destruction of the outer layer;
- Vinyl tiles or cement based flooring that may contain asbestos, which have had a number of layers of non-ACM placed over them and secured, where the layers above it have been well secured and require some form of destruction in order to access the vinyl or cement based material that may contain asbestos;
- Enclosed riser shafts in multi-storey buildings containing cables that may be insulated with ACM;
- Underground services such as electrical conduits, water pipes, and fire fighting pipelines may contain or be contracted from asbestos or ACM; and
- Air conditioning ducts that may contain asbestos gaskets or linings.

Unless otherwise mentioned in the asbestos register, electrical switchboards, electrical cabling, plant equipment / machinery, air conditioning units, boilers, pumps, transformers, generators and any other equipment or machinery not specifically mentioned which were 'live' at the time of the audit were not accessed or inspected for safety reasons.

Fire door cores were accessed only along the top edge of the door. No lock or door mechanisms were dismantled. If the door was fully enclosed or the edges beaded, the fire door is classed as inaccessible.

Subject sites which have undergone renovation and refurbishments throughout their lifetime have a large variety and range of potential asbestos or ACM. Representative samples from these potential asbestos or ACM are taken for identification purposes however without sampling each individual sheet, panel or area, the results of the sampling can only give an indication of the presence of asbestos. If unsure, the material must either be assumed to contain asbestos and be treated with the appropriate caution based on the level of risk, or a sample should be taken and analysed. If it is assumed to contain asbestos, it is considered to be asbestos for all legal purposes.

5. REFERENCES


State Government of Victoria, Occupational Health & Safety Regulations 2017 (Part 4.3 Asbestos)


Occupational Health and Safety Act 2004 VIC

Worksafe Victoria, Compliance Code - Removing Asbestos in Workplaces, (2018).

Worksafe Victoria, Compliance Code - Managing Asbestos in Workplaces, (2018).


APPENDIX A – ASBESTOS REGISTER


Location Details		Material Details		Results / Management Details		Photographs	
Sample #:	No sample required	Material Type:	Non-asbestos vinyl sheet	Status of ACM:			
Accessed:	Yes						
Elevation:	Ground Floor	Quantity:		Disturbance Potential:			
Area:	Baby Playroom 1	Condition:		Sample Result:			
Position Installed:	Floor covering	Friability:		Risk Level:			
Internal/External:	Internal	Recommendation:					
Comments:						Urgent Action Required?	


Location Details		Material Details		Results / Management Details		Photographs
Sample #:	No sample required	Material Type:	Possible Cement Sheet	Status of ACM:		
Accessed:	No					
Elevation:	Ground Floor	Quantity:	5 - m2	Disturbance Potential:		
Area:	Children's W/C	Condition:		Sample Result:		
Position Installed:	Wall under ceramic tiles	Friability:		Risk Level:		
Internal/External:	Internal	Recommendation:	Inspect for asbestos prior to disturbance			
Comments:	No access without damage					Urgent Action Required?

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Location Details		Material Details		Results / Management Details		Photographs
Sample #:	No sample required	Material Type:	Possible Cement sheet	Status of ACM:		
Accessed:	No					
Elevation:	Ground Floor	Quantity:	10 - m2	Disturbance Potential:		
Area:	Bathroom W/C	Condition:		Sample Result:		
Position Installed:	Wall under ceramic tiles	Friability:		Risk Level:		
Internal/External:	Internal	Recommendation:	Inspect for asbestos prior to disturbance			
Comments:	No access without damage					Urgent Action Required?

Location Details		Material Details		Results / Management Details		Photographs
Sample #:	No sample required	Material Type:	Possible Cement sheet	Status of ACM:		
Accessed:	No					
Elevation:	Ground Floor	Quantity:	8 - m2	Disturbance Potential:		
Area:	Kitchen	Condition:		Sample Result:		
Position Installed:	Wall under ceramic tiles	Friability:		Risk Level:		
Internal/External:	Internal	Recommendation:	Inspect for asbestos prior to disturbance			
Comments:	No access without damage					Urgent Action Required?

Location Details		Material Details		Results / Management Details		Photographs
Sample #:	No sample required	Material Type:	Cement sheet	Status of ACM:		
Accessed:	No					
Elevation:	Ground Floor	Quantity:	8 - m2	Disturbance Potential:		
Area:	Toilet	Condition:		Sample Result:		
Position Installed:	Wall under ceramic tiles	Friability:		Risk Level:		
Internal/External:	Internal	Recommendation:	Inspect for asbestos prior to disturbance			
Comments:	No access without damage					Urgent Action Required?

