

MANAGEMENT OF SMALL SCALE, LOW RISK SOIL ASBESTOS CONTAMINATION*

PURPOSE

This Information Sheet provides guidance on the assessment and management of single residential blocks, or similar small scale sites, which have soil asbestos contamination resulting from poor demolition practices or dumping. It is intended to be primarily used by Access Canberra staff and industry professionals, in consultation, as necessary, with the Environment Protection Authority (EPA) and ACT Health.

BACKGROUND

Asbestos building products were widely used in the Australian Capital Territory (ACT) from the 1940s to the 1980s, and many of the buildings and structures involved are now being demolished for infill developments. If the demolition is not properly conducted, then asbestos debris will often remain on site or be dumped on other sites. This can pose a risk or community concern that ACT regulatory agencies are frequently called upon to resolve.

The main legislation in the ACT relating to contaminated sites is the *Environment Protection Act 1997* (the Act), administered by the Environment Protection Authority (EPA). For contamination issues the EPA has developed the *Contaminated Sites Environment Protection Policy* (Contaminated Sites EPP) and specifically for asbestos issues has endorsed the Western Australia Department of Health, *Guidelines for the Assessment, Remediation and Management of Asbestos Contaminated Sites in Western Australia* (2009) (the Guidelines).

The removal of asbestos from building structures is regulated under the *Building Act 2004*, with asbestos related work practices regulated under the *Dangerous Substances Act 2004*. All asbestos related works at a site containing soil asbestos contamination must be undertaken by consultants suitably licensed in the ACT.

The full application of the Act, Contaminated Sites EPP and the Guidelines, which can be expensive and protracted, is not warranted in certain low risk situations where acceptable simpler regulatory measures may be sufficient. Soil asbestos contamination resulting from poor demolition practices or dumping on a single residential block are often low risk situations where the following regulatory process is recommended. However, with EPA agreement, the approach may also be suitable for other low risk applications such as for commercial sites.

SIMPLE SITE ASSESSMENT AND MANAGEMENT PROCESS

This process is for asbestos containing materials (ACM) where the asbestos is bound in a matrix such as cement (bonded asbestos), and there is little free fibre present. The ACM would mainly appear as fragments, pieces or sheets. Asbestos in these forms is not likely to release appreciable amounts of free asbestos fibre, which presents the main risk from asbestos through inhalation.

The general sequence of steps is to:

- > halt potential contaminating or contamination disturbing activities at a site
- > identify the presence of asbestos
- > assess the extent of contamination and select a clean up option
- > provide notice of what is required and
- > monitor and validate the clean up.

At various stages, it may be necessary to inform other agencies such as the EPA or ACT Health.

CONTAMINATION PREVENTION

Any incorrect handling or disturbance of ACM on a site should be halted as soon as possible. The activity may be posing a real-time risk to adjacent properties or site personnel, or may be scattering and burying ACM which may pose a future risk.

ASBESTOS IDENTIFICATION

ACM may be able to be identified based on experience, but confirmation is recommended by submitting representative ACM pieces for laboratory analysis. If in doubt, assume it is asbestos.

SITE ASSESSMENT AND MANAGEMENT SELECTION

The site assessment will primarily depend on a visual inspection. Other useful information includes: building license records; demolition development applications; hazardous materials surveys, asbestos removal or waste plans; asbestos disposal receipts; and often interviews with site personnel, the owner or neighbours. Important topics include: age and condition of building or structures; the likely amount of asbestos in them; the method of demolition and safeguards; and details of earth-disturbing activity.

The “walkover” should be systematic and preferably on a grid basis. For instance, a 4m by 4m area might be inspected, taking note of the total sheet area of ACM found. Small location flags may be helpful. It is then possible to determine the average ACM total sheet area per m² of surface, for each grid area. As an example, 3 x 1cm², 1 x 6cm² and 1 x 20cm² ACM pieces found in that grid would equate to a total of 29cm² divided by 16 (the grid area) which equals about 2cm² of ACM per m².

