



# HAWKE'S BAY DISTRICT HEALTH BOARD



GENERAL VIEW 1946 / 47

## Asbestos Management Plan

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## Purpose

The purpose of the Asbestos Management Plan is to ensure that the health and wellbeing of all staff, visitors, contractors and patients is protected in relation to the management of Asbestos on any Hawke's Bay District Health Board site.

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## Introduction

Hawke's Bay District Health Board (HBDHB) is a person conducting business or undertaking (PCBU) in accordance with the Health and Safety at Work Act 2015. HBDHB has a primary duty of care to ensure the health and safety of workers as far as reasonably practicable. As PCBU, Hawke's Bay District Health Board is committed to ensuring that all patients, members of the public, employees and contractor workers do not become inadvertently exposed to asbestos fibres.

This Asbestos Management Plan sets out how HBDHB's identified asbestos and asbestos containing material (ACM) will be managed in accordance with legislative requirements under the Health and Safety at Work Act 2015 (HSWA), Health and Safety at Work (Asbestos) Regulations 2016 and approved codes of Practice

The following key areas will be covered in this plan:

- Identification of asbestos and ACM
- Informing workers where they may find asbestos/ACM
- Decisions on how asbestos risks are managed and the reasoning behind these decisions
- Information about the workers carrying out work involving asbestos
  - their roles and responsibilities
  - information and training that has or will be provided
  - any health monitoring that has or will be conducted
- Procedures for removal of asbestos in the workplace
- Procedures for incidents or emergencies involving asbestos in the workplace
- Processes for review of this Asbestos Management Plan
- Procedures for selection and approval of approved Asbestos Management Contractors

This plan should be read in conjunction with the Health and Safety at Work (Asbestos) Regulations 2016 and Hawke's Bay District Health Board's Asbestos Management Policy.

## Regulatory Requirements

The Health and Safety at Work (Asbestos) Regulations 2016 requires PCBU's to ensure the following:

- so far as is reasonably practicable, that all asbestos or ACM giving rise to a risk at the workplace is identified;
- the presence and location of asbestos or ACM identified at the workplace are clearly indicated;
- the Asbestos Management Plan for the workplace is prepared and that the information in the Asbestos Management Plan is kept up to date;
- that the plan is reviewed and revised

## Asbestos Background

Asbestos is the name used to describe naturally occurring silicate minerals, which form in fibrous strands. The natural strength, fire and chemical resistance properties of asbestos made it a highly popular product for use in building materials from the 1940s until the late 1980s. Buildings built or refurbished in this timeframe are likely to contain asbestos and/or ACM.

The potential health effects of asbestos include asbestosis, lung cancer and mesothelioma in the worst cases. The latency between exposure to ACM and development/diagnosis of diseases means that it is imperative those workers in direct contact with asbestos are monitored on a regular and ongoing basis.

It is important to understand that if asbestos or ACM is in good condition and left undisturbed, the likelihood of fibres being released into the air is very low. In these instances, it is often safer to regularly review the condition of the asbestos/ACM and leave the material in situ.

Asbestos is generally separated into two categories, non-friable and friable. These terms are applied to the condition of the asbestos or ACM *prior* to work being undertaken. The categories are a reflection of the level of risk associated with a given piece or area of asbestos/ACM. Friable is the highest risk condition for asbestos/ACM, whilst non-friable is usually safer unless abraded or disturbed.

### Friable asbestos/ACM

Friable asbestos/ACM is able to be crumbled pulverised or crushed into powder by hand pressure when it is dry. Asbestos/ACM in powder form also falls into this category.

### Non-friable asbestos/ACM

Non-friable asbestos/ACM is by definition, not friable. Asbestos fibres are generally bonded into the product and those fibres will only be released should manipulation or machining occur.

# HBDHB's Asbestos Management Plan

## About this Plan

This Asbestos Management Plan is to be read in conjunction with the HBDHB's Asbestos Register. As PCBU, HBDHB will make this Plan for the workplace and the Asbestos Register, readily available via HBDHB's Intranet, via email or in hard copy to all of the following:

- Workers have carried out, carry out, or intend to carry out work at the workplace; and
- A representative of the above workers;
- A PCBU who has carried out, carries out or intends to carry out work at the workplace; and
- A PCBU who has required, requires, or intends to require work to be carried out at the workplace.

