Interim guidance for work involving asbestos

MARCH 2015





New Zealand Government

ACKNOWLEDGEMENTS

WorkSafe New Zealand acknowledges the contribution made by industry during the development of these guidelines.

CONTENTS

01	INTRODUCTION		
	1.1	Relevant legislation	2
02		DRMATION FOR PEOPLE IN CONTROL A PLACE OF WORK	4
	2.1	Identifying the presence of asbestos	5
	2.2	Asbestos surveys	5
03		DRMATION FOR PEOPLE ENGAGING OTHERS JNDERTAKE WORK INVOLVING ASBESTOS	10
	3.1	Step 1: Scoping the work	11
	3.2	Step 2: Pre-qualifying the contractor	12
	3.3	Step 3: Contractor selection and negotiation of terms	14
	3.4	Step 4: Awarding the contract	15
	3.5	Step 5: Monitoring a removal contract	15
	3.6	Step 6: Post contract review	16
04	INFO	DRMATION FOR PEOPLE REMOVING ASBESTOS	17
	4.1	Notifying restricted work involving asbestos	18
	4.2	Removal of roofs and decorative ceilings	18
	4.3	Asbestos work area enclosures	19
	4.4	Negative Pressure Units (NPUs)	19
	4.5	Air monitoring	21
	4.6	Induction	21
	4.7	Health monitoring	22
	4.8	Signage	22
	4.9	Decontamination	23
	4.10	Waste disposal	23
	4.11	Selection and use of Respirators/Protective Clothing	25
	4.12	Clearance procedures	26
05	INFO	DRMATION FOR PEOPLE WORKING WITH ASBESTOS	28
	5.1	Work involving non-friable asbestos materials	29
06	CON	ITAMINATED SITES	33

01/

This document highlights some key information on managing asbestos in the workplace and anticipates some of the concepts that are expected to be included in the new regulations¹. However, it should be read in conjunction with the current legislation and guidance material.

This document includes information for the following duty holders:

- > People in control of a place of work.
- People who engage any person to undertake work involving asbestos.
- > People removing asbestos.
- > People working with asbestos.

1.1 Relevant legislation

The Health and Safety in Employment Act 1992 (the HSE Act) and the Health and Safety in Employment (Asbestos) Regulations 1998 (the Asbestos Regulations) set out the legislative requirements for duty holders in relation to work involving asbestos.

The "New Zealand Guidelines for the Management and Removal of Asbestos" (the NZ Guidelines) are industry-produced guidance on the removal, transportation and disposal of asbestos and Asbestos-Containing Materials (ACMs).

Developing regulations to support the new Health and Safety at Work Act, MBIE, 2014.

The Building Act 2004, through the Building Code, also includes some rules in relation to asbestos. The Transport and Industrial Relations Select Committee has completed hearing submissions on the Health and Safety at Work Bill (the Bill). When the Bill is passed in 2015 it will replace the HSE Act. Regulations including new asbestos regulations and guidance on asbestos in the form of a code of practice, factsheets and safe work practices will be developed to support the new Act.



02/ INFORMATION FOR PEOPLE IN CONTROL OF A PLACE OF WORK

2.1 Identifying the presence of asbestos

People in control of a place of work should take all practicable steps to identify asbestos products within their properties and record their location and condition².

Proposed regulations

Revised Asbestos Regulations are due to come into force in 2015.

The Ministry of Business, Innovation and Employment (MBIE) has proposed that under the new regulations, people in control of a place of work will need to prepare an asbestos register and keep it at the workplace. The person with management or control of a workplace will need to provide this information to those who occupy the premises (including worker representatives) or those who may carry out work that may disturb the asbestos.

Recommended practice

WorkSafe New Zealand recommends that people in control of a place of work prepare an asbestos register by arranging for an asbestos survey of their workplace. The asbestos register will assist those in control of a place of work and provide information for contractors undertaking minor maintenance of locations where ACMs are present.

2.2 Asbestos surveys³

The purpose of the asbestos survey is to locate and record all asbestos and ACMs in the area where the work will take place or in the whole building if demolition is planned. An asbestos survey is an intrusive survey which may affect all parts of the building structure including lifting carpets and tiles and breaking through walls, ceilings, cladding and partitions.

² WorkSafe Information Sheet 2 - Locations where asbestos may be found.

