

Guidance Material: Asbestos and Fire-damaged Buildings

Which buildings are likely to contain asbestos?

Buildings built before 1988 may contain asbestos in the form of flat or corrugated sheets ('fibro') used for walls, ceilings and roofing, or in products such as pipes, electrical conduit and eaves.

What is the health risk from fire damaged buildings containing asbestos?

Asbestos dust and fibres have the potential to present a health risk during and after a fire if not properly managed. The presence of asbestos in ash and rubble does not pose a health risk itself, however airborne asbestos fibres may pose a risk to those inhaling them. The use of water or foam in controlling a fire helps prevent fibres from becoming airborne.

What precautions should be taken immediately after fire?

To prevent access to the area which may contain asbestos the site should be securely fenced. The site will need to be continually damped down so as not to cause runoff or sprayed with PVA to ensure that the asbestos cannot become airborne. This needs to continue until the site is cleaned up.

What precautions should be taken during clean-up of a fire-damaged building containing asbestos?

Asbestos fibres released from broken or disintegrated sheeting may be present in the dust and ash of fire-damaged buildings. Care should be taken when moving burnt material to minimise the generation of dust. If burnt material needs to be moved it should be dampened first to reduce dust.

Depending on the extent of fire damage, the asbestos present can be classified as either friable or bonded. Asbestos sheets that are severely damaged or reduced to ash are likely to be friable, whereas asbestos that is intact or has suffered smoke damage only is likely to be classified as bonded.

The following precautionary measures are recommended during the clean-up of fire-damaged buildings containing asbestos:

- An occupational hygienist should undertake a site assessment and determine an appropriate clean-up program. Check your local telephone directory or the *Yellow Pages* for listings.
- Asbestos should be removed by an asbestos removal contractor with an AS1 Licence for friable asbestos or an AS2 for bonded asbestos issued by WorkCover NSW. Check your local telephone directory or the *Yellow Pages* for listings.
- Warning signs should be erected to discourage people from entering the site.
- Access to the immediate site should be limited to those involved in the clean-up. They are required to wear appropriate personal protective equipment (i.e. suitable respirator or dust mask and disposable coveralls). At completion, all personal protective equipment is to be disposed of as asbestos waste.
- Ensure the site is kept damp at all times, particularly while debris is being removed.



Will neighbouring properties be affected by a fire involving asbestos?

The possibility of neighbours being exposed to asbestos fibres is generally very low, however precautions should be taken to minimise the release of asbestos dust and fibres during clean-up. As a precautionary measure, neighbours should be advised to:

- close all external doors and windows and stay indoors
- avoid unnecessary outdoor activity during the clean-up and do not put washing on the clothes line
- wipe dusty surfaces with a damp cloth and use a low pressure hose on a spray configuration to remove visible dust from pathways. Cloths should be disposed of as asbestos waste.

Who is responsible for cleaning up fire-damaged buildings containing asbestos?

Responsibility for clean-up of fire-affected buildings containing asbestos and any affected neighbouring property rests with the person or company responsible for the fire or the occupier of the site. The appropriate regulatory authority (usually the local council) can direct clean-up operations using powers under Part 4.2 of the *Protection of the Environment Operations Act 1997*.

Further advice or assistance

NSW Fire Brigade

The NSW Fire Brigade is the lead agency for extinguishing fire and rendering the site safe. Officers of the NSW Fire Brigade will determine if the building is likely to contain asbestos that may present a health risk. Where necessary they will isolate the area with warning tape advising that there is a danger and that the area should not be entered. Upon completion of their response to the incident the officers will hand over control of the site by giving the owner, occupier or person indicating they have control of the site a completed *NSWFB Handover of site of NSWFB Response* form.

One or more agencies will be involved securing the site, ensuring remaining building structures are safe, clean-up of the site, assessing the potential for off-site release of materials into the neighbourhood, and providing information.

Local council

If fire occurs at a residential or non-workplace site, local council is the lead agency for ensuring that clean-up of the site is conducted by the person or company responsible for the site and managing any off-site public health risks.

If council is the appropriate regulatory authority, a clean-up notice can be issued under the *Protection of the Environment Operations Act 1997* to the owner or occupier of the site or the person reasonably suspected of causing the pollution incident requiring asbestos waste to be removed from a fire-damaged building.

Department of Environment, Climate Change and Water

If fire occurs at a site licensed by the Department of Environment, Climate Change and Water (DECCW) or occupied by a public authority, DECCW is the lead agency for ensuring that clean-up of the site is conducted by the person or company responsible for the incident and managing any off-site public health risks. DECCW's involvement in an asbestos related fire incident also includes providing advice in relation to transport and disposal of material containing asbestos.

NSW Health

NSW Health may be requested to provide advice on public health issues when there is the potential for public exposure to asbestos. Advice may include technical information/support on potential public health risks to concerned residents and assisting other agencies with the preparation of public health information bulletins.

WorkCover NSW

If a fire occurs at a workplace, WorkCover NSW would be the lead agency for ensuring that clean up of the site is conducted by persons who are appropriately licensed with either a Friable or Bonded asbestos removal licence and for managing any Occupational Health and Safety issues. WorkCover can provide a range of technical advice and publications on asbestos removal.

Further reading

- Department of Human Services, Victorian Government (2006) *Report on the investigation of the effect of fire on asbestos fibre contamination*, prepared by Noel Arnold & Associates, www.health.vic.gov.au/environment/community/asbestos.htm
- EnHealth (2005) *Management of asbestos in the non-occupational environment*, www.health.gov.au/internet/main/publishing.nsf/Content/ohp-enhealth-asbestos-cnt.htm
- Holroyd City Council (2005) *Asbestos cement policy*, www.holroyd.nsw.gov.au/building__and__development/local_plans__and__policies/asbestos
- National Occupational Health and Safety Commission (2005) *National Code of Practice for the Safe Removal of Asbestos and National Code of Practice for the Management and Control of Asbestos in Workplaces*, www.safeworkaustralia.gov.au/swa/AboutUs/Publications/NationalStandards/IndexofNationalStandardsCodesofPracticeandrelatedGuidanceNotes.htm
- Smith KR and Saunders PJ (2007) *The public health significance of asbestos exposures from large scale fires*, Chilton UK, Health Protection Agency, www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1204013002817
- WorkCover NSW (2008) *Working with asbestos: Guide* www.workcover.nsw.gov.au/Documents/Publications/OHS/Safety%20Guides/working_with_asbestos_guide_5484.pdf

Published by:

Department of Environment, Climate Change and Water
59–61 Goulburn Street
Sydney
PO Box A290
Sydney South 1232

Phone: 131555 (NSW only – publication and information requests)
(02) 9995 5000 (switchboard)
Fax: (02) 9995 5999
TTY: (02) 9211 4723
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

DECCW 2009/561
ISBN 978 1 74232 408 1
August 2009