

Asbestos Removal Process

(less than 10m²)

1. Introduction

1.1. Purpose

This document describes the actions to be taken when removing less than 10m² of asbestos. For more information on asbestos management, refer to the *Asbestos management process*.

1.2. Scope

This process applies to all workers involved in non-restricted cutting, removing, and disposing of nonfriable asbestos pipes, less than 10m². Work with material greater than 10m², or friable material must only be done under the supervision of a Class B license holder and requires notification to WorkSafe NZ.

2. Personal protective equipment (PPE) requirements

PPE required for asbestos removal includes:





- Disposable coveralls, type 5/6

- P2 grade (minimum) half face respirator
- Safety gumboots (laced footwear can trap asbestos contaminated material)
- Disposable gloves



3. Procedure

4.

Do	Do not
Remove pipes in sections, split at collar or sleeve	Break the pipes up if possible
Keep the pipes wet	Dry cut
Hand cut 	Use power tools or saws 
Contain and collect all slurry and pipe debris	Use high pressure water, or compressed air



- Place the wrapped material in another 200µm heavy duty plastic bag, goose-tie the neck
- Label the bag “Asbestos Hazard – wear respirator and protective clothing while handling contents”
- Visually inspect site to ensure NO residual asbestos remains
- Take the bagged waste to an approved asbestos waste disposal area (or store in an approved place until it can be disposed of)
- Asbestos waste is to be disposed of appropriately and legally (refer to your local council for exact requirements)



5. PPE decontamination

Leave your respirator on until the end of the process

- PPE and tools that are to be reused are cleaned and immersed in a bucket of water, followed by a second immersion in a second, clean bucket of water.
- Inspect thoroughly for asbestos contamination and repeat if necessary until all potential asbestos has been removed. Place the object outside the authorised work area.
- Remove debris from protective clothing and gumboots using a damp cloth or sponge, remove the disposable coveralls, and place them into a labelled ‘Asbestos Waste’ bag (follow the sealing of disposal bag procedures noted in the *Asbestos disposal* section).
- Leave the work area boundary **still wearing your respirator**.
- Thoroughly wash hands, remove the respirator, and wipe face with a cleaning wipe or damp cloth from a separate clean water bucket which is outside the work area.

- Wipe the respirator inside and out with respirator cleansing wipes. If the cartridges are clothtype then they should be removed, sealed with duct tape, and placed into a sealable bag for disposal. If they have a plastic outer layer (such as 3M 6035) they can be wiped down with respirator cleansing wipes. The wipe must be placed in the asbestos waste bag.

6. Transportation

Transportation of less than 50kg requires only Emergency Response information to be accessible to the driver in the event of an emergency. No placarding or "D" Endorsement required.

Transportation of more than 50kgs of asbestos waste is classified as Dangerous Goods and the following requirements must be met:

- Driver must be supplied with a completed Dangerous Goods Declaration Form
- Truck to have correct Placarding - Class 9 front and rear (or orange and black striped dangerous goods sign for volumes 50-2500kg)
- Driver must have a current "D" endorsement on their driver's license, or be under the direct supervision of a person in the vehicle who holds a current "D" endorsement
- Emergency response information and dangerous goods declaration must be contained in document holder marked "Dangerous Goods Documents" or similar and placed on the driver's door in a position that is visible and accessible to a person standing on the ground with the driver's door open.

7. Health monitoring

All staff carrying out **licensed asbestos removal work** (refer [Health and Safety \(Asbestos\) Regulations 2016](#)) or **has been at risk of exposure** must within one (1) month of carrying out such work have an initial medical including:

- The worker's demographic and work history
- Examining records of any previous asbestos exposure
- A medical examination, chest X-ray (PA and lateral) and lung function tests (FEV1 and FVC).

Asbestos medicals should be repeated after 1 year, 5 years, 10 years, 15 years, 18 years and thereafter every 2 years by a suitably qualified specialist with experience in asbestos-related diseases or conditions. The X-rays and lung function tests are the property of the employee and must be kept for 40 years.