³ WorkSafe Information Sheet 3 - <u>Surveying a building to determine whether</u> asbestos is present.

This survey itself may involve health risks that will need to be managed.

A competent surveyor (see page 8) should take samples to determine which building products contain asbestos. At the completion of the survey, the surveyor should produce an asbestos survey report. This asbestos survey report should include:

- > an executive summary
- > the scope of work
- > general site and survey information
- survey results (including plans, photographs, test results and material assessment results)
- > conclusions and actions.

Taking samples

Sampling and analysis of suspect material is the only way to verify the presence of asbestos (air sampling to determine the presence of asbestos in air is not acceptable by itself). It is important to sample all suspect material and have it analysed. Suspect material must be regarded as containing asbestos, and dealt with accordingly, until the results of the analysis are available.

How sampling is done will depend on several factors, including the size and number of premises/rooms and the extent, type and variation in materials present. The visual inspection and checking (eg tapping and prodding) of each material will determine the number and locations of samples taken.

When taking samples, the competent surveyor (see page 8) should take additional samples where any variations in the appearance, texture or colour of the material are observed. For multi-story buildings, many samples may need to be taken. Samples should be adequately labelled, to enable follow-up action. For example:

- > the name and location of the building
- > the exact location of the sampled material
- > the date of sampling and
- > a batch identification number.

In general, for homogeneous manufactured products containing asbestos, it can be assumed that the asbestos is uniformly distributed throughout the material, and one or two samples from each location will suffice. Examples of such products are:

- > boards
- > sheets
- > cement products
- > textiles
- > ropes
- > friction products
- > plastics and vinyl
- > mastics
- > sealant
- > bitumen roofing felt and
- > gaskets.

Insulation materials and ceiling decorations are generally less homogeneous as they are applied on site and their composition depended on the availability of supply. Later repairs and patching may add to this variability and increase the number of samples required. The person taking samples should always sample repaired and replaced materials in addition to the original items.

Sampling of applied decorative coatings, encapsulated sprays and bulk materials

These are usually, but not always, homogeneous (under any encapsulate). Different mixtures may have been used and material may have been removed, repaired or patched at various times. If the material appears uniform and consistent, two samples should usually be enough, if taken at either end of the applied surface. If the installation is particularly large (eg >100 m²) one sample should be taken approximately every 25-30 m². Samples should be taken from all patches of repairs or alterations.

Competent surveyors

The person taking samples does not need an asbestos certificate of competence (to undertake restricted work) but they must be competent to work in the asbestos-hazard conditions without risk to their own or others' health and safety. They must have the appropriate personal protective equipment (PPE) and a sampling kit.

Surveys should be carried out by an independent and competent third party. Engaging a professional survey body with a well-documented quality management system and/or an ISO/IEC 17020 accreditation is recommended. Professional surveyors should have appropriate industry specific knowledge, training and experience, and may be ISO/IEC 17024 accredited.

Asbestos surveyors also need to have a good understanding of where and how asbestos and ACMs were used in different building types, and how to correctly (and safely) take samples and undertake risk management. People in control of a place of work should seek the following information to get assurance of the competency of the person or organisation they are considering engaging to undertake surveys:

- > The accreditation of the organisation (ISO/IEC 17020) or person (ISO/IEC 17024) and any relevant asbestos survey qualifications. People in control of a place of work should request details of the surveyor's qualifications and training and references of similar work, if the surveyor cannot demonstrate competence through current accreditation.
- > Information on the surveyor's past experience in the type of survey planned and their capability to do the work.
- > A written declaration which states that the surveyor can operate with independence impartiality and integrity and that the people carrying out the work are adequately trained for all aspects of the work taking place in the survey.
- > A copy of the professional indemnity cover that covers the proposed work.
- > Copies of their written procedures including safe operating procedures, risk assessments and safety policy may also be requested.

03/ INFORMATION FOR PEOPLE ENGAGING **OTHERS TO** UNDERTAKE WORK INVOLVING ASBESTOS

Any person who engages another to undertake work involving asbestos is a principal under the HSE Act.

The Principal's guide to contracting to meet the Health and Safety in Employment Act 1992 lists the following six practicable steps a principal should take when contracting others to undertake work:

- 1. scoping the work
- 2. pre-qualifying the contractor
- 3. contractor selection and negotiation of terms
- 4. awarding the contract
- 5. monitoring the contract
- 6. post contract review.