KEY to Codes Used in the Asbestos Register:

Friability

Friable	When dry, (a) may be crumbled, pulverised or reduced to a powder by hand pressure; or (b) as a result of a work process becomes such that it may be crumbled, pulverised or reduced to a powder by hand pressure
Non - Friable	Unable to be crumbled, pulverised or reduced to a powder by hand pressure.
Unknown	No access available to assess friability
Not Applicable	A measure of friability does not apply to this material.

Condition

Good	Well secured, surfaces are stable and fibres are well bonded either by its matrix,
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	encapsulating material or paint.
Fair	May be loose, broken or its surface/matrix partly deteriorated or frayed.
Poor	Item damaged, sufficiently broken, or its surface/matrix badly deteriorated or frayed such that fibres may be released to the atmosphere.
Unknown	No access available to assess condition
Not Applicable	A measure of condition does not apply to this material.

Disturbance Potential

Low	Disturbance is unlikely during normal occupation, or during standard maintenance works.
Medium	Disturbance unlikely during normal occupation, but may occur as a result of standard maintenance works.
High	Disturbance may be unavoidable during normal occupation, or is likely to occur during standard maintenance works.

APPENDIX B – NATA ACCREDITED LABORATORY REPORT/S

No laboratory analysis required

APPENDIX C – LIST OF ACRONYMS & GLOSSARY OF TERMS

Accredited Laboratory: Defines a testing laboratory accredited by NATA (National Association of Testing Authorities, Australia).

ACM: Asbestos Containing Material (ACM) means any material, object, product or debris containing asbestos.

Air Monitoring: Refers to airborne asbestos air sampling to assist in assessing exposure and the effectiveness of control measures. This includes exposure monitoring, clearance monitoring and control monitoring.

AMO: Abbreviation within asbestos register for amosite (Brown/Grey Asbestos) fibres.

Asbestos: Defined as the fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including actinolite, amosite/grunerite (brown or grey asbestos), anthophyllite, crocidolite (blue asbestos), chrysotile (white asbestos), tremolite, or any mixture containing one or more of these.

Asbestosis: A form of lung disease (pneumoconiosis) directly caused by inhaling asbestos fibres, causing a scarring (fibrosis) of the lung tissue which decreases the ability of the lungs to transfer oxygen to the blood. The latency period of asbestosis is generally between 15 and 25 years.

Asbestos Removalist: Means a competent person who performs asbestos removal work.

Asbestos Removal Work: Means the removal of asbestos or ACM.

Asbestos Work Area: The immediate area in which work on ACM is taking place. The boundaries off the work area must be determined by a risk assessment.

Bonded Asbestos: Means asbestos or ACM in which the asbestos fibres are bound into a firm matrix (i.e. cementations or resinous).

CHR: Abbreviation within asbestos register for chrysotile (White Asbestos) fibres.

CRO: Abbreviation within asbestos register for crocidolite (Blue Asbestos) fibres.

Clearance Inspection: Refers to an inspection carried out by a competent person, to verify that an asbestos work area is safe to be returned to normal use after work involving the disturbance of ACM has taken place. A clearance inspection must include a visual inspection, and may also include clearance monitoring and/or settled dust sampling.

Clearance Monitoring: Air monitoring using static or positional samples to measure the level of airborne asbestos in an area following work on ACM. An area is cleared when the level of airborne asbestos fibres is measured as being below 0.01 fibres/mL.

Competent Person: Means a person who has acquired through training, qualification or experience the required knowledge, and skills to carry out a task.

Control Monitoring: Air monitoring using static or positional to measure the level of airborne asbestos fibres in an area during work on ACM. Control monitoring is designed to assist in assessing the effectiveness of control measures. Its results are not representative of actual occupational exposures and should not be used for that purpose.

Friable Asbestos: Means asbestos or ACM which, when dry, is or may become crumbled, pulverised or reduced to powder by hand.

Condition: The physical state of the material in question.

Hazard: Refers to any matter, thing, process, or practice that may cause death, injury, illness or disease.

HEPA Vacuum Cleaner: Means a vacuum cleaner that is fitted with a High Efficiency Particulate Air (HEPA) Filter which complies with AS 4260-1997 High efficiency particulate air (HEPA) filters – classification, construction and performance. A domestic vacuum cleaner is not suitable for use with asbestos.

