

## Chapter 2

# Framework for response to asbestos contamination

Asbestos contaminated soil must be addressed at the earliest possible opportunity permitted by legislation. Understanding how asbestos is legislated, managed and controlled in Western Australia is important to effectively assess, remediate and manage asbestos contamination early and in compliance with the most relevant legislation.

Section 5.5 and Figure 2 of the [Contaminated Sites Guidelines: Identification, reporting and classification of contaminated sites in Western Australia \(2017\) \(external site\)](#) references alternate legislative processes for addressing asbestos contaminated soil impacts. [Table 2](#) expands on this advice and outlines the various legislation, responsible agencies and associated codes of practices and guidance and how they may apply in various circumstances.

For example, asbestos contamination of soil related to the following activities may be addressed immediately through other legislation outlined in Table 2:

- incomplete removal and/or clean-up of soil directly following asbestos removal work
- broken and damaged sections of bonded materials from existing structures, such as fencing
- illegal dumping of bonded asbestos cement material with simple surface impact
- incident response (pollution) from contamination arising from a single incident, e.g. fire, high-pressure water hose cleaning of a roof.



Figure 4 Broken ACM sheeting.

## 2.1 Decision to report under the Contaminated Sites Act 2003

The decision on whether it is necessary to [report a site \(external site\)](#) must consider both:

- the information available, including initial site inspections on the likely type, quantity and distribution of asbestos-containing materials at the site
- other regulatory provisions in place for managing asbestos.

If in doubt, it is best to contact DWER and other relevant agencies to discuss the decision. The obligation to report falls on the owner, occupier, the polluter and the contaminated sites auditor, where appointed. However, others, such as an environmental consultant or Local Government officer, may also report the site.

It is important to note that the CS Act allows new information to be submitted to DWER for (re)evaluation at any time. Even where a site has been previously reported and not classified, where information becomes available that asbestos-contaminated soils remain at a site, the site should again be reported to DWER.

## 2.2 Further guidance for common asbestos contamination scenarios

The information provided in the various chapters of these guidelines (e.g. soil sampling, characterisation of contamination and soil clean up) can be used to achieve compliance with other legislation.

Further advice on specific situations is outlined below

### 2.2.1 Small scale or limited surface impacts

Small scale or limited surface impact of bonded ACM can be more readily and practically assessed and managed using the [Guidance Note on the Management of Small-Scale, Low-Risk Soil Asbestos Contamination – May 2009 \(PDF 121KB\) \(under review\)](#).

### 2.2.2 Incident response

Specific guidance is available for responding to [fires, storm damage and natural disasters](#) and single incidents involving [high pressure water equipment](#) on roofs.

**Table 2 Legislation framework**

Source of asbestos	Legislation	Supporting Documents	Responsible Agency
<b>Existing asbestos products</b>			
Commercial / Industrial and other workplaces	<i>Occupational Health and Safety Regulations 1996</i>	<a href="#">Code of Practice for the Safe Removal of Asbestos [NOHSC:2002 (2005)] (external site)</a> <a href="#">National code of practice for the management and control of asbestos in workplaces [NOHSC:2018 (2005)] (external site)</a> <a href="#">Guidance note on the membrane filter method for estimating airborne asbestos fibres 2nd edition [NOHSC:3003(2005)] (external site)</a> AS 4964: 2004 Method for the qualitative identification of asbestos in bulk samples	WorkSafe Division, DMIRS
Residential	<i>Health (Asbestos) Regulations 1992</i>	<a href="#">Guidance Note: Identification of Asbestos Containing Material (PDF 2.4MB)</a> <a href="#">Guidance Note: Asbestos Cement Fences (PDF 1.3MB)</a> <a href="#">Guidance Note: Asbestos Cement Roofs (PDF 1.13)</a> <a href="#">Dust from DIY renovations (external site)</a> <a href="#">Prohibited: Pressure Cleaning of Asbestos Cement Roofs 2010 (PDF 157KB)</a> <a href="#">Hazards on your property after a bush fire (PDF 58KB)</a> <a href="#">Guidance note on the management of fire damaged asbestos (PDF 687KB)</a> <a href="#">Asbestos fire contamination leaflet (PDF 606KB)</a> <a href="#">Contamination Free Mulch</a>	DOH/Local Government Authority
<b>New products</b>	National Ban since 2003	<a href="#">Australian Border Force: Prohibited Goods (external site)</a>	Border Force