3.1 Step 1: Scoping the work

Scoping the work means determining what work needs to be contracted out, and considering the broad health and safety implications. An asbestos consultant independent of asbestos removal involvement may provide valuable independent assistance.

Asbestos survey/register

Part of scoping the work includes getting information about the presence of asbestos hazards from the asbestos survey or register if one has been prepared for the property. This information may not always be available or the survey may not provide enough detail in the area where the work is to be undertaken. In this case, the principal should arrange for an asbestos survey before any work starts. The principal should supply the survey to potential refurbishment/ removal contractors before tender. This will give the contractor time to consider the costs of specialist sub-contractors and the necessary work procedures and controls to complete the work safely.

3.2 Step 2: Pre-qualifying the contractor

The principal should pre-qualify (assess competency of) contractors by assessing each contractor's:

- > work history
- > technical competence do they have a certificate of competence?
- > workers' training and qualifications
- > any specialist plant and machinery available to them to work with asbestos.

Qualifications for undertaking work involving asbestos

Work involving asbestos can vary in size from drilling holes in ACM to a large asbestos removal project before demolition takes place.

Membership of an industry body such as the New Zealand Demolition and Asbestos Association (NZDAA) and/or the New Zealand Occupational Hygiene Society (NZOHS) may be relevant but does not in itself demonstrate competence.

WorkSafe does not certify operators to work with asbestos; certificates of competence to undertake "restricted work" are awarded to people who meet the requirements of the Asbestos Regulations. A principal should find out if the company employs or engages people with a certificate of competence when considering engaging a contractor. Restricted work means work in one or more of the following categories:

- Work involving asbestos, if the asbestos concerned is friable and is or has been used in connection with thermal or acoustic insulation, or fire protection, in buildings, ships, structures, or vehicles.
- b. Work involving asbestos, if the asbestos concerned is friable and is or has been used in connection with lagging around boilers, ducts, furnaces, or pipes.
- c. The demolition or maintenance of anything, including a building or a part of a building, containing friable asbestos.
- d. The encapsulation of materials containing friable asbestos.
- The use, on asbestos cement or other bonded product containing asbestos, of—
 - a power tool with any kind of cutting blade or abrasive device, except when it is used with dust control equipment or
 - any other equipment whose use may result in the release of asbestos dust, except when it is used with dust control equipment.
- f. Dry sanding of floor coverings containing asbestos.

Friable means asbestos that under ordinary conditions can be easily crumbled.

Employers and principals are legally required to ensure that persons undertaking restricted work hold a 'Certificate of competence for restricted work involving asbestos' or are working under the direct supervision of someone who does. Direct supervision means that the person supervising is physically present when and where the restricted work is being undertaken.

If a certificate of competence for restricted work is required and the contractor does not initially provide this, the principal should request this information.

If in doubt, the principal should contact WorkSafe to determine any licensing requirements before any ACM or asbestos removal.

Principals should consult with or engage people who hold a certificate of competence (to undertake restricted work) for all work involving asbestos.

3.3 Step 3: Contractor selection and negotiation of terms

The terms of the contract should require that information on the presence of asbestos is made available. The contract should specifically refer to the asbestos removal plan. Tenderers should complete a draft health and safety plan.

If the work involves removing asbestos, the draft health and safety plan must include an asbestos removal plan⁴ that identifies:

- > the location, type and condition of the asbestos to be removed (this can usually be gathered from the asbestos survey) and whether the work is notifiable
- > who will remove the ACMs
- > what equipment will be used to remove the ACMs
- > how it will be removed safely
- > any enclosures that will be constructed and how they will be constructed

⁴ WorkSafe Information Sheet 4 – <u>Managing Asbestos;</u> NZ Guidelines Section 7.3.1; Appendix A.

- any decontamination procedures for personnel and equipment
- > dismantling of any enclosures/decontamination facilities
- > clearance procedures and
- > disposal details.

The principal should use this information to select the contractor who can do the job with least risk to safety, rather than choosing the cheapest price.

