Hazardous Materials Management Plan (HMMP)

Teacher and Police Housing

Version 3.1

May 2024

Acknowledgement of Country

The Department of Community and Justice acknowledges the Traditional Custodians of the lands where we work and live. We celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.

We pay our respects to Elders past, present and emerging and acknowledge the Aboriginal and Torres Strait Islander people that contributed to the development of this document.

We advise this resource may contain images, or names of deceased persons in photographs or historical content.

Hazardous Materials Management Plan (HMMP)

Published by the Teacher and Police Housing

External review completed by Mansfield Property Advisory PTY TLD.

nsw.gov.au/homes-nsw

First published: March 2024

Reviewed by

NSW Police Force, Police Property Group (PPG), Director, Property Asset Management

Department of Education (DoE), Manager, Education Housing Team

Director, Teacher and Police Housing

More information

Teacher and Police Housing can be contacted on 1300 137 343

Version

Version	Revision Comment
May 2024_3.1	Endorsed by THA Board for Circulation
March 2024_3.0	Final, including formatting to HOMES NSW template
July 2023	Initial updated plan for DoE and PPG Endorsement and for legal review
December 2018	Updated Plan for currency
December 2014	Reviewed to refine roles and responsibilities and risk.

Copyright and disclaimer

Foreword

Teacher and Police Housing (T&PH) provides residential accommodation in rural and remote locations in NSW where the accommodation needs of eligible teachers and officers cannot be met by the private rental market. The property portfolio comprises residences that were built in the late 1800s through to current day construction. Due to the age, materials of construction and location, each residence has its own inherited risk profile. This Hazardous Materials Management Plan (HMMP) is designed to provided processes and guidance for this risk profile.

The most common hazardous materials that may be encountered in T&PH properties includes various forms of Asbestos Containing Material (ACM), non-friable (bonded) asbestos sheeting, lead based paint/dust, Polychlorinated biphenyls (PCBs) and Synthetic mineral fibres (SMF). All properties built on or before 31 December 2003 are assumed to contain one or more forms of hazardous materials.

This Hazardous Materials Management Plan has been prepared to assist Teacher & Police Housing, its Managing Agents, Property Construction Managers and Contractors to meet the requirements of the NSW Work Health and Safety Act 2011 and its associated Regulations.

Teacher & Police Housing staff, Managing Agents, Property Construction Managers and Contractors need to familiarise themselves with these requirements, which are outlined in this plan.

Throughout this document, a reference to “Teacher & Police Housing” should be read as a reference to “Teacher Housing Authority NSW and/or NSW Police Force Housing”.

Anyone requiring further information about this plan should in the first instance contact the Director, Teacher & Police Housing on 1300 137 343.

Contents

1 Definitions

The use of the words below in bold in this document indicates the word or words have the following defined meaning:

Asbestos: The asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock forming minerals including the following:

- Actinolite asbestos;
- Grunerite (or amosite) asbestos (brown);
- Anthophyllite asbestos;
- Chrysotile asbestos (white);
- Crocidolite asbestos (blue);
- Tremolite asbestos; and
- A mixture that contains 1 or more of the minerals referred to into (f).

Asbestos-containing material (ACM): Means any material or thing that, as part of its design, contains asbestos.

Asbestos-contaminated dust or debris (ACD): Means dust or debris that has settled within a workplace and is, or assumed to be, contaminated with asbestos.

Asbestos Register: A register recording the type, condition and location of all asbestos and asbestos containing materials for all premises on site.

Asbestos vacuum cleaner: A vacuum cleaner that complies with Class H requirements in AS/NZS 60335.2.69 Industrial vacuum cleaners or its equivalent and whose filters conform to AS 4260-1997 high efficiency particulate air (HEPA) filters – Classification, construction and performance.

Class A licence: Means a licence that authorises the carrying out of Class A asbestos removal work and Class B asbestos removal work by or on behalf of the licence holder.

Class B licence: Means a licence that authorises the carrying out of Class B asbestos removal work by or on behalf of the licence holder.

This allows the holder to conduct the removal of more than 10 square metres of non-friable asbestos or ACM removal work and/or the removal of ACD associated with the removal of more than 10 square metres of non-friable asbestos.

Class A asbestos removal work: Work requiring a Class A asbestos removal license.

Class B asbestos removal work: Work requiring a Class B asbestos removal license.

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

Control Level: The airborne concentration of a particular substance which, if exceeded, indicates a need to implement a control, action or other requirement. Control levels are generally set at no more than half the National Exposure Standard (NES for the substance. Control levels are occupational hygiene 'best practice', and are not health-based Standards

Control Monitoring: Means air monitoring, using static or positional instruments 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 material that is in a powder form or that can be crumbled, pulverised or reduced to powder by hand pressure when dry, and contains asbestos.

Hierarchy of hazard control: Measures taken to minimise risk to the lowest level reasonably practicable in the descending order of: Elimination, Substitution, Engineering controls, Administrative controls, and Personal Protective Equipment (PPE).

Lead containing paint (LCP): Any paint system with a lead content above 0.1% weight / weight.

Lead containing dust (LCD): Dust, often built up within voids / ceiling spaces, with a discernible amount of lead (determined the discretion of the occupational hygienist);

Licensed asbestos removal work: Means asbestos removal work for which a Class A asbestos removal licence or a Class B asbestos removal licence is required.

Licenced asbestos assessor (LAA): Means a person licenced to carry out air monitoring and clearance inspections during and following work with friable asbestos.

Managing Agent/Agency: a managing agent is a third part real estate agency who is engaged by T&PH. They are the tenants contact for day-to-day real estate matters.

Non-friable (or bonded) asbestos: Material containing asbestos that is not friable, including material containing asbestos fibres reinforced with a bonding compound.

PCBU: Person conducting a business or undertaking.

Person with management or control of a workplace: Means a PCBU to the extent that the business or undertaking involves the management or control, in whole or in part, of the workplace.

The person with management or control of a workplace must ensure, so far as is reasonably practicable, that the workplace, the means of entering and exiting the workplace and anything arising from the workplace are without risks to the health and safety of any person.

PNSW: Property NSW

PFNSW: Police Force NSW

Polychlorinated Biphenyls (PCBs): common name for a family of chlorinated organic chemicals that contain many individual compounds with varying levels of toxicity. Because of their insulating and thermal stability properties, PCBs have been widely used as coolants and lubricants in transformers, capacitors and other electrical equipment.

PPG: Police Property Group (the asset division of Police Force NSW)

Synthetic mineral fibres (SMF): generic term used to collectively describe a number of amorphous (non-crystalline) fibrous materials including glassfibre, mineral wool and ceramic fibre.

T&PH: Teacher and Police Housing

TSO: Tenancy Services Officers work for T&PH. They are tenants first point of contact for any issue relating to the tenants lease, including vacating/occupying the premises, paying rent or discussing the bond.

THA: Teacher Housing Authority

The DoE: The Department of Education

Worker: In accordance with the Work Health and Safety Act 2011, a person who carries out work in any capacity for a PCBU, including work as:

- An employee, or
- A contractor or subcontractor, or
- An employee of a contractor or subcontractor, or
- An employee of a labour hire company who has been assigned to work in the person's business or undertaking, or
- An outworker, or

- An apprentice or trainee, or
- A student gaining work experience, or
- A volunteer, or
- A person of a prescribed class.

For the purpose of Work Health and Safety Act 2011, a police officer is:

- A worker, and
- At work throughout the time when the officer is on duty or
- Lawfully performing the functions of a police officer, but not otherwise.
- The PCBU is also a worker if the person is an individual who carries out work in that business or undertaking.

2 Purpose

The purpose of this Hazardous Materials Management Plan ('Plan' or 'HMMP') is to enable Teacher & Police Housing to meet its obligations under the NSW Work Health and Safety Act 2011 and NSW Work Health and Safety Regulation (2017) i.e. to ensure, so far as is reasonably practicable, the health and safety of contractors and tenants by establishing a management framework to promote compliance with the law and avoid uncontrolled exposure to hazardous materials at properties owned or managed by Teacher & Police Housing. The HMMP is also considered Teacher & Police Housing Hazardous Materials Management Policy.

It is to be used by all who are involved in planning or managing responsive or refurbishment maintenance or other works on Teacher & Police Housing properties, including demolition and emergency maintenance as a result of property damage.

It clarifies the roles and responsibilities of Teacher & Police Housing staff, Property and Construction Managers, Property Managing Agent, contractors and tenants in the management of hazardous materials that may be present in Teacher & Police Housing properties, along with outlining the Teacher & Police Housing Framework for Hazardous Materials (Figure 1).

It outlines the protocols and processes that they need to follow when conducting works on properties managed by Teacher & Police Housing, and to understand what needs to be sought from external persons managing properties which are not owned or managed by Teacher & Police Housing.

This Plan will also increase the awareness of Teacher & Police Housing staff to the potential risks posed by hazardous materials in Teacher & Police Housing properties and how those risks are to be managed in conjunction with Property and Construction Managers, Managing Agents and Contractors.

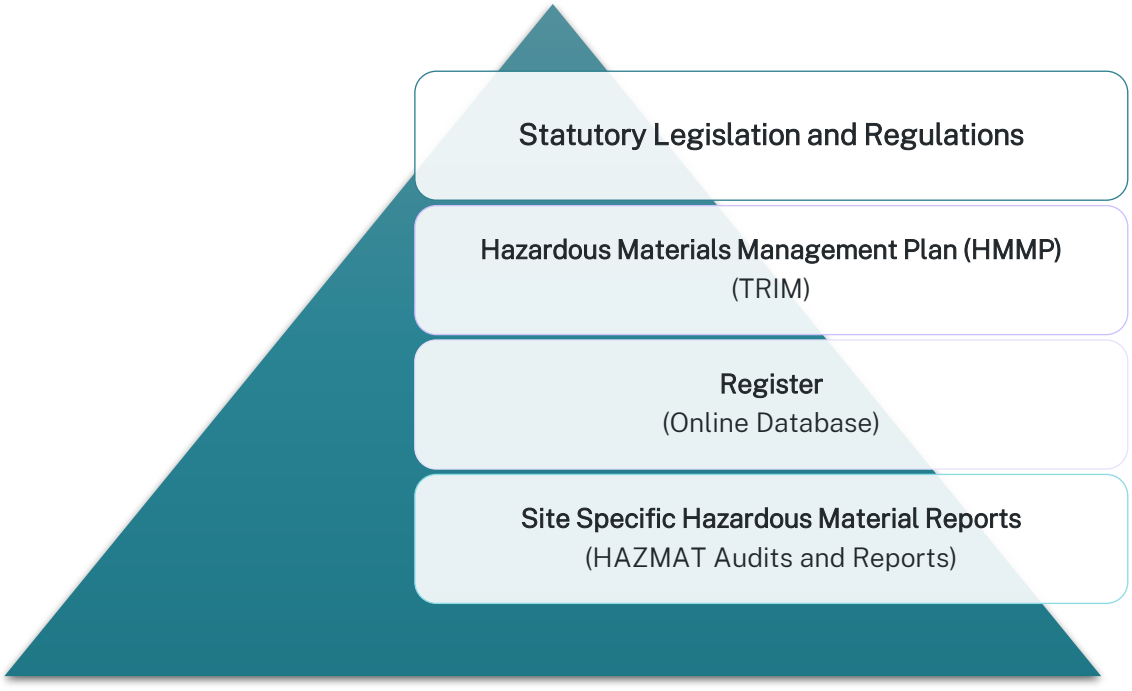


Figure 1: Teacher & Police Housing Framework for Hazardous Materials.