Lung Cancer: This disease has been shown to be caused by all types of asbestos. The average latency period of the disease, from the first exposure to asbestos, ranges from 20 to 30 years. Lung cancer symptoms are rarely felt until the disease has developed to an advanced stage.

Malignant Mesothelioma: A cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelial cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness. Mesothelioma was once rare, but its incidence is (continued) increasing throughout the industrial world as a result of past exposures to asbestos. Australia has the highest incidence rate in the world.

Masonry: Concrete work, brickwork or stone work.

NAD: No asbestos or ACM detected.

NATA: National Association of Testing Authorities, Australia.

Non-friable (Asbestos): Material, not in its natural state, that is bonded by a cement matrix, vinyl, resin or other binding material.

Occupational Hygienist: A qualified and/or experience person with tertiary qualification in a science or occupational health related field. To work within the asbestos industry, Occupational Hygienists should be NATA Accredited, and must have experience in the assessment and control of asbestos, and other chemical, physical or biological hazards in the workplace.

Person Conducting a Business or Undertaking (PCBU): Means a person conducting a business or undertaking alone or with others, whether or not for profit or gain. A PCBU can be a sole trader (for example a self-employed person), a partnership, company, unincorporated association or government department of public authority (including municipal council). An elected member of a municipal council acting in that capacity is not a PCBU.

Permit to Work: A formal written authority to operate a planned procedure, which is designed to protect personnel working in hazardous areas or activities. Authority for a safe system of work.

Person with Management or Control of a Workplace: means a PCBU with management or control over the workplace.

Personal Protective Equipment (PPE): Means equipment and clothing that is used or worn by an individual person to protect them against, or minimize their exposure to, workplace risks. It includes items such as facemasks and respirators, coveralls, goggles, helmets, gloves and footwear.

Respirable Asbestos Fibres: Asbestos fibres less than 3 µm wide, more than 5 µm long with a width ratio of more 3:1.

Respiratory Protective Equipment (RPE): Equipment used to protect personnel from inhalation of asbestos and other hazardous or radioactive materials.

Risk: The likelihood and consequence of a hazard causing harm to a person or the environment.

Workplace: Is any place where work is, or is to be, performed by a worker; or a person conducting a business or undertaking.

APPENDIX D – RECOMMENDED SAFE WORKING PROCEDURES

The following safe working practices are excerpts from the approved code of practice: How to Manage and Control Asbestos in the Workplace. These practices demonstrate how control measure can be used when asbestos or ACM is present in the workplace. Note this is not an exhaustive list of safe working practices.

- Safe work practice 1 – Drilling for asbestos-containing material
- Safe work practice 2 – Sealing, painting, coating and cleaning of asbestos-cement products
- Safe work practice 3 – Cleaning leaf litter from gutters of asbestos cement roofs
- Safe work practice 4 – Replace cabling in asbestos cement conduits or boxes
- Safe work practice 5 – Working on electrical mounting boards (switchboards) containing asbestos
- Safe work practice 6 – Inspection of asbestos friction materials

SAFE WORK PRACTICE 1 - DRILLING OF ASBESTOS-CONTAINING MATERIALS

The drilling of asbestos cement sheeting can release asbestos fibres into the atmosphere, so precautions must be taken to protect the drill operator and other persons from exposure to these fibres. A hand drill is preferred to a battery-powered drill, because the quantity of fibres is drastically reduced if a hand drill is used.

Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	<ul style="list-style-type: none"> • A non-powered hand drill or a low-speed battery-powered drill or drilling equipment. Battery-powered drills should be fitted with a local exhaust ventilation (LEV) dust control hood wherever possible. If an LEV dust control hood cannot be attached and other dust control methods – such as pastes and gels – are unsuitable then shadow vacuuming techniques should be used. • Disposable cleaning rags. • A bucket of water, or more as appropriate, and/or a misting spray bottle. • Duct tape. • Sealant. • Spare PPE. • A thickened substance such as wallpaper paste, shaving cream or hair gel. • 200 µm plastic sheeting. • A suitable asbestos waste container (e.g. 200 µm plastic bags or a drum, bin or skip lined with 200 µm plastic sheeting). • Warning signs and/or barrier tape. • An asbestos vacuum cleaner. • A sturdy paper, foam or thin metal cup, or similar (for work on overhead surfaces only).
PPE	<ul style="list-style-type: none"> • Protective clothing and RPE (see AS1715, AS 1716: It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	<ul style="list-style-type: none"> • If the work is to be carried out at a height, appropriate precautions must be taken to prevent the risk of falls. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. close door and/or use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • If drilling a roof from outside, segregate the area below. • If access is available to the rear of the asbestos cement, segregate this area as well, as above. • If possible, use plastic sheeting, secured with duct tape, to cover any surface within the asbestos work area that could become contaminated. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Drilling vertical surfaces	<ul style="list-style-type: none"> • Tape both the point to be drilled and the exit point, if accessible, with a strong adhesive tape such as duct tape to prevent the edges crumbling. • Cover the drill entry and exit points (if accessible) on the asbestos with a generous amount of thickened substance. • Drill through the paste. • Use damp rags to clean off the paste and debris from the wall and drill bit. • Dispose of the rags as asbestos waste, as they will contain asbestos dust and fibres • Seal the cut edges with sealant. • If a cable is to be passed through, insert a sleeve to protect the inner edge of the hole.

Drilling overhead horizontal surfaces	<ul style="list-style-type: none"> • Mark the point to be drilled. • Drill a hole through the bottom of the cup. • Fill or line the inside of the cup with shaving cream, gel or a similar thickened substance. • Put the drill bit through the hole in the cup so that the cup encloses the drill bit, and make sure the drill bit extends beyond the lip of the cup. • Align the drill bit with the marked point. • Ensure the cup is firmly held against the surface to be drilled. • Drill through the surface. • Remove the drill bit from the cup, ensuring that the cup remains firmly against the surface. • Remove the cup from the surface. • Use damp rags to clean off the paste and debris from the drill bit. • Dispose of the rags as asbestos waste, as they will contain asbestos dust and fibres. • Seal the cut edges with sealant. • If a cable is to be passed through, insert a sleeve to protect the inner edge of the hole.
Decontaminating the asbestos work area and equipment	<ul style="list-style-type: none"> • Use damp rags to clean the equipment. • Carefully roll or fold any plastic sheeting used to cover any surface within the asbestos work area, so as not to spill any dust or debris that has been collected. • If necessary, use damp rags and/or an asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the asbestos work area. • Place debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	<ul style="list-style-type: none"> • If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>
Clearance procedure	<ul style="list-style-type: none"> • Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task. • Dispose of all waste as asbestos waste. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>

SAFE WORK PRACTICE 2 - SEALING, PAINTING, COATING AND CLEANING OF ASBESTOS-CEMENT PRODUCTS

These tasks should only to be carried out on asbestos that are in good condition. For this reason, the AC material should be thoroughly inspected before commencing the work. There is a risk to health if the surface of asbestos cement sheeting is disturbed (e.g. from hail storms and cyclones) or if the sheeting has deteriorated as a result of aggressive environmental factors such as pollution. If asbestos cement sheeting is so weathered that its surface is cracked or broken, the asbestos cement matrix may be eroded, increasing the likelihood that asbestos fibres will be released. If treatment of asbestos cement sheeting is considered essential, a method that does not disturb the matrix of the asbestos cement sheeting should be used. Under no circumstances should asbestos cement products be water blasted or dry sanded in preparation for painting, coating or sealing.

Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	<ul style="list-style-type: none"> • Disposable cleaning rags. • A bucket of water, or more as appropriate, and/or a misting spray bottle. • Sealant. • Spare PPE. • A suitable asbestos waste container. • Warning signs and/or barrier tape.
PPE	<ul style="list-style-type: none"> • Protective clothing and RPE (see AS1715, AS 1716: It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed. Where paint is to be applied, appropriate respiratory protection to control the paint vapours/mist must also be considered.
Preparing the asbestos work area	<ul style="list-style-type: none"> • If work is to be carried out at a height, precautions must be taken to prevent the risk of falls. • Before starting, assess the asbestos cement for damage. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. close door and/or use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • If working at a height, segregate the area below. • If possible, use plastic sheeting, secured with duct tape, to cover any floor surface within the asbestos work area which could become contaminated. This will help to contain any runoff from wet sanding methods. • Ensure there is adequate lighting. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag. • Never use high-pressure water cleaning methods. • Never prepare surfaces using dry sanding methods. Where sanding is required you should consider removing the asbestos and replacing it with a non-asbestos product. • Wet sanding methods may be used to prepare the asbestos, provided precautions are taken to ensure all the runoff is captured, and filtered where possible. • Wipe dusty surfaces with a damp cloth.
Painting and sealing	<ul style="list-style-type: none"> • When using a spray brush, <i>never</i> use a high pressure spray to apply the paint. • When using a roller, use it lightly to avoid abrasion or other damage.
Decontaminating the asbestos work area and equipment	<ul style="list-style-type: none"> • Use damp rags to clean the equipment. • Where required, use damp rags and/or an asbestos vacuum cleaner to clean the asbestos work area. • Place debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work