3.4 Step 4: Awarding the contract

Once a contractor has been selected the principal and contractor should agree to the terms of the contract. The principal will provide further information and answer specific questions about the job, the site specific health and safety plan and the asbestos removal plan so that these can be fully incorporated into the contract. This should include agreed detail of lines of communication, responsibilities, accountability, safe systems of work and method statements. Where the principal does not have the requisite knowledge to determine the adequacy of the asbestos removal plan they should seek independent specialist advice.

3.5 Step 5: Monitoring a removal contract

The principal must ensure that the asbestos enclosure is effective before removal work begins, and periodically check that the contractor's performance meets the agreed standards as stated in the asbestos removal plan. Contracting an independent specialist may be helpful.

If entering an asbestos work area to check work, the principal, or their representative, must wear specialist Respiratory Protective Equipment (RPE). Therefore, monitoring asbestos removal work is usually done outside work areas and enclosures. The principal should request a viewing window in the enclosures so they can observe and monitor from outside. The need for, number and location of viewing windows should be agreed during discussion around the asbestos removal plan.

Principals should view and check documentation such as:

- > air monitoring results
- > details of workers on site and their competence
- > equipment maintenance records
- > asbestos waste disposal receipts.

Other reporting, notification and hazard management documentation should be available as required by the contract.

The principal should make arrangements for independent clearance testing of the work area before the enclosure is taken down and the area handed back for re-occupation.

3.6 Step 6: Post contract review

It is good practice to review the performance of the contractor and determine how successful the contract was. This will help the principal and contractor learn from health and safety performance during the contract.



4.1 Notifying restricted work involving asbestos⁵

Every employer or person who controls a place of work who intends to undertake restricted work involving asbestos must notify WorkSafe in writing and at least 24 hours before the work is due to start. The 'particular hazardous work' form is available on-line at WorkSafe's website.

4.2 Removal of roofs and decorative ceilings⁶

If a roof or ceiling is damaged or is in a condition where it can be easily crumbled, it is restricted work. This is often the case with roofs where gutters are full of damaged ACMs and the rafters or sarking beneath the roof are contaminated with free asbestos fibres.

Situations involving removing roofing materials like "super six" or decorative ceilings such as "stipple" (containing asbestos) might not be restricted work if their condition is stable before work starts and removal will not involve breaking or scraping.

However, all work involving ACMs can potentially create airborne asbestos fibres if not done carefully by experienced crews using good practice methods. A contractor should consider employing persons with a certificate of competence (to undertake restricted work) if they are going to remove the whole roof or all of the decorative ceilings. This is because the ACM may crumble or get damaged during removal and produce airborne asbestos fibres, even when wetting and suppression is used. Specialist knowledge and equipment is also needed to keep asbestos dust to a minimum and protect the people working or present in the vicinity.

⁵ WorkSafe Information Sheet 6 - <u>Restricted and notifiable work involving</u> <u>asbestos</u>.

⁶ NZ Guidelines Section 7.25.1.

4.3 Asbestos work area enclosures⁷

'Enclosure' involves placing a barrier between asbestos or an ACM and the surrounding environment. Enclosure is particularly suitable if the ACM or its protective coating is liable to damage during the work.

If work with ACMs can potentially create asbestos dust, the asbestos removal plan should require enclosure of the work area so an airtight seal is maintained for the duration of the work. This prevents airborne fibres escaping to the outside environment or further into a building.

The enclosure's design and installation should take account of the methods used to contain the asbestos, along with the provision and location of decontamination and changing areas.

The enclosure may be a portable unit or be built from heavy duty (minimum 200 micron thick) plastic sheeting. The plastic sheeting should be tightly sealed at all joins and connections to the rest of the building, such as windows, ducts, wall cavities, conduits, etc.

200 micron plastic is recommended for durability to prevent piercing or damage during removal. Double layers of 200 micron plastic should be laid on the floors. Plastic should cover the full height of walls.

4.4 Negative Pressure Units (NPUs)

All enclosures where airborne fibres are present during asbestos removal should have an Negative Air Pressure Unit (NPU) fitted with a primary disposable filter (H13) and a secondary main High-Efficiency Particulate Air (HEPA) filter⁸ (H14) that maintain the efficiency of the NPU to protect workers and people in the vicinity from exposure to asbestos fibres.

⁷ NZ Guidelines Section 5.4.2.

^a The HEPA filter must comply with the minimum 99.995% efficiency requirement detailed in AS/NZ 60335.2.69.