3 Policy

The health, safety and wellbeing of workers and other persons engaged in relation to Teacher & Police Housing properties and its operations is a high priority.

Teacher & Police Housing is committed to ensuring that all hazardous materials known or otherwise present in its properties are managed in a manner to minimise the risk to the work health and safety of all tenants, contractors and their staff, and other persons.

Effective identification, assessment and management of hazardous materials must involve a well-coordinated effort by Teacher & Police Housing management and staff, Managing Agents, Property and Construction Managers and the Contractors who are engaged to perform work on Teacher & Police Housing properties.

Management of the risks associated with hazardous materials in Teacher & Police Housing properties is based on the application of the hierarchy of controls, with elimination of the risk wherever reasonably practicable, and when it is not reasonably practicable, implementing a process where exposure to the material is minimised through rigorous control measures.

Teacher & Police Housing will consult and communicate with staff and interested parties on the management of risks from hazardous materials. This will include awareness training to staff on the hazard and risks associated with hazardous materials and on risk control methods recommended for effectively managing the risks.

Teacher & Police Housing relies on its Property, Project Manager, Construction Managers and Managing Agents to engage suitably pre-qualified, competent and experienced contractors to perform works on its properties. This includes relevant governance and assurances the contractors engaged will comply with all the relevant laws and regulations pertaining to the discovery, disclosure, handling and disposal of any hazardous materials.

Teacher & Police Housing assumes that all properties built on or before 31 December 2003 may have some hazardous material present and as far is reasonably practicable, advises Managing Agents, Property, Project and Construction Managers and Contractors about the presence of hazardous materials at its properties when issuing briefs or tenders for property refurbishments and when issuing purchase orders engaging Contractors to conduct responsive maintenance.

Where any incidents arise as a result of a failure of information or compliance with relevant standards, laws or regulations Teacher & Police Housing will undertake an incident debrief, involving the relevant parties to ensure appropriate lessons are learned and applied in future actions.

This Plan is reviewed at least every five (5) years in accordance with relevant WHS legislation to ensure ongoing relevance and effectiveness.

4 Scope

4.1 Properties Owned by T&PH

The HMMP outlines what is required for properties where Teacher & Police Housing own and manage the property. Where Teacher & Police Housing does not own the property (or in circumstances where it has only been vested), this Plan outlines what should be requested from the owner/s or strata committees in line with best practice.

This Plan applies to all properties, including vacant land, that Teacher & Police Housing owns or manages. It excludes head-leased properties in which Teacher & Police Housing does not conduct maintenance. While works would not be required, it outlines what should be requested from the Landlord where the property has only been vested or is not owned and managed by Teacher & Police Housing.

This Plan is designed to address the requirements and preparation of an asbestos management plan for a workplace where asbestos may be present and also encompasses the identification and management of risks arising from:

- Asbestos in Buildings; and
- Asbestos in Soil; and
- Lead Based Paint; and
- Lead Containing Dust; and
- Polychlorinated biphenyls (PCBs) & Synthetic Mineral Fibres (SMFs).

This policy does not capture combustible materials e.g. on the facades of buildings, or any other chemicals, materials, materials or elements other than those dangerous materials identified as most likely to be encountered and listed above on Teacher & Police Housing properties.

Information regarding each of these hazardous materials above is included in the Appendices of this document. In addition to this, relevant Australian Standards, Acts and Regulations can be referred to for more comprehensive information about these hazards and in regard to their safe handling, storage and disposal. Reference is made, but are not limited, to the following:

1. NSW Work Health and Safety Act 2011
2. NSW Work Health and Safety Regulation 2017
3. SafeWork NSW Code of Practice - How to Manage and Control Asbestos in the Workplace December 2022
4. SafeWork NSW Code of Practice – How to Safely Remove Asbestos 2022
5. AS4964:2004 Method for the qualitative identification of asbestos in bulk samples
6. AS4361.2 Guide to Lead-based paint Management Part 2: Residential and commercial buildings.

4.2 Properties Not Owned and Managed By Teacher & Police Housing

The HMMP outlines what is required for properties where Teacher & Police Housing own and manage the property. Where Teacher & Police Housing does not own the property (or in circumstances where it has only been vested), this Plan outlines what should be requested from the owner/s or strata committees in line with best practice.

4.3 Vested Properties (Police Force NSW)

Vested Properties are not owned by Teacher & Police Housing, and often only managed by Teacher & Police Housing. This Plan should be provided to the owner of the property with a request for recommended compliance. Teacher & Police Housing cannot undertake works on premises not owned by Teacher & Police Housing.

4.4 Head Leased Properties

Head Leased properties found and leased in the private market which are not owned by Teacher & Police Housing. A request for identification of hazardous materials should be requested from the Landlord in line with best practice. Teacher & Police Housing cannot undertake works on premises not owned by Teacher & Police Housing

4.5 Properties Owned by the DoE

While Teacher & Police Housing do not own properties owned by the DoE, in some cases Teacher & Police Housing manages the properties. A request for identification of hazardous materials should be requested from the Landlord in line with best practice. Teacher & Police Housing cannot undertake works on these premises unless endorsed to do so from the DoE. Additional funding needs to be secured from the DoE.

4.6 Strata Complexes

While a hazardous materials audit should be conducted on strata units owned by Teacher & Police Housing, a hazardous materials audit of the common areas should be sought during a strata committee meeting. Audits and reports for the entire complex, including the common areas, should be sought via strata meetings.

4.7 Properties Workplaces

For the purpose of this document, Teacher & Police Housing are not managing workplaces as the buildings within the portfolio are primarily used for residences.

For the purpose of this management plan, NSW Homes notes that NSW Government employees who reside within premises owned by the Accommodation Authority, but whom do not directly work within that premises, are not considered workers, by definition, under the WHS Act (2011).

In an instance where an employee both works and resides within the same premises, such as a Police Officer, the view is that all Accommodation Authority properties are generally being occupied as residential premises, which is in contrast to being a “workplace”, per legal advice dated 30 May 2023.

5 Roles and Responsibilities

The roles and responsibilities of Teacher & Police Housing, its management and the stakeholders involved in this document are as follows:

Table 1 - Roles and Responsibilities

	Roles	Responsibilities
Director, **Teacher & Police Housing1**	Setting policy with respect to the management of hazardous materials in Teacher & Police Housing owned and managed properties	Reviewing the plan to ensure it remains relevant and is achieving its purpose.
	Update external stakeholders on any changes to the HMMP.	Setting and communicating the plan, providing leadership, ensuring allocation of resources and budgets to implement the Plan, monitoring the effectiveness of the implementation of the plan.
Building Services Manager, Teacher & Police Housing 2	**Roles**	**Responsibilities**
	Establish a Hazardous Materials register for Teacher & Police Housing properties.	Continue to manage the hazardous materials register on the online systems.
	Continue to seek opportunities to remove or further mitigate hazardous materials across the portfolio.	Include requirements to identify hazardous materials prior to commencing work in all work briefs / requests for quotations / tenders to Property & Construction Managers and/or Contractors.
		Communicating the requirements of the Plan to Property & Construction Managers, Managing Agents and Contractors and monitoring their compliance.
		Act as the point of contact for all incident reporting relating to hazardous materials.
		Monitor the response to any hazardous materials incident, investigate incidents to identify corrective actions and overview the implementation of the corrective actions.

[1] Person employed under section 7(1)(c) of the Teacher Housing Authority Act 1975 (as amended)

[2] Teacher Housing employee delegated under section 17(1) of the Teacher Housing Authority Act 1975 (as amended)

	Roles	Responsibilities
Managing Agents[3]	**Roles**	**Responsibilities**
	Obtain quotations from contractors who are suitably qualified to conduct works. Managing Agents cannot complete removal works.	Classify/categorise works to be carried out, while being aware of known or possible presence of hazardous materials.
	When acquiring or divesting an asset, ensure all required information is included in the contract for sale.	Include requirements to identify hazardous materials prior to commencing work in all work order requests/quotes/tenders;
		Ensure the Contractor Statement is completed by each trade when they submit a quotation for works;
		Receive feedback from tenants and contractors regarding the management of hazardous materials during maintenance works and if necessary refer the matter to Teacher & Police Housing for action;
		Receive confirmation from the contractor that works involving hazardous materials have been completed in accordance with all relevant WHS legislation and this Plan.
		Undertake all works associated with Teacher & Police Housing in strict accordance with relevant WHS and other legislation and Codes of Practice
Property and Construction Managers[4]	**Roles**	**Responsibilities**
	Include requirements for contractors to identify hazardous materials prior to commencing work in all work briefs / requests for quotations / tenders.	Where previously unidentified material is found, follow the process, e.g. completing **Appendix E: Incident Report Form**

[3] Registered real estate agents engaged under contract by Teacher & Police Housing for the provision of property and tenancy management services.

4 Property managers engaged under contract on a project by project basis by Teacher & Police Housing to supervise Contractors engaged by Teacher & Police Housing for refurbishment maintenance and construction works

	Roles	Responsibilities
	Manage and monitor contractors to ensure that they meet their obligations under the contract with regard to identification, licensing, management and reporting of hazardous materials work including the discovery, handling and disposal of hazardous materials.	Receive confirmation from the contractor that works involving hazardous materials have been completed in accordance with WHS laws, the contract and this Plan
	Undertake all works associated with Teacher & Police Housing in strict accordance with relevant WHS and other legislation and Codes of Practice.	Receipt of any complaints / concerns from tenants / contractors regarding the management of hazardous materials and if necessary refer the matter to Teacher & Police Housing for action
	Ensure all Contractors / tenders include the scope to revise or create a brand-new hazardous report where any hazardous material is found, altered or removed.	
Teacher & Police Housing Staff	Roles	Responsibilities
	Notify senior managers if they believe the HMMP is not being followed.	Follow the HMMP
	Teacher & Police Housing staff cannot complete removal works.	Notify senior managers if they sight something that is not safe. Follow instructions and inductions at construction sites.
		Ensure training is completed and recorded in prescribed timeframes
Contractors[5]	Roles	Responsibilities
	Undertaking pre-tender / quotation inspections to ascertain the scope of works, including the possible presence of hazardous materials, including the review of any hazardous assessment surveys which may be available.	Hold appropriate licenses to undertake the works including removal and disposal of hazardous materials.
	Undertake all works associated with Teacher & Police Housing in strict accordance with relevant	Develop and implement safe work methods that comply with Work Health and Safety laws.