Source of asbestos	Legislation	Supporting Documents	Responsible Agency
<b>Mining and mineral extraction</b>	<i>Mines Safety and Inspection Regulations 1995</i>	<a href="#">Management of fibrous minerals in Western Australian mining operations Second edition (external site)</a> <a href="#">Guidance Note on Public Health Risk Management of Asbestiform Minerals Associated with Mining (external site)</a>	Resources Safety, DMIRS
<b>Pollution (large quantities)</b> <b>Illegal dumping – minor</b>	<i>Environmental Protection Act 1986</i>		DWER Local Government Authority
<b>Contamination of Land</b>	<i>Contaminated Site Act 2003</i> <i>Contaminated Site Regulations 2006</i>	<a href="#">Contaminated sites guidelines (external site)</a> <a href="#">Guidance note - Occupational safety and health management and contaminated sites work, 2005 (external site)</a> <a href="#">NEPM, Schedule B2. Guideline on site characterisation (external site)</a> <a href="#">Guidance Note on the Management of Small-Scale Low-Risk Soil Asbestos Contamination – May 2009 (PDF 121KB) (under review)</a> <a href="#">Guidance Note on the Identification, Assessment and Management of Asbestos Contamination in Regional Public Areas – May 2011 (PDF 394KB) (under review)</a> <a href="#">The Information Brochure for Owners and Occupiers (May 2009) (PDF 105KB) (under review)</a> <a href="#">Public Health and Contamination of Soil by Asbestos Cement Material (PDF 321KB)</a>	DWER WorkSafe Division, DMIRS
<b>Recycled products and waste</b>	<i>Environmental (Controlled Waste) Regulations</i> <i>The Waste Avoidance and Resource Recovery Levy Act 2007</i> <i>Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)</i>	<a href="#">Guidelines for managing asbestos at construction and demolition waste recycling facilities 2021 (external site)</a>	DWER

### 2.2.3 Soil contamination related to removal and demolition activities

Planned removal work and demolition of structures should be closely monitored to ensure all asbestos material is removed in compliance with WHS Regulations. Controlled and compliant removal prevents both asbestos contamination of soil and the introduction of asbestos-containing materials into the recycling waste stream.

Minor and/or localised asbestos contaminated dust and debris (ACD<sup>2</sup>) on structures and asbestos fines (AF) material in soil may be expected from the long term presence and use of structures made with asbestos-containing materials. Clean up and removal of minor AF contamination in soil and sediments (e.g. water tank sediment, soak wells receiving run-off from asbestos cement rooves, roof drip lines, damaged pipe insulation) will be required during removal works as it is for minor ACD. The removal of this material must be addressed in the asbestos removal control plan and comply with WHS Regulations and Codes of Practice.

Licensed asbestos removalists may seek assistance from a suitably qualified and experienced person to delineate soil impacts from structures in complex situations.

Where asbestos contamination is found in soil, care should be taken with site management practices during removal and demolition works to prevent the spread of any possible contamination.

Unrestricted asbestos removal licence holders have a legal obligation to include asbestos clearance inspections for any friable asbestos removal work.

The clearance inspection for friable removal work should be undertaken by an independent person<sup>3</sup> who:

- is independent of the removal business, is not involved in the asbestos removal work and does not have a real or perceived conflict of interest
- meets the competency requirements under the WHS legislation and Code of Practice for the Safe Removal of Asbestos [NOHSC:2002 (2005)]
- issues a clearance certificate.

**It is recommended that verification of the removal of soil impacts is provided for all asbestos removal work.**

DOH and DMIRS advise that a record of final clearance inspections is provided for all removal work. For non-friable asbestos removal, there is no requirement for an independent competent person to undertake the clearance inspection and provide a certificate. However, a final inspection can still be completed with a clearance report provided by either an independent person or the removalist themselves. In all cases, WA government agencies recommend that the owner/client inspects the removal work area as soon as possible after work is completed to ensure that all asbestos materials have been removed.