An air flow test should be carried out on the NPU to ensure the equipment meets the manufacturer's testing result. A competent person should inspect the dust control equipment weekly and it should be maintained according to the manufacturer's instructions and must be tested 6 monthly or earlier if damaged or used heavily. (Dispersed Oil Particulate (DOP) testing must comply with AS/NZS60335.2.69).

Competent service technicians should provide evidence of servicing with a sticker showing an expiry date or date for the next inspection and maintenance. HEPA filter stickers should be visible on the NPU, and evidence of maintenance to a specified standard should be made available to NPU users and WorkSafe's health and safety inspectors.

The NPU should be able to make eight to ten room changes of air per hour and be ducted to the outside of the building and positioned where good airflow can be applied throughout the working area. The NPU should be set up and tested at minus 12 pascals prior to entry before asbestos removal begins and the enclosure should be tested for airtightness using a smoke-test or a differential air monitor or similar device. The test should be witnessed by a representative of the principal, if possible.

Particular care is required to maintain a negative value during strong winds, opening doors and windows throughout the building and during lift operation

It is not always possible to run NPUs continuously for 24 hours whilst the premises are vacated or if power is not available. However, the unit should be left on until all workers have left the site and the premises are secured against unauthorised entry.

4.5 Air monitoring⁹

During asbestos removal operations, the contractor should conduct static air monitoring outside the removal area where people are not involved in the removal but are in close proximity to the removal area. This could include residential dwellings or other buildings where the public visit.

4.6 Induction

The HSE Act requires employers to give information to employees about the hazards they may be exposed to while at work. One way to achieve this is to have a documented induction programme that all employees attend, and is signed by the employee and a representative of the employer.

Workers carrying out asbestos removal work must receive training about the specific type of asbestos work they are going to do. The training must include information about the site-specific asbestos removal plan, specifically:

- > safe work procedures
- > correct decontamination procedures
- > emergency procedures
- > how to wear and maintain all PPE and RPE correctly.

4.7 Health monitoring¹⁰

Employers must also tell employees about the health risks associated with exposure to asbestos, in particular the significant increase in risk associated with smoking, the need for health surveillance, and medical examinations in accordance with the HSE Act.

Under the HSE Act, employers must monitor employee health in relation to significant hazards. The employer should monitor the levels of an employee's exposure and take all practical steps

⁹ NZ Guidelines Sections 9.2 and 9.3.

¹⁰ NZ Guidelines Section 14.

to get the employee's consent to have a medical examination and ongoing checks during their employment.

Medical examinations to monitor employee exposure to asbestos must be performed by qualified medical practitioners with specialist qualifications in occupational or respiratory medicine and experience in asbestos-related diseases and conditions. The medical examination should include chest X-rays and lung function tests.

Records of Certificates of Fitness for Work must be held by the employer. An employer may seek employees consent to access work related medical records.

4.8 Signage

Construction sites must be securely fenced with health and safety information posted at the entrance. Sites where asbestos is being removed must post clearly visible warning signs that asbestos work is underway at all entrances to work areas where asbestos work is carried out. An example of a warning sign is:



4.9 Decontamination

Mini-enclosures with dry decontamination can be used for small scale asbestos removal as shown in Figure 13 of the NZ Guidelines.

For larger scale work, showers are incorporated in the dirty decontamination and clean decontamination areas as shown in Figure 12 of the NZ Guidelines.

4.10 Waste disposal¹¹

Contractors must remove all asbestos waste from the site to an approved local authority refuse site as soon as practicable.

An asbestos waste disposal plan should be included in the asbestos removal plan and kept on site. It should describe:

- > how the waste is contained (on and off site)
- > the quantity (amount and dimensions) of waste
- > where the waste will be stored on site before disposal
- > how the waste will be transported (on and off site)
- > approvals from the local authority
- local authority requirements such as quantity of asbestos and dimensions of containers
- > where the waste will be transported to
- > verification of correct disposal such as tip dockets.

WorkSafe Information Sheet 8 - Disposal of asbestos waste.

Before being removed from site, asbestos waste must be:

- > stored in closed containers that are impermeable to asbestos dust, or
- > sealed in 200 micron thick plastic bags, or
- > wrapped in 200 micron thick polythene sheet.