If there is just a “hotspot” of contamination, eg. many pieces of ACM in a localised area, then a smaller grid size may have to be used. If there are just a few large ACM pieces sitting cleanly on the surface, then just their managed removal would be adequate, without resorting to calculations.

Actions will normally depend on the estimated level of asbestos contamination per m² of surface as follows:

- > ACM total sheet area <10 cm² (eg. 3 x 3 cm) and with little associated past soil disturbance – very low risk – remove all visible ACM, including, if practical, the gentle fine raking of wetted soil to a 10cm depth to expose ACM fragments.
- > ACM total sheet area >10 cm², or ACM occurrences with significant soil disturbance, or buried asbestos – low risk – consult EPA with the expectation of excavation the impacted soil and possibly all other soil down to the depth of likely ACM penetration.
- > For larger quantities of ACM, the risk may be higher and the site may need to be reported to the EPA under the Act.

DISPOSAL OF ASBESTOS

The EPA has developed *Contaminated sites Information Sheet 5 – Requirements for the Transport and Disposal of Asbestos Contaminated Wastes* which provides guidance on the disposal of soil contaminated with asbestos.

The disposal of all other forms of asbestos is regulated under the Act and the *ACT's Environmental Standards: Assessment & Classification of Liquid & Non-liquid Wastes* (the Standards). Under the Standards asbestos material is assessed and classified as industrial waste and must be disposed of only at a landfill site that is lawfully authorised to receive the waste. Mugga Lane Resource Management Centre is authorised to receive this waste.

For asbestos material being transported interstate it is considered a controlled waste under the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure* [Controlled Waste NEPM] and the waste producer must obtain all required approvals/authorisations prior to any movement. Once the appropriate approvals/authorisations have been obtained the waste must be collected and transported by an appropriately licensed or authorised transporter for treatment at an appropriately licensed/authorised

facility. The EPA has developed a document titled the *Responsibilities of the Controlled Waste Producer in the ACT* under the NEPM that details the responsibilities of the waste producer. Contact the EPA for more information.

REPORTING AND COMMUNICATION

For sites containing ACM total sheet area <10 cm² per m² of surface a clearance certificate for these sites can be issued by an ACT licensed asbestos assessor. The clearance certificate must be submitted to the EPA for endorsement prior to any work commencing on the site.

For sites containing ACM total sheet area >10 cm² per m² of surface, or ACM occurrences with significant soil disturbance, or buried asbestos, a final site validation report and a clearance certificate for the site must be issued by a suitably qualified environmental consultant specialising in contaminated sites assessment. Any report to the EPA should include details of the contamination, including location, cause, character and photographic evidence of the extent of contamination. The report and clearance certificate must be submitted to the EPA for endorsement prior to any work commencing on the site.

CLEAN UP MANAGEMENT

The asbestos assessor/environmental consultant must observe the clean-up, check the final surface for contamination and inspect disposal documentation. If in the asbestos assessor's/environmental consultant's opinion clean-up was inadequate then another remediation round or higher level of action may be necessary.

During any removal of asbestos soil contamination, the material must be handled by an ACT licensed asbestos removalist and management measures instituted to minimise the release of asbestos fibres, and thus protect site personnel and the public. For advice on health concerns site workers and the general public are advised to contact ACT Health.

As a minimum, gloves and P1/P2 dust masks should be worn and ACM double wrapped in heavy plastic (0.2mm thick). If soil is to be excavated, then the following additional measures are recommended: dust suppression methods such as spraying with a suitable wetting agent; securing the site and erecting warning signs; informing neighbours about activities; and covering transported impacted soil. All contaminated material must be disposed to an approved landfill site.

If the responsible party is not willing to implement the appropriate actions then it may be necessary to report the site to the EPA under the Act and take other actions as deemed necessary, including managing any real or perceived risks in the meantime. The EPA may then take regulatory action under the Act to have the site assessed and/or remediated.

CONTACTS

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For more information

Contact the Environment Protection Authority by calling
Access Canberra on 13 22 81

Go to www.accesscanberra.act.gov.au for more

Information relating to Environment Protection Authority

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