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	area.
Personal decontamination should be carried out in a designated area	<ul style="list-style-type: none">• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth.• While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag.• Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>
Clearance procedure	<ul style="list-style-type: none">• Visually inspect the asbestos work area to make sure it has been properly cleaned.• Clearance air monitoring is not normally required for this task.• Dispose of all waste as asbestos waste. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>

SAFE WORK PRACTICE 3 - CLEANING LEAF LITTER FROM GUTTERS OF ASBESTOS CEMENT ROOFS	
Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	<ul style="list-style-type: none"> • A bucket of water, or more as appropriate, and detergent. • A watering can or garden spray. • A hand trowel or scoop. • Disposable cleaning rags. • A suitable asbestos waste container. • Warning signs and/or barrier tape. • An asbestos vacuum cleaner.
PPE	<ul style="list-style-type: none"> • Protective clothing and RPE (see AS1715, AS 1716): It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	<ul style="list-style-type: none"> • Since the work is to be carried out at a height, appropriate precautions must be taken to prevent the risk of falls. • Ensure appropriately marked asbestos waste disposal containers are available. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • Segregate the area below. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Gutter cleaning	<ul style="list-style-type: none"> • Disconnect or re-route the downpipes to prevent any entry of contaminated water into the waste water system and ensure there is a suitable container to collect contaminated runoff. Contaminated water must be disposed of as asbestos waste. • Mix the water and detergent. • Using the watering can or garden spray, pour the water and detergent mixture into the gutter, but avoid over-wetting as this will create a slurry. • Remove the debris using a scoop or trowel. Do not allow debris or slurry to enter the water system. • Wet the debris again if dry material is uncovered. • Place the removed debris straight into the asbestos waste container.
Decontaminating the asbestos work area and equipment	<ul style="list-style-type: none"> • Use damp rags to wipe down all equipment used. • Use damp rags to wipe down the guttering. • Where practicable, and if necessary, use an asbestos vacuum cleaner to vacuum the area below. • Place debris, used rags and other waste in the asbestos waste container. • Wet wipe the external surfaces of the asbestos waste container to remove any adhering dust before it is removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	<ul style="list-style-type: none"> • If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth. • While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag. • Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>
Clearance procedure	<ul style="list-style-type: none"> • Visually inspect the asbestos work area to make sure it has been properly cleaned. • Clearance air monitoring is not normally required for this task.

	<ul style="list-style-type: none">• Dispose of all waste as asbestos waste. Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.
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SAFE WORK PRACTICE 4 - REPLACE CABLING IN ASBESTOS CEMENT CONDUITS OR BOXES	
Equipment that may be required on site prior to commencing the work (in addition to any equipment required to complete particular task)	<ul style="list-style-type: none"> • Disposable cleaning rags. • A bucket of water, or more as appropriate, and/or a misting spray bottle. • 200 µm thick plastic sheeting. • Cable slipping compound. • Appropriately marked asbestos waste disposal bags. • Spare PPE. • Duct tape. • Warning signs and/or barrier tape. • An asbestos vacuum cleaner.
PPE	<ul style="list-style-type: none"> • Protective clothing and RPE (see AS1715, AS 1716): It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	<ul style="list-style-type: none"> • If the work will be carried out in a confined space, appropriate precautions must be taken to prevent the risk of asphyxiation. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • Use plastic sheeting, secured with duct tape, to cover any surface within the asbestos work area which could become contaminated. • Place plastic sheeting below the conduits through which cable(s) are to be pulled, prior to pulling any cables. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Replacement or installation of cables	<ul style="list-style-type: none"> • Wet down the equipment and apply adequate cable slipping compound to the conduits/ducts throughout the process. • Clean all ropes, rods or snakes used to pull cables after use. Cleaning should be undertaken close to the point(s) where the cables exit from the conduits/ducts. • Ropes used for cable pulling should have a smooth surface that can easily be cleaned. • Do not use metal stockings when pulling cables through asbestos cement conduits. • Do not use compressed air darts for pulling cables through asbestos cement conduits/ducts.
Decontaminating the asbestos work area and equipment	<ul style="list-style-type: none"> • Use damp rags to clean the equipment. • Wet wipe around the end of the conduit, sections of exposed cable and the pulling eye at the completion of the cable pulling operation. • If the rope or cable pass through any rollers, these must also be wet wiped after use. • Wet wipe the external surface of excess cable pulled through the conduit/duct, as close as possible to the exit point from the conduit, before it is removed from the work site. • Carefully roll or fold any plastic sheeting used to cover any surface within the asbestos work area, so as not to spill any dust or debris that has been collected. • If required, use damp rags or an asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the asbestos work area. • Place all debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container. • Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work