5 Contractors engaged by Teacher & Police Housing or a party acting on behalf of Teacher & Police Housing, and managed by either Managing Agents, or Property and Construction Managers

	Roles	Responsibilities
	WHS and other legislation and Codes of Practice.	
	Carry out works in compliance with the contract or work order and relevant safety legislation.	Utilise subcontractors and employ staff that are appropriately licensed, trained and competent in handling Hazardous materials. Ensure a new or revised hazardous materials (HAZMAT) report and associated register is created by a qualified person where hazardous material is found, altered or removed.
	Notify their appointed contact (the Managing Agent, Property and Construction Manager or the Teacher & Police Housing) of any previously unidentified hazardous materials affecting the proposed works – whether during the pre-tender inspection or during execution of the works.	Where previously unidentified material is found, follow the process, EG completing Appendix E: Incident Report Form.
	Occupational Hygienist / Licensed Asbestos Assessor: •Development and management of asbestos management plan, •Designated site supervisor for hygienist work, •Airborne asbestos monitoring, inspections, clearance inspections and asbestos supervisions during asbestos removal works, •Supervise Class A or Class B Asbestos removal contractor, •Certify / verify that removal areas are free from non-friable asbestos containing materials as per the removal scope, •Review licensed asbestos contractor SWMS, •Guidance on methodology for the control of hazardous materials, •Provide advice to the Project on Work Cover Notifications, permit to works, insurances and license requirements.	Notifying their appointed contact of any issues or concerns about the behaviour of the tenant in relation to safe management of any hazardous materials that are encountered including non-compliance with any reasonable direction given by the contractor in relation to the works.

	Roles	Responsibilities
	Licensed Removalist Contractor: •Prepare an Asbestos Removal Control Plan in accordance with Part 3.5 of the Safework NSW Code of Practice: How to Safely Remove Asbestos (2022), •Lodge the required Safework NSW notifications, •Ensure consultation with people affected by the removal work, including neighbours, have occurred prior to works commencing, •Hold (at minimum) a Class B asbestos license for non-friable removal, •Control and establishment of asbestos working zones, •Ensuring PPE is worn correctly, •Control of potentially contaminated dust in the removal area at all times, •Asbestos removal, •Transport asbestos waste material to a licensed waste facility, •Decontaminating all plant and materials appropriately, •Provision of waste tracking receipts.	Notifying their appointed contact and relevant statutory bodies when the works are completed.
		Not entering a property where hazardous materials are known to be damaged. Staff should arrange for an external contractor to make safe. Staff must not carry out any asbestos removal work.
		In the event a contractor has removed a hazardous material(s) they are to provide Teacher & Police Housing with documentation that the hazardous material(s) have been disposed of in accordance with SafeWork NSW, NSW EPA and Local Government guidelines, including ensuring that all works associated with Teacher & Police Housing were undertaken in strict accordance with relevant WHS and

	Roles	Responsibilities
		other legislation and Codes of Practice.
Tenants[6]	Roles	Responsibilities
	Compliance with the terms and conditions of their Tenancy Agreement in particular: • allowing reasonable access to the Managing Agent, Property and Construction Manager, Contractors and Teacher & Police Housing to assess work requirements and to undertake works • Comply with any reasonable direction issued by the contractor to minimise the risk to the tenant and the contractor's staff during execution of the works • obtaining written approvals prior to undertaking any works or attachment of fixtures to the premises that may expose or damage hazardous materials; • reporting any damaged suspected hazardous materials; and • not entering enclosed or basement areas without written approvals from Teacher & Police Housing.	

[6] Tenants who lease a Teacher & Police Housing residence under the provisions of the NSW Residential Tenancies Act 2011

5.1 Training

Teacher & Police Housing staff and interested parties involved in the management of works on properties that Teacher & Police Housing owns or manages shall:

1. Attend awareness training or be provided information on the presence of hazardous materials in Teacher & Police Housing properties;

2. Have an overview of the applicable legislation, codes of practice, standards and typical locations where hazardous materials may be encountered on site;

3. Be provided information on the health risks associated with the hazardous materials covered by this plan

4. Inducted into procedures to be followed in the event of being made aware of, discovery, damage or disturbance to a hazardous material

5. The process and protocols to be followed for informing Property and Construction Managers, Managing Agents and Contractors about the known and possible presence of hazardous materials in a property prior to any works commencing; and

6. Access and update the hazardous materials register in the Teacher & Police Housing property current database; and

Refresher identification and awareness training for staff is predominately held online with a target of training to be completed once every two (2) years, but can be held more frequently or via in-person training.

6 Risk Management

The NSW Work Health and Safety Regulation 2017 Clause 420 states:

> *"A person conducting a business or undertaking must ensure, so far as reasonably practicable, exposure of a person at the workplace to airborne asbestos is eliminated. If this is not reasonably practicable, the exposure must be minimised so far as reasonably practicable."*

The most common hazardous materials that may be present in Teacher & Police Housing properties include various forms of asbestos containing materials (ACM) including both non-friable and friable asbestos, lead based paint, lead containing dust, PCBs and SMFs. These materials present a risk to health and safety when they are in a deteriorated or damaged condition or when proper controls are not implemented to manage them during maintenance or refurbishment works.

The Teacher & Police Housing property portfolio comprises residences that were built in the late 1800s through to current day construction. Due to the age, materials of construction and location, each residence has its own inherited risk profile.

The following outlines how Teacher & Police Housing manages the hazards and risks associated with the potential risk of exposure of workers and other persons to hazardous materials in the workplace.

- All properties built on or before 31 December 2003 are assumed to contain one or more forms of hazardous materials.
- Any premise that was built before 31st December 1987 is considered to be constructed using asbestos-containing materials (ACM's) and therefore any work carried out on these premises are to take this into account and to treat materials as if containing asbestos whether or not the material has been tested.
- Provide Managing Agents with the Hazardous Materials Data Base for properties that are under their management
- Managing Agents, Property and Construction Managers or the Contractors are notified of the possible presence of hazardous materials in properties built on or before 31 December 2003 and to assume that these hazards are present until such time as proven not.
- Contractors are expected to carry out works in accordance with the appropriate precautions and safe work methods.
- Conduct a hazardous materials survey before any refurbishment maintenance is undertaken on buildings completed on or before December 31, 2003 and records the results of these in the hazardous materials register contained in the Teacher & Police Housing property data base
- Before any responsive maintenance is arranged for buildings completed on or before December 31, 2003 , make the Managing Agent and contractor aware that hazardous materials may be present and that the requirements of the Codes of Practice for handling them are to be applied[7];
- Ensure that conditions of contract require Contractors to conduct a hazardous materials risk assessment prior to commencing refurbishment works and have an action plan in place to monitor and manage the risks.
- Maintain hazardous building materials in a stable condition by keeping exposed surfaces painted or repair/replace them when damage is reported to the Authority, until such time as major refurbishment work is required.

[7] SafeWork NSW *Code of Practice - How to Manage and Control Asbestos in the Workplace* 2022, SafeWork NSW *Code of Practice – How to Safely Remove Asbestos* 2022

In most instances where hazardous materials are present in Teacher & Police Housing properties their condition would not present any health concerns to residents or contractors undertaking routine maintenance works, where the works do not involve altering areas that contain a hazardous material.

In the absence of conducting a hazardous materials survey on every dwelling it is not possible to be completely confident that all known hazardous materials are identified at Teacher & Police Housing properties. By applying the controls and protocols in this Hazardous Materials Management Plan it is possible to manage the risk until a hazard materials survey is conducted on all Teacher & Police Housing properties.

More details on hazardous materials and their management are provided in the appendices as follows:

Appendix	A: Asbestos
Appendix	B: Lead-based paint / Lead Containing Dust
Appendix	C: PCBs
Appendix	D: Synthetic Mineral Fibres

7 Record Keeping

The hazardous materials register is maintained by Teacher & Police Housing on the Teacher & Police Housing database. The register contains a list of all Teacher & Police Housing properties and is updated when the presence and condition of hazardous materials is reported.

The register is further updated if actions have been taken to change the condition or to remove a hazardous material that was previously reported. Updating the register is a requirement of the Teacher & Police Housing team.

8 Labelling and Identification

Pursuant to Section 422 of the WHS regulation, asbestos is to be identified by a person with management or control of a workplace. The presence and location of asbestos is only to be indicated by a label if it is reasonably practical to do so, or where the building is used as a workplace. As the homes are not workplaces, hazardous materials will not always be labelled. Regardless, Teacher & Police Housing will complete a hazardous assessment audit for all properties pre-December 2003. The HMMP require a competent person to undertake inspections / assessments / identification of asbestos containing materials.

Teacher & Police Housing is aware of some historical labelling, such as the example below, within the Police portfolio. This was likely because labelling would be required for the ancillary Police Stations.

Identification of ACM to be conducted by a competent person. All asbestos samples are to be taken by a competent person. A “competent person” includes an occupational hygienist with experience identifying asbestos, licensed asbestos assessors and removalists and a person working for an organisation accredited by NATA under AS/NZS ISO/IEC 17020:2013 and experienced in asbestos identification.

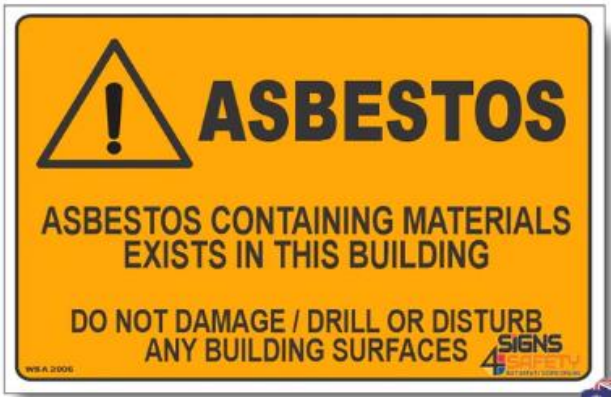


Figure 1 - Example of a Warning Sign

Figure 2 - Photographs taken in 2023 of current labelling within some Police Force residences (not Police Stations)

9 Purchasing and Refurbishing Properties

A new hazardous materials (HAZMAT) report is to be obtained for any property purchased that was built on or before 31 December 2003, or where it is suspected to have hazardous materials.