8. WorkSafe NZ notification requirements

8.1. Calculations

The 10m² requirement for pipes is based on external surface area calculated by:

$$\pi \times \text{diameter (m)} \times \text{length}$$

For example, for a 12 m length of 250mm (0.25m) diameter pipe:



$3.14 \times 0.25 \times 12 = 9.42\text{m}^2$ so no notification required

The formula to work out how much pipe of a certain diameter can be removed is:

$$\frac{10\text{m}^2}{\pi \times \text{diameter}}$$

For example, for a 250mm pipe (0.25m), the length that can be removed without notification is:

$$\frac{10}{3.14 \times 0.25} = 12.73\text{m}$$

8.2. Reference table

		Length (m)												
		1	2	3	4	5	6	7	8	9	10	20	30	35
Pipe dia m	0.1	0.31	0.63	0.94	1.26	1.57	1.88	2.20	2.51	2.83	3.14	6.28	9.42	10.99
	0.2	0.63	1.26	1.88	2.51	3.14	3.77	4.40	5.02	5.65	6.28	12.56	18.84	21.98
	0.3	0.94	1.88	2.83	3.77	4.71	5.65	6.59	7.54	8.48	9.42	18.84	28.26	32.97
	0.4	1.26	2.51	3.77	5.02	6.28	7.54	8.79	10.05	11.30	12.56	25.12	37.68	43.96
	0.5	1.57	3.14	4.71	6.28	7.85	9.42	10.99	12.56	14.13	15.70	31.40	47.10	54.95
	0.6	1.88	3.77	5.65	7.54	9.42	11.30	13.19	15.07	16.96	18.84	37.68	56.52	65.94

9. Responsibilities

Position title	What they are responsible for
Manager/Team Leader	Ensure your team members are trained and competent before starting work
Person undertaking work	Ensure you are trained and understand the risks, and put adequate controls in place

10. Licensing

To remove friable asbestos: Class A license required

To remove more than 10m² of non-friable asbestos and associated dust and debris: Class B license required

11. Related documents

Document number	Title
	Asbestos Register

	Health & Safety risk register
HSEP_0007	Health monitoring process

12. Reference documents

Document name	Entity	Location
ACOP for the Management and Removal of Asbestos	WorkSafe NZ	https://worksafe.govt.nz/topic-andindustry/asbestos/management-andremoval-of-asbestos

13. Legislation and standards

- Health and Safety at Work Act 2015
- Health and Safety at Work (Asbestos) Regulations 2016

14. Definitions

Word or Phrase	Definition
Asbestos removal supervisor	A supervisor who has been nominated to WorkSafe by the asbestos removal license holder. The supervisor must be suitably trained as set out in the Health and Safety at Work (Asbestos) Regulations 2016.
Asbestos removal work	Work involving the removal of asbestos or asbestos contaminated soil, or asbestos containing material. Class A removal work is the removal of friable asbestos material. Class B removal work is the removal of more than 10m ² of nonfriable asbestos and associated dust and debris.
Asbestos-containing material (ACM)	Any material or thing that, by its design, contains asbestos
Asbestos-related work	Work involving asbestos, other than asbestos removal work, which is permitted under the Health and Safety at Work (Asbestos) Regulations 2016. This includes maintenance and servicing work.
Friable (Crumbly)	A friable substance is any substance that can be reduced to fibres or finer particles by the action of a small pressure or friction on its mass, such as inadvertently brushing up against the substance. The term could also apply to any material that exhibits these properties.
Licensed asbestos removalist	A PCBU who is licensed under the Health and Safety at Work (Asbestos) Regulations 2016 to undertake Class A or Class B asbestos removal.

Non-friable (Not crumbly)	A non-friable substance is any substance that cannot be reduced to fibres or finer particles by the action of a small pressure or friction on its mass. For asbestos materials this also includes material which is reinforced with a bonding compound. The term could also apply to any material that exhibits these properties.
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