The person undertaking clearance inspections needs to make sure:

- they are satisfied asbestos is not visible in the removal area or its immediate surrounds
- a clearance certificate/report is issued before the area is re-occupied or before any further demolition or refurbishment work takes place

<sup>2</sup> asbestos contaminated dust or debris (ACD) is defined in Model Work Health and Safety Regulations (January 2019) as dust or debris that has settled within a workplace and is, or is assumed to be, contaminated with asbestos.

<sup>3</sup> May be a licensed asbestos assessor in proposed changes to legislation.

- the clearance certificate/report contains sufficient information regarding the outcomes of the clearance inspection, including the results of any air monitoring and laboratory analysis.

Clearance inspections may include some soil validation sampling, especially following removal of material that has been subject to task/activities that have the potential to generate asbestos fibres (e.g. use power tools, high-pressure cleaning equipment, excessive breakage, exposed ACM in poor condition, roof runoff collection points). The sampling requirements for clearance certificates/reports should be decided as part of the planning activities.

It is also suggested that all relevant records, including asbestos removal plans, clearance inspection reports, disposal receipts, be kept for a property/site and passed on to any new owners/occupiers.

#### **2.2.4 Minor soil contamination found during land development and at construction sites**

Asbestos containing debris in soil may be found within any previously developed land, including commercial and residential sites or where imported fill has been brought onto the site. These properties/sites may not have been properly cleaned up following removal or demolition of structures containing asbestos, particularly where impacts occurred before the introduction of the current legislative controls for asbestos removal and management.

For some sites, there may only be a small number of isolated, sparsely distributed fibre cement fragments arising from past incidental contamination or as residual fragments remaining following removal and demolition of buildings and structures. Where the total quantity and distribution is very low, these fragments may be removed under an established safe system of work for the site. In general, a small number of fragments can be carefully collected, secured in a labelled, heavy-duty plastic bag or wrapped in heavy-duty plastic (minimum 0.2 mm thickness) for transport and disposal to a licensed waste facility.

Specific procedures for handling small quantities of dispersed asbestos cement fragments and when and how to report hotspots and unexpected finds will need to be addressed through site-specific work health and safety procedures, site inductions and awareness training. Such procedures should include the decision making criteria for reporting more extensive contamination under the CS Act (Section 2.1).

The possibility of asbestos being present in underground structures, including infrastructure, buildings, footings and slabs, must be considered in cost estimates for land redevelopment projects. The discovery of asbestos impacts during excavation works can cause significant delays and cost overruns for redevelopment and become the subject of ongoing legal proceedings. **Case Study:** [Trouble at the mill: Developer Glenvill sues Amcor over Alphington clean-up \(external site\)](#).

## 2.2.5 Structures above and below ground

While still hazardous, asbestos that is 'part of' or 'wholly contained' within a building or other structure does not meet the definition of 'contaminated' and is not required to be reported under the CS Act. In these circumstances, other legislative controls apply.

Intact underground infrastructure on occupied commercial/industrial land, whether in live service or disused, e.g. asbestos cement pipes, may be managed through existing asbestos management programs required by WHS legislation, including the inclusion on organisational registers and/or prioritised removal programs. In determining whether disused or obsolete structures may be managed in situ or prioritised for removal, consideration should be given to the existing prioritised removal plan and whether the property owner or manager can manage the site in perpetuity, such as through institutional controls. Removal methods with minimum dissections and that prevent breakage are preferred.

Where land is being subdivided and redeveloped, a plan should be made to demolish and remove any remaining unrequired or disused above and below ground asbestos-containing structures, in accordance with WHS legislation and national policy for prioritised removal of asbestos.

For sites not subject to WHS legislation (e.g. residential development, road reserve), where the removal of disused/obsolete underground infrastructure is restricted, or a decision is made that the underground infrastructure is better left undisturbed, the land must be reported under the CS Act to ensure it is appropriately classified under the CS Act to inform future owner/occupiers of the presence of underground asbestos-containing materials.