Consideration to undertake a Phase 1 Preliminary Site Investigation should be undertaken during the due diligence. Should the Phase 1 Preliminary Site Investigation identify potential contamination, particularly if identified within surficial soils, a Stage 2 Detailed Site Investigation, in the form of intrusive sampling, may be warranted.

The hazardous materials report is to be revised when required by legislation, or when the property has a major refurbishment or when hazardous material has been moved, altered or removed.

10 Communication

10.1 General

This plan is available on request from Teacher & Police Housing, and on the online Portal used by managing agents.

The Department of Education, as the employer of the teachers that reside in Teacher & Police Housing residences, has been advised that the residential properties that Teacher & Police Housing owns or manages are not defined as workplaces for tenants under the NSW Work Health and Safety Act 2011 when they are used as residences and leased to tenants in accordance with the Residential Tenancies Act 2011.

The following parties and key stakeholders have been advised of this plan and where to locate it:

Managing Agents;

- Property and Construction Managers;
- All Contractors that have been engaged by Teacher & Police Housing for maintenance related works;
- All Teacher & Police Housing Teacher & Police Housing employees;
- Members of the Teacher & Police Housing (Board Members);
- Local housing representatives.

Maintenance conducted at Teacher & Police Housing properties is classified as either responsive or refurbishment maintenance. Contractors conducting responsive maintenance are supervised by Managing Agents. Contractors conducting refurbishment maintenance are supervised by Teacher & Police Housing through Property and Construction Managers and at times by Teacher & Police Housing Technical officers.

The procedure for advising Contractors of the presence or likely presence of hazardous materials in a residence is dependent upon the classification of maintenance and the entity that has engaged them to carry out the works and is described below.

10.2 Teacher & Police Housing Appointed Contact

The appointed contact at Teacher & Police Housing in regard to this plan including queries, further information and advice is the Senior Manager, Building Services. Phone 1300 137 343, or email teacherandpolice@homes.nsw.gov.au with the email subject “Teacher and Police Housing – Hazardous Materials Management Plan Query”.

10.3 Responsive maintenance conducted by Contractors engaged by T&PH

Contractors engaged by Teacher & Police Housing to conduct responsive maintenance are advised if there is a hazardous materials register indicating the presence of hazardous materials in the residence in which they have been engaged to conduct works.

If a Hazardous Materials Register is not available for the residence in which they have been engaged to conduct works, the contractor must contact the managing agent and request the register.

If unavailable, the contractor must assume the presence of asbestos and other hazardous materials in accordance with this management plan and WHS legislation and guidance material

10.4 Responsive maintenance conducted by Contractors engaged by Managing Agents

Contractors engaged directly by Managing Agents to carry out minor works, usually of a value at or below $1,250.00, are also under the control of the Managing Agent.

Teacher & Police Housing provides Managing Agents with a list of properties that are under their management and built on or before 31 December 2003. Managing Agents are advised to assume that they contain hazardous materials in accordance with this management plan and must notify their contractors that work to these properties need to be carried out in accordance with the relevant WHS legislation and guidance material.

10.5 Contractors conducting refurbishment maintenance

Teacher & Police Housing engages contractors to perform refurbishment maintenance work. A hazardous materials survey is conducted before refurbishment maintenance is undertaken on buildings constructed on or before 31 Dec 2003. Amongst other things, the survey will identify the presence of asbestos containing materials (ACM) at the property. The survey is recorded in the hazardous materials register.

The contractor is informed through the tender documents and the pretender site meeting of the presence of hazardous materials for the properties to be worked on.

10.6 Maintenance Guidelines

Acting as a notification, the following statement will be inserted into all of the maintenance guidelines provided to tenants at occupation.

> *"This property may have hazardous materials, such as asbestos or Lead-based paint/dust. Please speak to the managing agent if you have any questions as to its location or condition. You must notify the managing agent and Teacher & Police Housing immediately if the premises (e.g. a wall, roofing, meter box or the ceiling) is damaged."*

11 Incident Reporting

This section describes the action that needs to be undertaken, the responsible person and when the action needs to be undertaken if an unplanned hazardous materials exposure has occurred or management requirements related to the identification, handling and disposal of hazardous materials have not been complied with.

The Tenancy Services Manager, Director and Teacher & Police Housing are to be advised immediately by telephone (1300 137 343) that an incident has occurred. A message can be left on this number.

Contractors must immediately notify either their Managing Agent or the Property and Construction Manager if an incident has occurred. The incident is to be reported to the Asset Manager if they cannot be contacted.

A Hazardous Material Incident Reporting Form (refer Appendix E) must be completed by the contractor and submitted within 24 hours of the incident occurring. This needs to occur regardless if the Contractor, or Project Manager, provider their own incident forms.

Upon receipt of a Hazardous Material Incident Reporting Form, Teacher & Police Housing shall engage a suitably qualified contractor (Occupational Hygienist / NSW Licensed Asbestos Assessor (LAA)) to undertake an investigation and conduct a Asbestos or Lead Inspection and Report or a hazardous materials survey as identified in Appendix F.

Following the investigation, a Hazardous Material Disclosure Form (Appendix F) is to be forwarded to the Building Services Manager. Once received and assessed, the Asset Manager shall arrange for the Hazardous Material(s) to be listed in the Hazardous Materials Register for the property (Appendix G).

12 Evaluation

This plan and its implication will be reviewed at least every 5 years in accordance with WHS legislation to ensure ongoing relevance and effectiveness. The HMMP will be reviewed earlier if there is significant changes to the legislation or recommended guidelines.

The next review is to be completed by 30th December 2028 or earlier at the discretion of Teacher & Police Housing.

The principal questions that such a review would be expected to test and answer are:

- Has the plan been effective in preventing hazardous material incidents?
- Where incidents have occurred, what lessons were derived from these and what corrective actions were taken by Teacher & Police Housing, Managing Agents, Property and Construction Managers or the Contractors? Incidents should be tracked and recorded to ensure learning and adaption of best practice to prevent future incidents.
- Is the Teacher & Police Housing property database reflecting more accurate classification of properties with or without hazardous materials?
- How has the Project Control Group (PCG), if present, managed the discovery or removal of hazardous materials.
- Based on the learnings, are there any, changes required in the Plan.

13 Limitations

Please note: The residential properties Teacher & Police Housing owns or manages are not regarded as workplaces for tenants under the NSW Work Health and Safety Act 2011 or NSW Work Health and Safety Regulation (2017), when they are used as residences and leased to tenants in accordance with the NSW Residential Tenancies Act 2010.

When maintenance or refurbishment work is performed on these properties, the work areas managed and controlled by the contractor become a temporary workplace.

14 Appendices

14.1 Appendix A – Asbestos

14.1.1 Introduction

Asbestos is the generic term for a number of fibrous silicate minerals. There are two major groups of asbestos: the serpentine group contains chrysotile, commonly known as white asbestos; and the amphibole group contains amosite (brown asbestos) and crocidolite (blue asbestos). There are some other less common types, such as tremolite, actinolite and anthophyllite;

The Commonwealth Department of Health states:

> *Asbestos is ubiquitous in the environment, with fibre release from natural sources and extensive industrial and commercial use of asbestos in the past. Asbestos and materials containing asbestos were widely produced in Australia between the 1940s and 1980s8*

SafeWork NSW[9] states:

> *On 31 December 2003, a national ban on all forms of asbestos came into effect, including a prohibition on work involving asbestos or ACM in workplaces.*
>
> *Although the ultimate goal of this prohibition is for all workplaces to be free of asbestos, it is only when these materials are being replaced or where they present a health risk that non-asbestos alternatives must be used. Caution needs to be taken when working with buildings constructed before 1990, however, new buildings may have used recycled or stockpiled materials and may have reinstated plant or equipment made before 31 December 2003 containing ACM gaskets and/or linings. Caution also needs to be taken when using building products or replacing vehicle gaskets, brake pads and other components manufactured in countries which still use asbestos.*
>
> *In addition to the prohibition, there is also a restriction on who can safely remove asbestos. Asbestos removalists and their workers must be competent to carry out asbestos removal work and, except in limited circumstances, must be suitably licensed.*

The following figures have been taken from the SafeWork NSW website[10]:

Figure 3 - Assessing The Risk of Exposure

8 Department of Health and Ageing and Health – Management of asbestos in the non-occupational environment 2005 p3

9 Code of Practice How to Manage and Control Asbestos in the Workplace Section 1.1.

10 Code of Practice How to Manage and Control Asbestos in the Workplace Section 2.6.

2.6. Assessing the risk of exposure

This section does not apply to naturally occurring asbestos (NOA).

If asbestos or ACM is in good condition and left undisturbed, it is unlikely that airborne asbestos will be released into the air and the risk to health is extremely low. It is usually safer to leave it and review its condition over time. However, if the asbestos or ACM has deteriorated, has been disturbed, or if asbestos-contaminated dust is present, the likelihood that airborne asbestos will be released into the air is increased.

The type of material that binds asbestos fibres will influence the potential for airborne asbestos to be released into the air from different asbestos or ACM. For example, a loosely bound sprayed (or limpet) coating is more likely to release fibres when disturbed than asbestos cement in which fibres are firmly bound.

The following list ranks different types of asbestos according to the likelihood that airborne asbestos can be released into the air if it has deteriorated or been disturbed. The potential risk to health is greater for items higher up the list if people are exposed to airborne asbestos, but any of the materials listed can produce asbestos fibres if they are disturbed.