In addition, asbestos waste must be:

- > double-bagged in case of one bag rupturing
- > not be over-filled
- > tied in goose-neck manner (top bunched and doublebacked on itself).

All stored asbestos must be labelled with a warning statement.

An example of a warning statement is:

ASBESTOS HAZARD

WEAR RESPIRATOR AND PROTECTIVE CLOTHING WHILE HANDLING CONTENTS

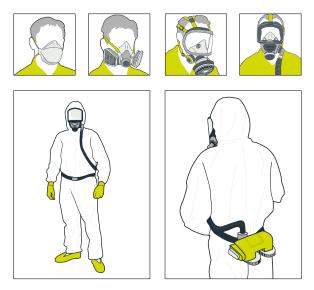
4.11 Selection and use of Respirators/ Protective Clothing¹²

Workers involved in asbestos removal must take all necessary control measures to protect against exposure to asbestos fibres.

Respirators (RPE)

Workers involved in asbestos removal must wear suitable RPE at any time when the presence of asbestos is suspected.

RPE should be issued for personal use and specifically fitted to the worker. Regular qualitative or quantitative fit testing must be carried out.



¹² WorkSafe Information Sheet 5 - Personal protective equipment to use when working with asbestos; NZ Guidelines Section 15.5. Friable amosite or crocidolite removal may require full face positive pressure RPE. Personal air tests during removal may be required to determine the level of protection required.

A system for cleaning, inspecting and maintaining the RPE must be kept.

Protective clothing

Protective clothing helps protect asbestos workers and prevent asbestos from spreading to other locations.

Protective clothing for restricted work is usually disposable. Washable PPE and other items like towels, and underwear worn under PPE is permitted only if this clothing is laundered in accordance with regulation 10 of the Health and Safety in Employment (Asbestos) Regulations 1998.

4.12 Clearance procedures¹³

After removing asbestos using enclosures (restricted work)

After using enclosures and before clearing the area for re-occupancy, an independent, competent person should conduct a four-stage clearance process.

The four-stage clearance procedure is:

- 1. Visually inspect the surfaces within the enclosure.
- 2. Apply sealant if it is reasonably practicable.
- Conduct static air clearance monitoring¹⁴ with dust disturbance inside the enclosure.
- After successful air monitoring and dismantling the enclosure for removal, conduct a final visual check.

¹³ See WorkSafe Position Statement – Asbestos Clearance Procedures.

¹⁴ Static monitoring involves positioning monitors at fixed points in the area undergoing sampling.

Once the person conducting the clearance test is satisfied the area is safe for reoccupation, they should issue a certificate clearly stating this, and include the test results.

Removing asbestos without using enclosures (non-restricted work)

When removing asbestos without using enclosures, clearance testing should comprise a visual inspection conducted by a competent person. This person may require air monitoring, surface swabs or tape sampling before clearance.

Notes:

Clearance procedures also apply to areas or buildings that are going to be demolished, to ensure the demolition waste is not contaminated with asbestos.

The person doing the clearance inspection and sampling should be independent from the asbestos removal contractor.



05/ INFORMATION FOR PEOPLE **WORKING WITH** ASBESTOS

Certain trades such as roofers, electricians, plumbers, drain layers and flooring contractors may do work involving asbestos without having a certificate of competence providing the work does not involve friable asbestos materials.

5.1 Work involving non-friable asbestos materials¹⁵

Non-friable asbestos materials are products that, under ordinary circumstances, cannot easily be crumbled. Non-friable ACMs are usually materials where asbestos fibres are bonded in cement, bitumen or resin. To be classified as non-friable, the products must be in good condition, without free fibres and must be able to be easily removed without breakage or damage.

People who do not hold a certificate of competence can do work with single sheets of roofing or cladding containing asbestos cement that are in good condition. However, the work still needs to be done by competent people, and the work appropriately managed.

- > Asbestos cement roofing must be considered friable as very few roofs are in good condition.
- > Ceiling tiles that contain asbestos should be treated as friable as they are easily broken.

PPE requires careful selection and use, and disposal and signage needs are the same as all asbestos work. However, the asbestos exposure levels are likely to be much lower.

¹⁵ WorkSafe Information Sheet 7 - Non-friable asbestos.

Airborne fibre release can be suppressed using water or a PVA solution. Waste materials must be wrapped in durable polythene (200 micron) and disposed of appropriately.

