



Managing contamination from pressure cleaning of asbestos cement roofs

Guide for local government

The use of pressure water cleaning equipment to clean asbestos cement (AC) roofing is prohibited under the Health (Asbestos) Regulations 1992 (HA Regs) and Occupational Safety and Health Regulations 1996 (OSH Regs).

Pressure cleaning an AC roof can significantly erode the surface layer and cause the release of asbestos fibres in a cement 'slurry' that is deposited on surfaces such as paving, foliage, garden beds and outdoor furniture. The residue can result in significant contamination of the source and adjoining properties and once dry and if disturbed, can result in asbestos fibres being released into the air.

Local government environmental health officers (EHOs) may be required to provide 'first line' response to complaints and initiate actions under the HA Regs.

This advice has been prepared to provide guidance to EHOs to assist them when dealing with such incidents which can pose difficulties from an enforcement perspective. This advice should be read and used in conjunction with the Health (Asbestos) Regulations 1992.

Response agency

Under the current HA Regs it is possible for an EHO to initiate action against a householder or tradesperson for a potential breach.

However if the pressure cleaning is carried out by a contractor or self employed person (engaged by a householder) this constitutes a 'workplace' under OSH Regs and the matter can be reported/referred to WorkSafe via their client services centre on 1300 307 977.

If a householder is carrying out the pressure cleaning themselves, this is not covered by OSH Regs and the HA Regs apply.

As complaints are often first directed to local government, it is preferable that an EHO provides the initial response. It is then possible for local government to initiate action under the HA Regs and/or joint actions to be taken under the HA and OSH Regs.

Initial response

- First responders should always wear outer protective clothing (disposable overalls) and respiratory equipment (Class P1 or P2 facemask) on arrival at the site.
- If it is suspected the roof is AC and pressure cleaning is still occurring, a verbal direction should be given for work to cease.
- An initial visual assessment should be carried out to identify the extent of contamination (cement residue) at source and neighboring properties.
- The EHO should advise the owner/offender and adjoining residents to keep the contaminated areas wetted down and isolated.
- Photos/video footage of contamination should be obtained as these may be used as evidence.

- For legal purposes, samples of the residue should be collected (from source and neighboring properties). This will verify if asbestos is present. Samples should be clearly labeled with place of collection, date and time. A sketch map may be useful to indicate the locations from which samples were collected.

Note: Under the present HA Regs (Reg 14 (2)) there are requirements for dividing of samples into 3 parts and distribution of those samples.

Planning and implementing clean-up

If sample results confirm the presence of asbestos, clean up measures can then be determined. The main aim is to remove all visible residues (surface contamination) that are likely to contain asbestos fibres. As a precaution, clean up should extend at least one metre beyond visible contamination.

The extent of clean up and remediation will vary from case to case but may need to be quite extensive if adjoining properties have been contaminated.

- Instructions for remediation (with an appropriate time frame), should be given as a written notice (HA Regs, Reg 8 (1)) to the offender. Note: Persons have the right of appeal to the Executive Director Public Health (within 28 days of notice being served).
- Asbestos residue has the potential to become 'friable', so the clean up work should be carried out by a licensed asbestos removalist with appropriate equipment and expertise. It is not advisable for the householder to attempt the clean up work.
- It is recommended that an environmental consultant be engaged to help plan and oversee the operation.
- As clean up may involve adjoining properties, those property owners need to give consent for and agree on the planned remediation.
- Where the issue is a very sensitive one (community concern) the local government may require independent verification (such as by an environmental consultant) that clean up measures have been adequate.
- Prior arrangements should be made to ensure all contaminated waste material can be properly 'contained' and transported to an approved waste facility for disposal. This may require prior notification to the Department of Environment and Conservation and relevant waste facility.

Relocation of immediate residents

In cases where there has been extensive contamination of the source or adjoining properties (and public concern) residents should be advised to relocate until clean up and remediation is completed. It is envisaged that relocation of costs would need to be met at some stage by the person who caused the problem.

Guidance on clean up actions

- The aim as previously mentioned is to remove all visible asbestos cement residues allowing for a 'margin of error' at least one metre beyond the visible contamination.
- Cleaning methods may involve a combination of wet cleaning and vacuuming using an approved industrial vacuum cleaner (compliant with AS 3544-1988) that is fitted with a High Efficiency Particulate Air Filter (HEPA) compliant with AS 4260-1997). Note: A domestic vacuum cleaner is not suitable even if it is fitted with a HEPA filter.
- Wet cleaning (mop, cloths and water) may be more appropriate for cleaning of smaller areas such as outdoor furniture, child play equipment and the like. All wash cloths, mop heads must be treated as 'contaminated' and placed in sealed bags and labeled with the words CAUTION ASBESTOS.
- For large paved areas and driveways the best option for cleaning is use of a HEPA vacuum.

- Contaminated foliage should be carefully removed, bagged and labeled.
- Contaminated topsoil and mulch should be removed (nominal depth of 50 mm) and placed in lined bins, bagged or wrapped in plastic. The soil should be pre wetted before removal.
- Where lawn areas have been contaminated, it may be necessary to remove affected sections of lawn.
- If residue is present in a swimming pool, decisions will need to be made on whether the pool can be effectively cleaned or emptied.
- Affected properties may need to be cleaned internally, using a combination of wet cleaning and HEPA vacuum cleaner.
- All asbestos waste material must be suitably contained and labeled as ASBESTOS then taken to a waste facility that accepts asbestos.
- Clothing that has been potentially contaminated should be washed separately. This should remove any asbestos fibres that may be present.
- If there are concerns about fibres being in the washing machine the best advice is to wet wipe the internal surfaces. The cloths used should then be treated as asbestos waste.

Other considerations

Any air conditioning units that may have become contaminated should be cleaned (wet wiping or HEPA vacuuming), with particular attention given to cleaning or replacement of filters. It may be necessary for samples to be taken before and after cleaning. This process should be assessed jointly by the licensed asbestos removalist, EHO and environmental consultant.

Vehicles that have been contaminated should undergo a detailed clean, preferably, at a commercial car wash. Following the external clean, the internal surfaces of the car should undergo cleaning (wet wiping and or HEPA vacuuming).

Non-compliance

In cases of default in complying with a direction (Regulation 8A) a local government may carry out the work (or make alternative arrangements) and recover costs.

Re-inspection after clean up

It is recommended and important that the Council EHO carries out a re-inspection of affected properties to assess (visually), that residues have been effectively removed.

An independent assessment (and clearance) by a competent person such as an environmental consultant should form part of the re- inspection and site clearance process.

For further guidance on procedures for clean up and decontamination you can refer to the National Occupational Health and Safety Commission – Code of Practice for the Safe Removal of Asbestos 2nd Edition (NOHSC:2002 (2005)). The website link is:

www.commerce.wa.gov.au/publications/national-code-practice-safe-removal-asbestos-2nd-edition-nohsc20022005

Further inquiries can be directed to the Department's Environmental Health Directorate on (08) 9222 2000 or email DOH.Chemicalhazards@health.wa.gov.au. Information about health-related aspects of asbestos is available at www.health.wa.gov.au

This document can be made available in alternative formats on request for a person with disability.

© Department of Health 2021

Copyright to this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the *Copyright Act 1968*, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.

Last updated March 2010

health.wa.gov.au