Figure 4 - Likelihood of Airborne Fibres

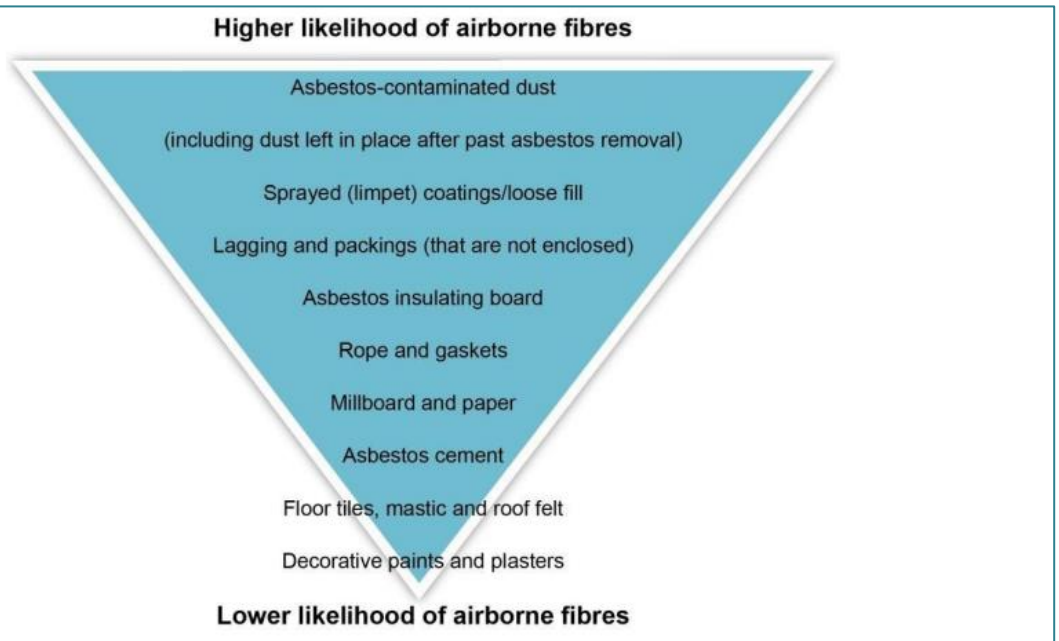


Figure 1 List ranking the different types of asbestos according to the likelihood that airborne asbestos can be released into the air if it has deteriorated or been disturbed

When deciding if there is a risk to health from asbestos, consider whether the asbestos or ACM is:

- in poor condition
- likely to be further damaged or to deteriorate
- likely to be disturbed due to work practices carried out in the workplace (for example routine and maintenance activities and their frequency), or
- in an area where workers are exposed to the material.

A visual inspection of the material, its location and an understanding of the work practices at the workplace will assist this decision.

14.1.2 Asbestos in Residential Buildings

Asbestos can occur in a number of locations within a residence. Figure 1 at the end of this appendix indicates typical places where asbestos can be encountered in a residential building.

The use of all forms of asbestos is no longer permitted. The use of all types of asbestos in the amphibole group was banned in the mid-1980s, and the manufacture and use of products containing chrysotile was prohibited nationally from 31 December 2003.

14.1.3 In Situ Asbestos

In situ asbestos refers to asbestos material that is fixed or installed in its original position and has not been removed – e.g. wall sheeting.

The prohibition of products containing chrysotile does not extend to the removal of asbestos products in situ at the time the prohibition took effect. These in situ asbestos-containing materials must be appropriately managed to ensure that the risks of exposure to airborne asbestos fibres are eliminated or controlled.

Asbestos products that were in situ on or before 31 December 2003 should be maintained in good order and condition. Once the asbestos material has deteriorated or is no longer fit for use, it must be replaced with a non-asbestos alternative.

14.1.4 Non-friable and Friable Asbestos

Material that contains asbestos is referred to as friable or non-friable.

14.1.5 Non-friable asbestos material

Non-friable asbestos material is any material that contains asbestos in a non-friable matrix. It may consist of Portland cement or various resins/binders, and it cannot be crumbled, pulverised or reduced to powder by hand pressure. Asbestos cement (AC) products in good condition are examples of non-friable asbestos material.

A large number of products made from non-friable asbestos material are still found in Australian buildings. These products include:

1. flat (fibro), corrugated or compressed asbestos cement sheeting;
2. asbestos cement pipes such as electrical, water, drainage and flue pipes;
3. vinyl-asbestos floor tiles.

14.1.6 Friable asbestos material

Friable asbestos material is any material that contains asbestos and is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Examples of friable asbestos can include:

1. sprayed limpet
2. asbestos cloth and rope
3. pipe lagging
4. boiler lagging.

Any asbestos cement products that have been subjected to weathering, or damaged by hail, fire or water blasting, are considered to be friable asbestos.

14.1.7 Importation of Material

Imported material such as fill is a possible source of asbestos contamination.

No individual or organisation is to be permitted to import/dump any type of fill on a Teacher & Police Housing property.

Fill shall only be brought onto Teacher & Police Housing properties sites as part of necessary works and must be accompanied by an appropriate validation certificate as virgin excavated natural material (VENM) ensuring that the fill is suitable for use. Please refer to Teacher & Police Housing and the EPA website for advice on the use of imported fill on Teacher & Police Housing sites.

14.1.8 Use of certain equipment on asbestos or ACM

The NSW WHS Regulation 446 prohibits the use of high-pressure water spray and compressed air on asbestos or Asbestos Containing Material. It also bans the use of power tools, brooms and any other implements that cause the release of airborne asbestos into the atmosphere, except if the use of the equipment is specially controlled so as to capture or suppress the airborne asbestos.

14.1.9 Principles of Asbestos Management

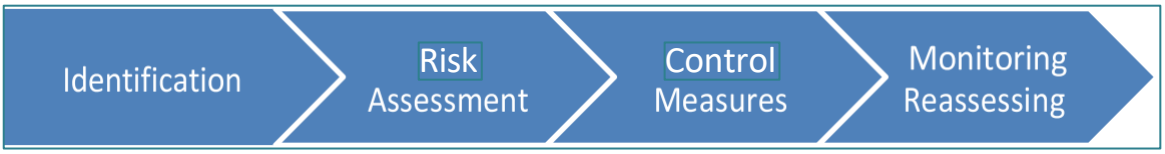
These principles of asbestos management have been adapted from general principles published in the SafeWork NSW Code of Practice - How to Manage and Control Asbestos in the Workplace 2022.

1. asbestos which has been incorporated into a stable matrix can be found in many working environments. Provided the matrix remains stable and no airborne dust is produced, it presents a negligible health risk
2. asbestos presents a risk only when it is airborne. The risk to health increases as the number of fibres inhaled increases
3. asbestos removal may not be immediately necessary, but must be completed before a structure, or part of a structure, is demolished;
4. removal of asbestos should be subject to priority setting, determined by the condition and location of the asbestos as well as scheduled refurbishment works;
5. the presence of asbestos should be identified after reference to the on-site asbestos register for information;
6. if there is uncertainty as to whether asbestos is present, it should be assumed that it is present and the precautions applied or it should be tested;
7. asbestos removalists and maintenance workers in an asbestos environment must be suitably protected; and

8. all future use or re-use of asbestos is illegal. The presence of asbestos should be identified after reference to the on-site asbestos register for information.

The general principles of asbestos management are covered in the following four areas:

Figure 5 - General Principals of Asbestos Management



14.1.10 Identification

For refurbishment maintenance, (including demolition), the Teacher & Police Housing Asset Manager is responsible for ensuring that a hazardous materials register is available to contractors who are planning to submit tenders for works that may involve the disturbance of asbestos-containing materials. The register will be issued along with the scope of works to works being undertaken. If it cannot be determined if asbestos materials are present and have not been previously tested and recorded in the asbestos register, an environmental hygienist will be engaged to identify asbestos and ACMs.

14.1.11 Risk Assessment

The assessment process entails identifying, evaluating, controlling and monitoring sources of asbestos within buildings or other structures.

SafeWork NSW states that in 'assessing the risk of exposure' that:

> *If asbestos or ACM is in good condition and left undisturbed, it is unlikely that airborne asbestos will be released into the air and the risk to health is extremely low. It is usually safer to leave it and review its condition over time. However, if the asbestos or ACM has deteriorated, has been disturbed, or if asbestos-contaminated dust is present, the likelihood that airborne asbestos will be released into the air is increased*[5].

Asbestos and other hazardous materials identified by inspections are reported with a risk assessment in the register for each Teacher & Police Housing property. Such situations are assigned one of the following priorities:

Priority 1 - friable asbestos in exposed area - quarantine immediate area to prevent exposure, urgent removal by Class A Asbestos Removal contractor, Airborne Asbestos Monitoring by independent NSW Licensed Asbestos Assessor (LAA) and provision of clearance certificate;

Priority 2 - friable asbestos in enclosed area - air monitoring and settled dust sampling to identify any contamination - if contamination present, treat as Priority 1, if not identify as high priority on maintenance program, removal as per Priority 1;

Priority 3 - extensive quantity of damaged or deteriorated non-friable asbestos in exposed area - removal by Class B non-friable asbestos removal contractor, air monitoring by independent hygienist and provision of clearance certificate;

Priority 4 - limited quantity of damaged or deteriorated non-friable asbestos in exposed area - make safe with PVA or similar sealant, schedule removal by Class B non-friable asbestos removal contractor when conducting refurbishment works; and

Priority 5 - non-friable asbestos in good condition - include on register and review condition and consider removal when considering refurbishment works.[6]

Refer to the Safework NSW Guide Managing risk of Exposure to Asbestos, for a more detailed approach. SafeWork is also available via #13 10 50.

14.1.12 Control Measures

In accordance with the SafeWork NSW Code of Practice - How to Manage and Control Asbestos in the Workplace 2022 the following control measures may be adopted:

The control of asbestos hazards should utilise the most appropriate method applicable to the particular circumstances. Based upon the assessment of the condition of the asbestos, its potential

to suffer damage or mechanically degrade, and the likelihood of exposing people to airborne asbestos, the following control strategies are relevant:

Leave in-situ. The identification of asbestos in a building does not automatically necessitate its immediate removal. Asbestos in a stable condition and not prone to mechanical damage can generally remain in situ. The asbestos will need to be inspected on a regular basis (every 12 months where a risk assessment indicates the need for reassessment) to ensure its integrity is maintained. Asbestos must be removed under controlled conditions prior to demolition or refurbishment works that may disturb the asbestos.7

Removal. Removal of asbestos must be performed under certain controlled conditions, depending on the type of asbestos product to be removed. Removal is considered preferable to the other abatement options such as enclosure or encapsulation, as it eliminates the hazard. The removal process, however, does pose an increased risk to personnel engaged in the removal, and may result in increased airborne fibre levels in adjacent occupied areas if the removal program is not strictly controlled. Asbestos removal is generally an expensive exercise, and can cause major disruptions to building occupants.

The removal of asbestos is considered appropriate when the asbestos product is deteriorated, has reached an unserviceable condition, or is at risk of being disturbed, and the other control options are not feasible. Where demolition or refurbishment works are to occur, and this work is likely to impact on asbestos materials, the asbestos must be removed under controlled conditions prior to the commencement of any site works.

Where the asbestos is friable and not in a stable condition, and there is a risk to health from exposure, they should be removed as soon as practicable.

If it is not reasonably practicable to remove asbestos, then other control measures including either enclosing or sealing the asbestos must be implemented to ensure people are not exposed to airborne asbestos.