Specialist equipment like industrial vacuums with HEPA filters are required to keep work areas clean and free of asbestos fibres.

What procedures must be followed?

When working with non-friable asbestos:

- > wear a respirator (see WorkSafe's information sheet: Personal Protective Equipment to use when working with asbestos)
- > minimise dust generation by the following:
 - avoid abrasive cutting
 - use hand (not powered) tools
- > wet the ACM to reduce the release of asbestos fibres
- > do not high-pressure hose or water blast materials
- > put down plastic drop sheets to collect off-cuts and dust
- > use appropriate vacuum cleaning equipment (the PPE information sheet has more detail)
- > dispose of asbestos appropriately (see WorkSafe's information sheet: Disposal of asbestos waste).



Non-friable asbestos may become friable after being exposed to fire



Non-friable asbestos may become friable after being damaged

What PPE must be worn when asbestos is or may be present?

If asbestos is, or may be present, PPE must include:

- > respiratory protective equipment (RPE) to avoid inhaling asbestos fibres (see WorkSafe's information sheet: Health risks from asbestos exposure)
- > overalls (either disposable or able to be washed*) to avoid the risk of carrying asbestos fibres away from the worksite on clothing
- > footwear appropriate for the work being undertaken (footwear should be non-laced as laced footwear is difficult to clean - alternatively wear disposable boot covers).

* Washing must only be done in laundries specifically set up for handling asbestos-contaminated clothing (in accordance with regulation 10(2)(b) of the Health and Safety in Employment (Asbestos) Regulations 1998). It must not be done at home or a public laundromat.

Why is PPE required?

Although controls must be in place to prevent or reduce exposure to asbestos fibres when working with ACM, the asbestos hazards must be minimised as much as is reasonably practicable by using appropriate personal protective equipment.

What is required when disposing of asbestos?

Asbestos must be removed from the site to an approved refuse site as soon as practicably possible.

Before removal the asbestos waste must be:

- > stored in closed containers that are impermeable to asbestos dust, such as:
 - 200 micron thick plastic bags, or
 - 200 micron thick polythene sheet.

Asbestos waste should:

- > be double-bagged in case of one bag rupturing
- > be in bags no bigger than 1200 mm x 900 mm
- > not be more than half-filled
- > have excess air in the bag carefully removed before sealing so there is no release of asbestos dust
- > have the bags tied with a goose-neck closure.

All stored asbestos waste must be labelled with:

ASBESTOS HAZARD

WEAR RESPIRATOR AND PROTECTIVE CLOTHING WHILE HANDLING CONTENTS

06/ CONTAMINATED SITES

Contaminated sites¹⁶

People working with asbestos must ensure that they, and other people around them, are not harmed by asbestos. Currently there is no New Zealand guidance for assessing, remediating or managing asbestos-contaminated sites.

Following the Western Australian <u>Guidelines for the</u> <u>Assessment, Remediation and Management of Asbestos-</u> <u>Contaminated Sites in Western Australia</u> can help people with duties under the HSE Act and the Asbestos Regulations. However, people responsible for workplace health and safety can take other steps to comply, if those steps are equal to, or better than, these recommendations.

¹⁶ WorkSafe Position Statement - Remediating asbestos-contaminated sites.

Notes	

DISCLAIMER

WorkSafe New Zealand has made every effort to ensure the information contained in this publication is reliable, but makes no guarantee of its completeness. WorkSafe may change the contents of this guideline at any time without notice.

This document is a guide only. It should not be used as a substitute for legislation or legal advice. WorkSafe is not responsible for the results of any action taken on the basis of information in this document, or for any errors or omissions.

ISBN: 978-0-478-42577-2 (print) ISBN: 978-0-478-42576-5 (online) Published: March 2015. Current until: 2018.



Except for the logos of WorkSafe, this copyright work is licensed under a Creative Commons Attribution-Non-commercial 3.0 NZ license. To view a copy of this license, visit http://creativecommons. org/licenses/by-nc/3.0/nz

In essence, you are free to copy, communicate and adapt the work for non-commercial purposes, as long as you attribute the work to WorkSafe and abide by the other license terms.

WorkSafe New Zealand

Level 6 86 Customhouse Quay PO Box 165 Wellington 6140 New Zealand



New Zealand Government