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	area.
Personal decontamination should be carried out in a designated area	<ul style="list-style-type: none">• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth.• While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag.• Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>
Clearance procedure	<ul style="list-style-type: none">• Visually inspect the asbestos work area to make sure it has been properly cleaned.• Clearance air monitoring is not normally required for this task.• Dispose of all waste as asbestos waste. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>

SAFE WORK PRACTICE 5 - WORKING ON ELECTRICAL MOUNTING BOARDS CONTAINING ASBESTOS

If the asbestos-containing electrical mounting panel has to be removed for work behind the board, the procedures for removing electrical meter boards outlined in the *Code of Practice: How to Safely Remove Asbestos* should be followed. If drilling is required, the control process should be consistent with the measures described in **Safe Work Practice 1**.

Equipment that may be required on site prior to commencing the work (in addition to equipment required to complete particular task)	<ul style="list-style-type: none"> • A non-powered hand drill or a low-speed battery-powered drill or drilling equipment. Battery-powered drills should be fitted with a LEV dust control hood wherever possible. If a LEV dust control hood cannot be attached and other dust control methods, such as pastes and gels, are unsuitable then shadow vacuuming techniques should be used. • Duct tape. • Warning signs and/or barrier tape. • Disposable cleaning rags. • A plastic bucket of water and/or a misting spray bottle. • Spare PPE. • A suitable asbestos waste container. • 200 mm plastic sheeting. • An asbestos vacuum cleaner.
PPE	<ul style="list-style-type: none"> • Protective clothing and RPE (see AS1715, AS 1716: It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	<ul style="list-style-type: none"> • Because the asbestos work area will involve electrical hazards, appropriate precautions must be taken to prevent the risk of electrocution. • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • Segregate the asbestos work area to ensure unauthorised personnel are restricted from entry (e.g. use warning signs and/or barrier tape at all entry points). The distance for segregation should be determined by a risk assessment. • Use plastic sheeting, secured with duct tape, to cover any surface within the asbestos work area which could become contaminated. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Work on electrical mounting panels	<ul style="list-style-type: none"> • Providing the panel is not friable, maintenance and service work may include: <ul style="list-style-type: none"> ○ replacement of asbestos containing equipment on the electrical panel with non-asbestos equipment ○ operation of main switches and individual circuit devices ○ pulling / inserting service and circuit fuses ○ bridging supplies at meter bases ○ using testing equipment ○ accessing the neutral link, and ○ installation of new components/equipment.
Decontaminating the asbestos work area and equipment	<ul style="list-style-type: none"> • Use damp rags to clean the equipment. • Carefully roll or fold any plastic sheeting used to cover any surface within the asbestos work area, so as not to spill any dust or debris that has been collected. • In areas where there is an electrical hazard, an asbestos vacuum cleaner should be used to remove any dust or debris from the mounting panel and other visibly contaminated sections of the asbestos work area.

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	<ul style="list-style-type: none">• In areas where there is no electrical hazard, wet wiping with a damp rag can be used to remove minor amounts of dust or debris.• Place debris, used rags, plastic sheeting and other waste in the asbestos waste bags/container.• Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before they are removed from the asbestos work area.
Personal decontamination should be carried out in a designated area	<ul style="list-style-type: none">• If disposable coveralls are worn, clean the coveralls while still wearing RPE using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth.• While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag.• Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>
Clearance procedure	<ul style="list-style-type: none">• Visually inspect the asbestos work area to make sure it has been properly cleaned.• Clearance air monitoring is not normally required for this task.• Dispose of all waste as asbestos waste. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>

SAFE WORK PRACTICE 6 - INSPECTION OF ASBESTOS FRICTION MATERIALS

This guide may be used when friction materials containing asbestos (e.g. brake assemblies or clutch housings) need to be inspected or housings need to be cleaned. Compressed air must not be used to clean dust from a brake assembly.