Removal of Non-friable Asbestos. Teacher & Police Housing will require the use of asbestos removal contractors with a Class B license for the removal of non-friable asbestos. The work will have to be carried out in accordance with the WHS Regulations 2017and the SafeWork NSW Codes of Practice How to Manage and Control Asbestos in the Workplace 2022 and How to Safely Remove Asbestos 2022

Teacher & Police Housing will require the submission of a clearance certificate for the asbestos removal work at the completion of the work.

Removal of Friable Asbestos. Teacher & Police Housing will require the use of asbestos removal contractors with a Class A license for the removal of friable asbestos.

The work will have to be carried out in accordance with the WHS Regulations 2017 and the SafeWork NSW Codes of Practice How to Manage and Control Asbestos in the Workplace 2022 and How to Safely Remove Asbestos 2022.

Teacher & Police Housing will ensure that an independent licensed asbestos assessor will undertake air monitoring of the asbestos removal area at the workplace. (WHS Reg Clause 475).

14.1.13 Management of Asbestos in Soil

Sites containing asbestos become a workplace when work is carried out there. The WHS Regulations require that, where asbestos is identified as contaminating a workplace, a register and asbestos management plan be created for the site.

The management and remediation of sites contaminated with asbestos from illegal dumping/uncontrolled importation and demolition is a specialised task. In some instances, site remediation may entail removal of asbestos impacted soil materials and ACM from the site; in other cases, this may not be practicable, and other management strategies should be used. Engaging specialists who may include asbestos removalists is highly recommended for all but the most minor of non-friable contaminations.

The Assessment of Site Contamination National Environmental Protection Measure (ASC NEPM 2013) sets out the general principles for assessment and remediation of sites contaminated with a number of hazardous materials including asbestos.

For further information pertaining to the management of asbestos in soil, please refer to the Safework NSW Guidance.

14.1.14 Emergency Situations

An emergency situation is most likely to entail a scenario where asbestos or ACM present on site has been inadvertently disturbed through actions of Teacher & Police Housing tenants, staff, maintenance personnel, contractors, out of hours vandalism or criminal entry, visitors, become damaged by severe weather conditions (e.g. hail damage to external asbestos products), or become exposed in grounds through surface erosion or illegal dumping of waste.

The NSW WHS Regulation 455 also requires that, for an emergency at a residential premise where a structure or plant that contains asbestos must be demolished because it is structurally unsound or its collapse is imminent, that the contractor carrying out the demolition must notify SafeWork NSW as soon as they become aware of the emergency and before the demolition is commenced.

The contractor who is to carry out the demolition must develop a procedure, so far as is reasonably practicable, to reduce the risk of exposure to workers and other persons to airbone asbestos fibres.

14.1.15 Under Buildings

Properties that have cavities below (typically older style buildings) present storage opportunities for waste or spare materials. This can include asbestos building materials, such as Super Six roofing or fibrous cement sheeting.

Fibrous cement packing may also be present between piers and the building.

Fill materials or demolition waste containing fragments of fibrous cement materials may also be present below demountable buildings and as such require action to remove materials/remediate the area.

Asbestos may have been used as a filler material in mortar joints or in concrete footings and slabs on ground. It is also a product which may be present in service pipes and pits or as a lagging material.

14.1.16 Building Materials – Damaged

Damage occurring to asbestos-containing materials in buildings may cause an increase in the risk of asbestos fibre release. Materials becoming degraded over time may also cause an increase in the risk of asbestos fibre release. Minor surface scratches may not require emergency response actions, rather a repair to the surface coating, although more extensive damage will usually require emergency responses such as restricting access and material removal.

14.1.17 Friable Asbestos Building Materials

Where friable asbestos is exposed or loose sprayed, immediate measures are required in order to control the risk. Please note that friable asbestos may only be removed by contractors Class A licensed by SafeWork NSW to remove friable asbestos. Contractors will also be required to apply to SafeWork NSW prior to friable removal for a work site-specific permit.

14.1.18 Fire Damaged Buildings

Where buildings become damaged or destroyed by fire, it is possible that asbestos-containing materials may also have become damaged. Once asbestos materials become damaged by fire, there is a significantly elevated potential for fibre release. It is, therefore, important in all circumstances to restrict access.

Fire damaged asbestos will also be classified as friable by SafeWork NSW, and as such will require removal by a Class A licensed contractor.

14.1.19 Illegal Dumping of Suspected Asbestos Waste

Due to the high costs associated with the disposal of asbestos waste, on rare occasions this waste is illegally dumped. Dumped asbestos can be mixed with general builder's waste, which may include rubble and spoil. It is not unknown for individuals and companies to dispose of building waste, including asbestos waste, on Teacher & Police Housing grounds.

14.1.20 Single Source at Surface

When asbestos materials, such as fibrous cement sheeting or other material types, have been found at the surface of Teacher & Police Housing grounds over a small area, this is usually due to demolition of a structure containing asbestos such as a building or fence where waste asbestos has been left at the surface or buried instead of proper disposal.

14.1.21 Extensive Surface Contamination

These are asbestos materials (typically as fibrous cement sheeting) that have been found over a wide area of ground as a result of imported waste materials (used for landscaping) or from demolition of domestic dwellings (previously located on the site) and fibrous cement fragments that have become exposed due to surface erosion and soil dynamics.

14.1.22 New Instances of Asbestos Materials (suspected or known)

Where new instances of asbestos materials are suspected of being present in Teacher & Police Housing properties, the Teacher & Police Housing must be contacted upon discovery of suspected asbestos cement materials to determine actions to be taken. Access to the area should be restricted to all people until it is proven that no asbestos is present or until asbestos materials are removed or appropriately encapsulated.

Teacher & Police Housing will engage a hygienist to take samples and provide recommendations on the management of the potentially contaminated land.

Management techniques are required to control the risk of exposure to asbestos fibres. Depending on the situations, one or more of the following strategies should be employed:

- removal of all visible asbestos materials at the surface;
- enclosure of area to restrict access;
- containment of fill materials by means of applying a demarcation barrier such as geofabric and/or by applying a surface layer such as mulch or topsoil above contaminated soils;
- re-turfing of exposed soils;

- encapsulation of fill materials by means of applying a permanent covering such as concrete; and
- removal of asbestos contaminated soils.

Alternate strategies will be considered by Teacher & Police Housing in conjunction with a hygienist / environmental scientist.

14.1.23 Re-inspections

In order to monitor the effectiveness of onsite management it is essential that the treated area be annually inspected.

Should areas of exposed soil or geofabric be identified where previous containment has occurred or where encapsulating measures appear to be damaged or are no longer effective then these

areas should be recovered immediately. Some remedial measures will require ongoing maintenance by a suitable person, such as surface layers including mulch and topsoils to ensure that a sufficient barrier layer is in place.

14.1.24 Enclosure

Enclosure involves installing a barrier between the asbestos material and adjacent areas. This is effective in inhibiting further mechanical damage to the asbestos, and friable products such as calcium silicate pipe lagging or sprayed limpet asbestos may be targeted for enclosure where removal is not an option. The type of barrier installed may include plywood or sheet metal products, constructed as boxing around the asbestos.

14.1.25 Encapsulation or Sealing

Encapsulation refers to the coating of the outer surface of the asbestos material by the application of some form of sealant compound that usually penetrates to the substrate and hardens the material. Sealing is the process of covering the surface of the material with a protective coating impermeable to asbestos. Encapsulation or sealing helps protect the asbestos from mechanical damage, and is designed to reduce the risk of exposure by inhibiting the release of asbestos fibres into the airborne environment, and increase the length of serviceability of the product.

The use of encapsulation or sealing may be of limited application. It is not considered to be an acceptable alternative to repairing or removing severely damaged or friable asbestos materials.

14.1.26 Examples of Hazardous Material Locations Within a Property

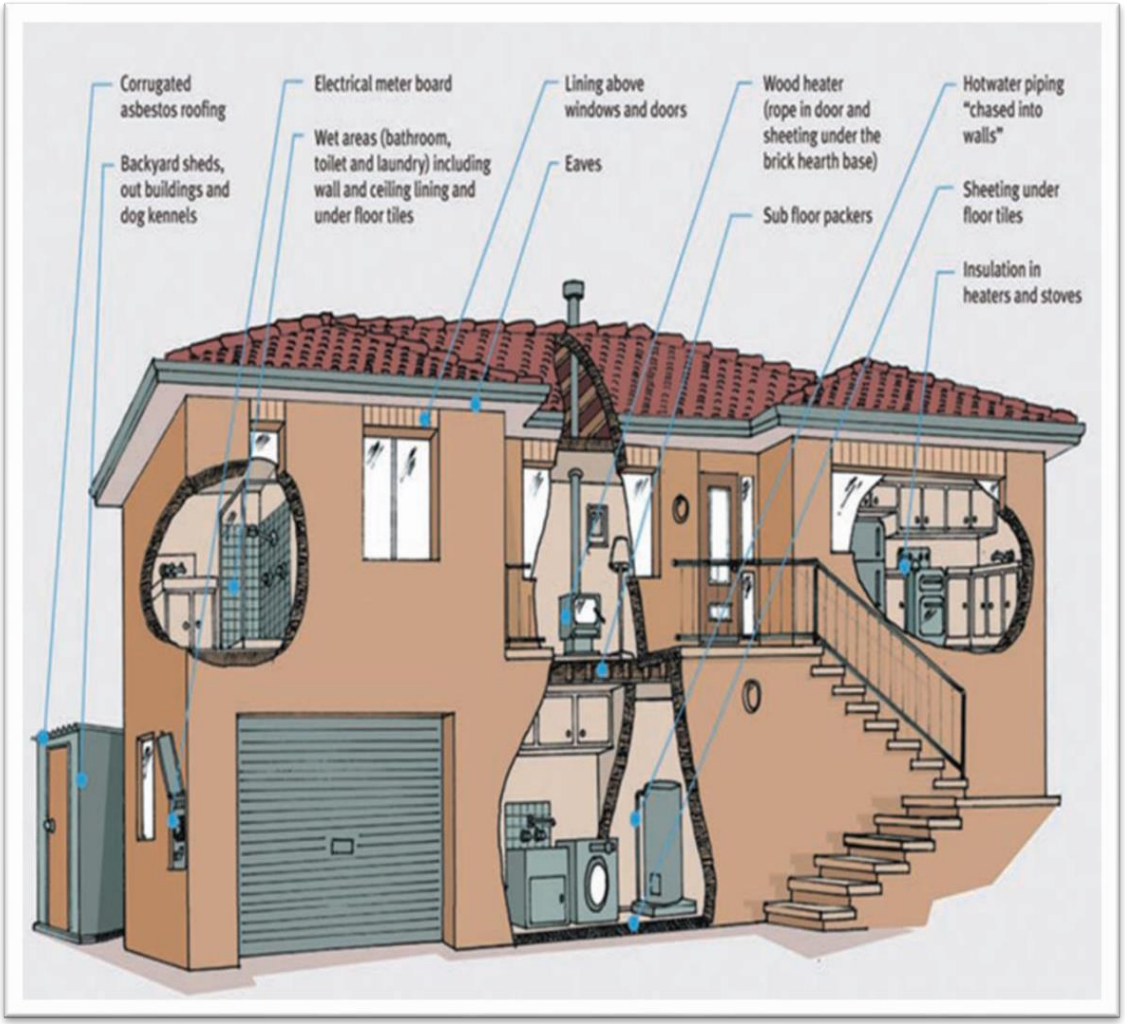


Figure 6 - Potential presence of asbestos and asbestos containing material in domestic residences