## Roles and Responsibilities

The Asbestos Management Plan is primarily overseen by the Property Manager and Facilities Engineer. However, the day to day management of projects, maintenance and BAU requires input and cooperation from the whole Facilities Management team, inclusive of capital projects, property management and maintenance teams, with compliance assistance where required from the HBDHB's Health & Safety Manager, who maintains the site Hazard and Risk Register.

Due to the overall perception that the public has regarding asbestos, an important component in managing asbestos is the conveyance of factual information and reassurance to HBDHB contractors and employees, who may feel affected by the presence of asbestos.

Role	Responsibilities
<b>HBDHB (PCBU)</b>	Primary duty of care. Ensuring that the Asbestos Management Plan and Register is in place.
<b>Members of board and Executive Management Team (EMT) (Officers)</b>	Ensuring the responsibility of the Asbestos Management Plan and Register is assigned to the correct role within the organisation and there is due diligence to the management of this particular hazard.
<b>Executive Director of Provider Services, Facilities Manager and Health and Safety Manager</b>	Overarching owners of the Asbestos Management Plan and Register. Assigns roles and responsibilities under the plan and monitors adherence to the plan and that all are doing what is required under the plan.
<b>Facilities Engineer and Property Manager</b>	Responsible for the review and updating of the Asbestos Management Plan. Implement inspection programme to monitor the presence and condition of asbestos. Responsible for maintaining the Asbestos Register Communicates changes in Asbestos register to Health and Safety Manager for updating Risk Register. Inform Occupational Nurses to the exposure or potential exposure of workers so health monitoring can be undertaken.

Role	Responsibilities
<b>Maintenance Supervisor</b>	<p>Responsible for complying with the Asbestos Management Plan and procedures.</p> <p>Training of maintenance team members in processes associated with ACM and communicating updates to Plan, Register and/or procedures.</p> <p>Inform Facilities Engineer of any suspect material or any areas of potential risk not previously captured.</p> <p>Inform Occupational Nurses to the exposure or potential exposure of workers so health monitoring can be undertaken.</p>
<b>Capital Projects Manager</b>	<p>Responsible for complying with the Asbestos Management Plan and procedures.</p> <p>Training of project team in processes associated with ACM and communicating updates to Plan, Register and/or procedures.</p> <p>Inform Facilities Engineer of any suspect material or any areas of potential risk not previously captured.</p> <p>Inform Facilities Engineer of any updates required to Plan and Register.</p> <p>Selects ACM contractors.</p>
<b>Health and Safety Manager</b>	<p>Ensures the Hazard and Risk Register is kept up to date and that action plans for containment, mitigation and elimination are in place in accordance with the Health and Safety at Work Act 2015.</p> <p>Provides training, support and assistance where required.</p> <p>Updates Risk Register with information from Asbestos Register.</p>
<b>Asbestos Removal Contractors</b>	<p>Comply with the Asbestos Management Plan and procedures.</p> <p>Ensure legislative requirements and appropriate procedures are complied with, including notifications to WorkSafe NZ. Responsible for providing Asbestos Removal Control Plan and final clearance certification to Project Manager.</p>
<b>Occupational Health Nurses</b>	<p>Responsible for testing exposed Workers and maintaining a register of all workers currently under going health monitoring. Responsible for updating the national register to ensure ex Workers are still monitored and keeping all records for exposed workers for 40 years.</p>
<b>Workers</b>	<p>Communicates any new or possible areas of concern in regard to asbestos. Follows all policies, procedures and directions in regard to the management of asbestos in the workplace.</p>



Contractors, maintenance personnel and project managers (Workers):