Equipment that may be required on site prior to commencing the work (in addition to equipment required to complete particular task)	<ul style="list-style-type: none"> • A misting spray bottle. • Duct tape. • Warning signs and/or barrier tape. • Disposable cleaning rags. • A bucket of water and detergent. • Spare PPE. • A suitable asbestos waste container. • A catch tray or similar container. • An asbestos vacuum cleaner.
PPE	<ul style="list-style-type: none"> • Protective clothing and RPE (see AS1715, AS 1716): It is likely that a class P1 or P2 half face respirator will be adequate for this task, provided the recommended safe work procedure is followed.
Preparing the asbestos work area	<ul style="list-style-type: none"> • Ensure appropriately marked asbestos waste disposal bags are available. • Carry out the work with as few people present as possible. • A risk assessment should determine whether to segregate the asbestos work area, but it may be necessary to ensure unauthorised personnel are restricted from entry (e.g. using barrier tape and/or warning signs). • Use a suitable collection device below the location where the work will be carried out to collect any debris or runoff. • Ensure there is adequate lighting. • Avoid working in windy environments where asbestos fibres can be redistributed. • If using a bucket of water, do not resoak used rags in the bucket, as this will contaminate the water. Instead, either fold the rag so a clean surface is exposed or use another rag.
Inspection of asbestos friction materials	<ul style="list-style-type: none"> • A misting spray bottle should be used to wet down any dust. If using spray equipment to wet the asbestos might disturb asbestos fibres, use alternative wetting agents, e.g. a water-miscible degreaser or a water/detergent mixture. • The wet method should be used, but if this is not possible the dry method may then be used. <p><u>Wet method:</u></p> <ul style="list-style-type: none"> • Use the misting spray bottle to wet down any visible dust. • Use a damp rag to wipe down the wheel or automobile part before removal. Ensure the dust is kept wet to prevent atmospheric contamination. • Use hand tools rather than power tools to reduce the generation of airborne fibres. • Partially open the housing and softly spray the inside with water using the misting spray bottle. Any spillage of dust, debris or water must be controlled (e.g. capturing any runoff in a container) and either filtered or disposed of as asbestos waste. • Open the housing and clean all asbestos parts using a damp rag, ensuring all runoff water is caught in a suitable asbestos waste container. <p><u>Dry method:</u></p> <ul style="list-style-type: none"> • Place a tray under the components to catch dust or debris spilling from the housing or components during the inspection and dispose of any material as asbestos waste. • Use an asbestos vacuum cleaner to remove asbestos fibres from the brakes and rims or other materials before carrying out the inspection.
Decontaminating the asbestos work area and equipment	<ul style="list-style-type: none"> • Use damp rags to clean the equipment, including the dust collection tray. • If necessary, use damp rags or an asbestos vacuum cleaner to clean any remaining visibly contaminated sections of the asbestos work area.

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	<ul style="list-style-type: none">• Place debris, used rags and other waste in the asbestos waste bags/container.• Wet wipe the external surfaces of the asbestos waste bags/container to remove any adhering dust before removing them from the asbestos work area.
Personal decontamination should be carried out in a designated area	<ul style="list-style-type: none">• If disposable coveralls are worn, clean the coveralls and RPE while still wearing them using a HEPA vacuum, damp rag or fine-water spray. RPE can be cleaned with a wet rag or cloth.• While still wearing RPE, remove coveralls, turning them inside-out to entrap any remaining contamination and then place them into a labelled asbestos waste bag.• Remove RPE. If non-disposable - inspect it to ensure it is free from contamination, clean it with a wet rag and store in a clean container. If disposable - cleaning is not required but RPE should be placed in a labelled asbestos waste bag or waste container <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>
Clearance procedure	<ul style="list-style-type: none">• Visually inspect the asbestos work area to make sure it has been properly cleaned.• Clearance air monitoring is not normally required for this task.• Dispose of all waste as asbestos waste. <p>Refer to the <i>Code of Practice: How to Safely Remove Asbestos</i> for more information.</p>

APPENDIX E – EXAMPLE WARNING SIGNS AND LABELS