Figure 7 - Non-friable (bonded) Asbestos Shed / Out House

Figure 8 - Friable Asbestos – Pipe lagging

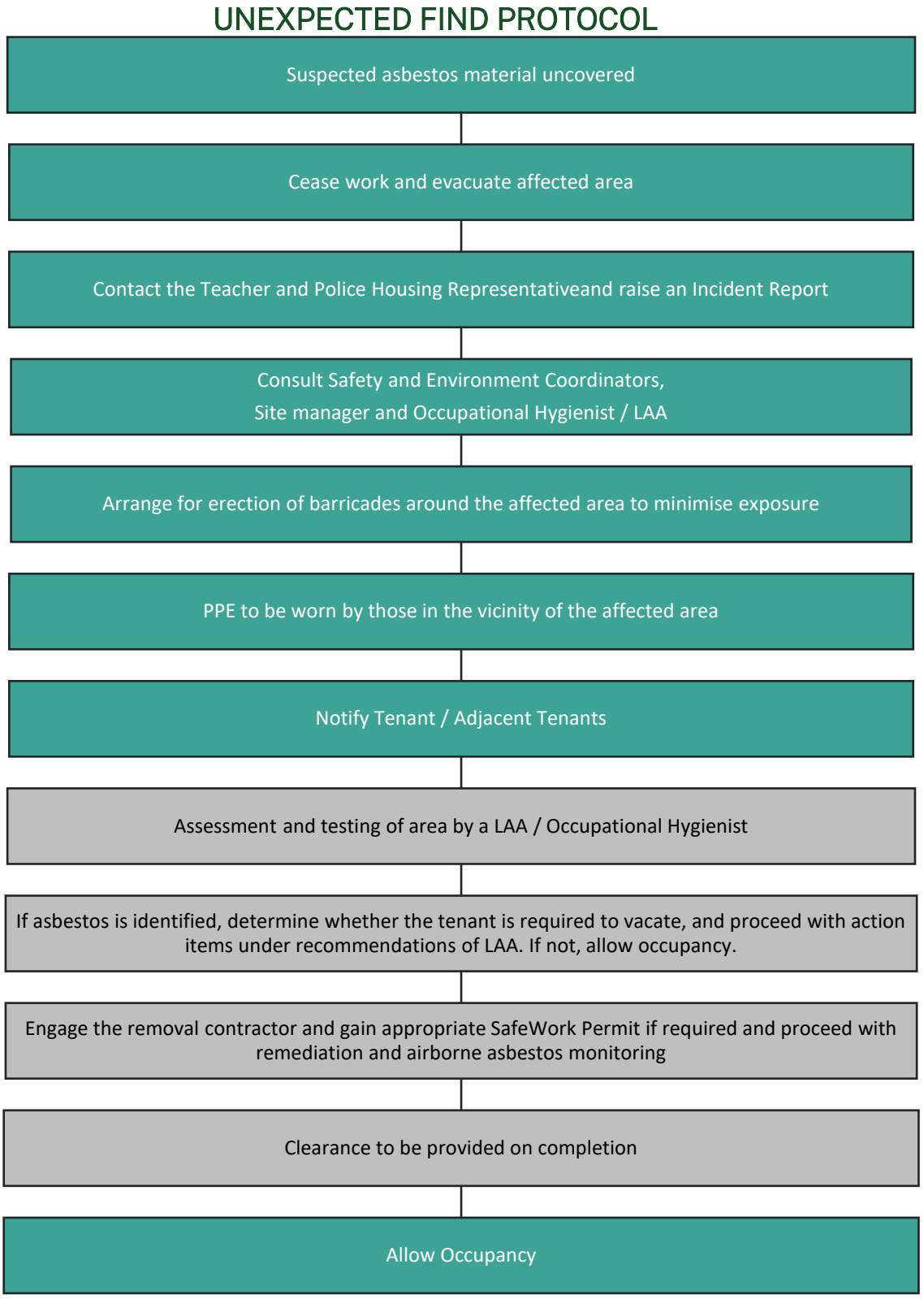
Figure 9 - Friable asbestos – Sprayed fire insulation on beams

Figure 10 - Example of non-friable (bonded) asbestos fibrous cement fragment, considered to be in fair condition.

Figure 11 - Example of widespread asbestos impacted surface soils

14.2 Unexpected Find/s Protocol

Key
Green sections to be performed by Teacher and Police Housing.
Grey sections to be performed by others.



14.3 Appendix B LEAD-BASED PAINT / DUST

14.3.1 Introduction

Lead in deteriorating paint / dust If lead is present in paint that is still in good condition and it is not a friction or impact surface, it is not likely to present a health hazard unless disturbed by sanding, or mechanical or water damage. However, if the paint is in poor condition, such as flaking, peeling or badly chalking, or if lead-containing dust is present, it may be a risk to those touching it, or even through removal by wind action.

Flaking of old Lead-based paint from exterior surfaces is common even where a number of coats of more recent lead-free paints have been applied. These flakes usually settle on soil or paved areas, or within voids, ceiling / spaces and other places where dust tends to accumulate, and may then be ingested or inhaled by the body.

Paints containing white lead pose the greatest risk since the white lead is highly reactive, readily absorbed and its sweet taste is attractive to children. However, paint with more than 1% lead, or paint containing white lead, was prohibited for domestic use after 1970.

If paint is known to be pre-1970, is in poor condition and is accessible to children, it may present a health hazard, and the paint should be tested for the presence of lead. If it is found to contain more than 0.1% of lead by weight, careful and immediate measures are required to control this hazard. There is generally no criteria for lead containing dust, given the bioavailability of lead within the dust matrix, and the risk that that even a small amount of inhalation / ingestion presents.

If the presence of lead is known or suspected, the extent of the hazard will be related to the amount and condition of Lead-based paint present. A single wall panel or metal door-frame with high lead levels may not be as great a hazard as the entire exterior of a house with peeling lead paint. Small area hazards are generally easy to control.

It is recommended that children and pregnant women should not be present in an area when renovations that will disturb Lead-based paint are taking place. Even low blood lead levels may have detrimental effects on young children's intellectual development and may cause other health problems. Children absorb the lead mostly through ingestion, i.e. by touching contaminated dust or soil and then putting their fingers in their mouths. They absorb a much greater percentage of the lead entering their bodies than adults do. During pregnancy, essential elements such as calcium are transferred from the bones of the mother to the baby, which process may release accumulated lead. Women of child-bearing years and during pregnancy, therefore, should take special care to avoid sources of lead exposure.

Other sources of lead should be considered when doing remedial work on properties, as dust accumulated in ceiling cavities can be high in lead (from use of lead based fuels on busy roads) and lead flashings and fittings may have been used on heritage building plumbing and roofing works.

Figure 12 - Potential sources of lead within residences.

14.3.2 Principles of Lead-based paint Management

If paint is known to be pre-1970, is in poor condition and is accessible in general, it may present a health hazard, and the paint should be tested for the presence of lead. If it is found to contain

more than 0. 1% of lead by weight, careful and immediate measures are required to control this hazard.

If there is deteriorating Lead-based paint on external surfaces, it may be necessary for an occupational hygienist to be engaged to determine if Lead-based paint has been deposited in the soil and is creating a health risk, should it be ingested.

All work needs to be carried out in accordance with the requirements of AS4361.2 Guide to Lead-based paint Management Part 2: Residential and commercial building. The following is a summary – reference must be made to AS4361.2 for full requirements.

- Lead testing kits should be used to identify the presence of Lead-based paint. The lead testing kits are readily available from hardware shops and provide a quick and effective means of identifying whether lead is present in paint.
- The removal of Lead-based paint by dry sanding and open flame methods is generally prohibited.
- Special precautions will need to be taken to ensure the effective management of Lead-based paint, Lead containing dust and associated waste. This includes assessing whether existing deteriorated Lead-based paint may have contaminated furnishings, carpet or other floor coverings.
- There is a requirement to notify workers of lead risk work and to monitor workers health who perform lead risk work (refer WHSR 392 to 395).

14.3.3 Actions Taken

If a house contains Lead-based paint or lead containing dust, they need to be managed to prevent it becoming a health hazard. Depending on the particular circumstances, Teacher & Police Housing will determine which of the following options for management of the Lead-based paint will be applied:

a) doing nothing;
b) stabilizing the paint;
c) carrying out abatement or
d) a combination of these options.

More details of these management options are provided in AS4361.2 Guide to Lead-based paint Management Part 2: Residential and commercial buildings, as well as the NSW EPA Website.

For the specific laws about working with lead, see clauses 392 – 418 of the Work Health and Safety Regulation 2017.

14.4 Appendix C PCBs

14.4.1 Introduction

PCBs is the common name for polychlorinated biphenyls. PCBs range in appearance from colourless, oily liquids to more viscous and increasingly darker liquids, to yellow then black resins, depending on chlorine content of the PCB.

The major use of PCBs in the electrical industry has been as an insulating fluid inside transformers and capacitators.

Capacitators containing PCBs were installed in various types of equipment, including fluorescent light fittings during the 1950's, 1960's and 1970's.

The Australian and New Zealand Environment and Conservation Council (ANZECC) has prepared an Information Booklet for Electricians and Electrical Contractors on the Identification of PCB-Containing Capacitators which includes guidelines on safe removal and disposal and a list of electrical equipment known to contain PCBs.

14.4.2 Principles of managing PCBs in light fittings

If PCBs are identified in fluorescent light fitting capacitators, they should be safely removed and disposed of by a competent electrician in accordance with the safe working and disposal procedures in the Australian and New Zealand Environment and Conservation Council (ANZECC) has Information Booklet for Electricians and Electrical Contractors on the Identification of PCB- Containing Capacitators.

14.4.3 Actions taken

If a PCB are located in a house owned or managed by Teacher & Police Housing the PCBs are to be managed to prevent them becoming a health hazard. Depending on the particular circumstances, Teacher & Police Housing will arrange for a competent electrician to conduct the works and lawful disposal.

14.5 Appendix D – Synthetic Mineral Fibres (SMF)

14.5.1 Introduction

Synthetic mineral fibres (SMF) is a term used to describe a fibrous product manufactured by the process of blowing or spinning a molten mineral raw material into a fibrous 'woollen' product that is used for insulation.

SMF can be classified into three groups:

1. Glasswool: is manufactured by melting glass into a fibrous 'wool'

- used as thermal and acoustic insulation in the manufacturing and construction industry
- does not include fibreglass used in boatbuilding, surfboards and other industrial applications because they contain catalysts and resins which require different work practices.

2. Rockwool: is manufactured by melting volcanic rock (usually basalt) into a fibrous 'wool'

- also known as slagwool
- used as thermal and acoustic insulation in the manufacturing and construction industry.

3. Refractory ceramic fibres (RCF): are made from kaolin (a naturally occurring alumino-silicate clay or a synthetic mix of alumina) used as:

- high temperature, high performance thermal insulation, e.g.: in furnaces, kilns and other industrial heaters
- insulation in the automotive, marine, petrochemical, steel, aluminium, ceramic, glass and construction industries.

For over 70 years, glasswool and rockwool insulation materials have been the most widely used insulation in Australia.

14.5.2 Principles of working with SMF

14.5.2.1 SMF classified as possibly cancerous to humans in 1987

Concerns from research into other building materials in the 1970s (e.g. asbestos) led to questions being raised about possible health effects of SMF products.

In 1987, based on some early research findings the International Agency for Research into Cancer (IARC), an agency of the World Health Organisation (WHO), classified all SMF as 'Category 2B - possibly carcinogenic to humans'.

14.5.2.2 Change to SMF classifications in 2001

Throughout the 1990s, further extensive medical and scientific research was conducted and then reviewed by the IARC in 2001. As a result of this review:

- Glasswool was reclassified down to 'Category 3 - not classifiable as carcinogenic to humans',
- Rockwool was also reclassified down to 'Category 3 - not classifiable as carcinogenic to humans', but
- RCF remains classified as 'Category 2B - possibly carcinogenic to humans' and, therefore, a hazardous material.

Since 2000 – 2002, all glass and rockwool insulation products manufactured in Australia have been bio soluble, allowing the product to dissolve in bodily fluids and be quickly cleared from the lungs. Despite this, it should be remembered that workers can still be exposed to SMF made of lower quality imported products.

14.5.2.3 Health effects from exposure to glasswool and rockwool

Dust from glasswool and rockwool products may cause:

- discomfort, tickling and dryness of the nose, throat and respiratory tract, especially for those who suffer hay fever, asthma or bronchitis;
- temporary skin irritation, particularly where there is rubbing from clothing such as cuffs and collars; and
- severe irritation to eyes.

14.5.2.4 Working with SMF

If synthetic mineral fibres (SMF) are located in a property owned or managed by Teacher & Police Housing the SMFs are to be managed to prevent them becoming a health hazard.

Persons working with synthetic mineral fibres on behalf of PNSW, Teacher & Police Housing or agents of Teacher & Police Housing must do so in accordance with relevant WHS legislation, SafeWork Australia and SafeWork NSW advice and relevant Codes of Practice :

- workplace exposure standards for airborne contaminants 2020
- SafeWork Australia's guide to handling refractory ceramic fibres 2022
- National Occupational Health and Safety Commission's national standard for synthetic mineral fibres and National Code of Practice for the Safe Use of Synthetic Mineral Fibres May 1990

14.6 Appendix E - Incident Report Form

14.6.1 Reporting suspected or discovered hazardous material via Report Form

The presence of the suspected hazardous material should be reported to the Teacher & Police Housing via the Managing Agent or the Property and Construction Manager using the following incident report form.

Hazardous Material Incident Report Form		
Allocated Incident Reference Number:	Please note this reference number on all future documents related to this incident.	**Name of Person Submitting this Report:**
Date / Time of Incident	**Job / Purchase Order Ref#:**	**Managing Agent:**
Property Address:	**Tenant:**	**Property & Construction Manager:**
Hazardous Material Involved:		**Contractor:**
Description – extent of the hazardous material exposed / damaged:		
Causes: What has caused this to occur? Brief sequence of events:		
Consequences: Has anyone been harmed? Is medical treatment required? Can the tenancy continue whilst things are rectified?		
Actions Taken or Planned:		
What	**By Whom**	**By When**

14.7 Appendix F - Incident Investigation

14.7.1 Process

Upon receipt of a Hazardous Material Incident Reporting Form (Appendix E) Teacher & Police Housing shall engage a suitably qualified contractor to undertake a detailed investigation of potential hazardous building materials, and provide a report, including the attached Hazardous Materials Disclosure Form identifying the location and condition of all asbestos and other hazardous materials.

The report must include a diagram showing the location of the samples of materials that are taken, assign a priority and provide recommendations on the treatment of the hazardous materials.

The report and recommendations must comply with the requirements of the NSW Work Health and Safety (WHS) Regulations 2017 and the NSW WHS Codes of Practice identified in section five (Scope) of the plan (and all applicable SafeWork NSW guidelines).

The scope of the investigation is to include all areas in the following locations [specify the building(s), room(s) and other areas, and ground area(s), where the inspections and testing is required to be undertaken by the consultant when preparing the survey]:

This includes, but is not limited to:

a) Walls and ceilings
b) Mortars, mastics and other sealants
c) Flooring materials, including glues
d) Under floor areas where accessible
e) Exposed roof trusses, purlins, mechanical cranes
f) Exposed mechanical ducts, internal and external, service trays
g) Roofs
h) Ceiling spaces
i) Mezzanines and lofts
j) Underfloor spaces
k) Locations where false ceilings / wall panels have been installed
l) Grounds

Samples should be taken on an agreed reasonable basis of any suspected asbestos-containing material and it should be tested at a NATA-accredited laboratory.

If the consultant identifies covered areas such as false ceilings/ wall panels where they consider asbestos or other hazardous materials may be present, they should provide a recommendation as to whether further investigations, including breaking through the ceiling / wall panel to the covered area, should be undertaken.

The survey of the grounds should include a consideration of previous land use and a visual assessment of the grounds and surrounding environment. Where it is considered there is a possibility of contaminated land, the consultant is to conduct the testing using test pits and recommend their depth. Any suspected hazardous material should be tested at a NATA-accredited laboratory.

14.7.2 Hazardous Material Disclosure Form

<table>
<tr><th colspan="4">Hazardous Material Disclosure Form</th></tr>
<tr><td colspan="2">Property Address:</td><td colspan="2">Name of Person Submitting this Form:

Date: / /____</td></tr>
<tr><td>Managing Agent:</td><td>Property & Construction Manager:</td><td colspan="2">Contractor:</td></tr>
<tr><td colspan="2" rowspan="4">Hazardous Material Involved:</td><td colspan="2">Risk Priority (refer below):</td></tr>
<tr><td>1.</td><td>2.</td></tr>
<tr><td>3.</td><td>4.</td></tr>
<tr><td colspan="2">5.</td></tr>
<tr><td colspan="4">Description – extent of the hazardous material exposed / damaged:</td></tr>
<tr><td colspan="4">Recommended Actions (use other side if required):</td></tr>
<tr><td colspan="4">Teacher & Police Housing Use Only:

Property Database Updated: / /____

Works / Actions Scheduled: / /____

Re-Assessment Scheduled: / /____</td></tr>
</table>

14.7.3 Hazardous Materials Management Priorities

Priority 1: friable asbestos in exposed area - quarantine immediate area, urgent removal, air monitoring and provision of clearance certificate:

Priority 2: friable asbestos in enclosed area - air monitoring and settled dust sampling - if contamination present, treat as Priority 1, if not identify as high priority on maintenance program, removal as per Priority 1 and/or flaking Lead-based paint on walls or in soil where children may be present - quarantine / clean up immediate area, identify removal as high priority on maintenance program and/or fluorescent light fitting with leaking PCB - immediate removal by licensed electrician

Priority 3: extensive quantity of damaged or deteriorated non-friable asbestos in exposed area - removal, air monitoring and provision of clearance certificate

Priority 4: limited quantity of damaged or deteriorated non-friable asbestos in exposed area - make safe with PVA or similar sealant, schedule removal as part of maintenance program

Priority 5: non-friable asbestos / Lead-based paint / fluorescent light filling with PCBS in capacitator in good condition - include on register and review condition on two yearly bases, and remove when refurbishment work required.

14.8 Appendix G - Hazardous Materials Register

Clauses 425, 426 43 & 457 of the NSW Work Health and Safety Regulation 2017 speak to asbestos management.

Clauses 53 & Chapter 7 of the NSW Work Health & Safety Regulation 2017 speak to the management of hazardous chemicals (including hazardous materials)

A person with management or control of a workplace must ensure an asbestos register is prepared and kept at the workplace. The asbestos register must be maintained, to ensure the information in the register is up-to-date.

Note: An asbestos register is not required to be prepared when:

- *the workplace is a building that was constructed after 31 December 2003*
- *no asbestos has been identified at the workplace*
- *no asbestos is likely to be present at the workplace from time to time.*

A person conducting a business or undertaking who is to carry out demolition / refurbishment of residential premises must ensure:

- that all asbestos that is likely to be disturbed by the refurbishment is identified, and
- so far as is reasonably practicable, that the asbestos is removed before refurbishment is commenced.

As the Teacher & Police Housing residential properties are only defined as workplaces[11] when construction or maintenance work is undertaken on them.

Teacher & Police Housing maintains a Hazardous Materials Register on an online database. The presensce of hazardous materials is known to the managing agents when the reports are made available and the online system is updated. Contractors are required to declare they have sighted the register/hazardous materials information for each property. Tenants are advised of the potential for hazardous materials at their residene in the Tenancy Handbook.

The Hazardous Materials Register will list all identified hazardous materials. This will include:

a) the date on which the hazardous material was identified
b) the location, type and condition of the hazardous material;
c) results of any analysis that confirms a material; or
d) state that no asbestos or ACM or other hazardous material is present

[11] The residential properties that Teacher & Police Housing manages are not defined as workplaces under the NSW Work Health and Safety Act 2011 when they are used as residences. The properties only become workplaces of the Contractor when maintenance or construction work is carried out on the properties.

4PSQ Level 15, 12 Darcy Street
Parramatta NSW 2150

Locked bag 5022
Parramatta NSW 2124

Office hours:
Monday to Friday
8:30am – 4:30pm

T: 02 1300 137 343 – Toll Free
E: teacherandpolice@homes.nsw.gov.au
W: nsw.gov.au/homes-nsw

NSW GOVERNMENT

Homes NSW