- Undertake the required health and safety induction(s)
- Consult the Asbestos Register prior to starting work in any building
- Undertake risk assessments of asbestos where present
- If there is uncertainty as to whether an area may be affected by asbestos or ACM, do NOT proceed with work until you have consulted with your project manager
- Ensure that all employees under their direction or supervision have adequate training, information and instruction to enable them to work safely in areas where asbestos or ACM may be present
- Not be permitted to disturb any asbestos or ACM
- Ensure that all work activities relating to asbestos containing materials will only proceed after authorised by either their project manager or contract manager
- Record and report any incidents of potential exposure to your manager for immediate action
- Carry out renovation, routine maintenance or service work, which is likely to disturb asbestos or ACM, only after the work has been quantified and authorised
- Be prepared to conduct high risk work under the supervision of a licensed and competent asbestos removalist and/or assessor to ensure that safe work methods and techniques are used to minimise the risk of potential exposure
- Ensure that any penetrations made to walls, ceilings or floors are appropriately sealed to maintain building compliance and avoid further potential contamination (containment)
- Immediately inform your supervisor/manager if damage or disturbance of asbestos or ACM occurs during the course of their work
- Not damage, remove, paint or otherwise interfere with the asbestos identification tags

All other Hawke's Bay District Health Board Workers (Workers)

Includes staff, contractors and employees of contractors and employees not involved in asbestos management or removal:

- Be familiar with the Asbestos Management Plan, including the labelling and identification system. This to be included in induction material
- Ensure that all maintenance, repair or installation work is carried out via Facilities Management so that all work can be properly assessed for asbestos risk
- Not disturb asbestos or ACM (such as textured ceilings). This will prevent any asbestos fibres from being released
- Record any incidents of potential exposure via the HBDHB Health and Safety incident reporting system
- Have all renovation, maintenance or service that may damage or disturb any asbestos or ACM authorised by Facilities Management prior to any work being carried out
- Not damage, remove or paint over any of the asbestos identification labels
- Immediately inform Facilities Management if any asbestos or ACM are damaged or disturbed

Training

The Health and Safety Manager undertakes or commissions training on an annual basis for Capital Projects and Maintenance staff. This training discusses the following:

- Awareness and potential health effects
- Types, uses and likely occurrence of asbestos/ACM across the site
- Processes and procedures (including this plan)
- Where applicable, PPE and equipment training alongside safe work procedures including use of respirators and their maintenance

Asbestos management and information is included in the induction material of all workers (Staff, contractors and employees of contractors). This induction is to include information on the identification, handling and tagging of potential and actual asbestos in the workplace.

Information for visitors is to be displayed at entry points of areas identified as containing asbestos – including the tags and what they mean. Additional information such as the plan and the register is available on request.

## Asbestos/ACM Identification

ACM has been identified since the 1980s as a potential health hazard. HBDHB's asbestos identification records extend from the late 1980s through to today. In order to establish the risk posed by the asbestos, possible uses, locations and condition of asbestos must be known. To gather this information, surveys are undertaken across all HBDHB sites.

For any new lease or purchase of buildings there will be surveys completed to identify the actual or likely presence of asbestos. Results of these surveys will be added to the Asbestos Register.

## Asbestos Surveys

Surveys undertaken on behalf of the HBDHB are performed by a Licenced Asbestos Assessor and are undertaken in accordance with WorkSafe NZ's Good Practice Guidelines for Conducting Asbestos Surveys (2016). Any samples required as part of identification are sealed appropriately and clearly labelled as potential asbestos/ACM and sent only to an IANZ accredited laboratory.

The purpose of the surveys is to locate as far as reasonably practicable, the presence and location of any identified or assumed asbestos/ACM in a building which could potentially give rise to a risk of exposure to respirable asbestos fibres. An example of this is ACM that could be damaged or disturbed during normal occupancy or foreseeable maintenance and installation work. As part of the survey, the risk assessment of the asbestos (Appendix 2) identifies the best option for management of the asbestos.

Asbestos surveys and due diligence are also undertaken on all leased buildings to ensure any asbestos is identified and adequately managed.

These surveys are completed annually where required, or at the time of new lease or purchase of buildings.

## HBDHB's Asbestos Register

Hawke's Bay District Health Board's Asbestos Register is a digital document, which contains readily accessible records of all asbestos surveys, including locations, sample analysis results and identified and assumed asbestos or ACM. The Asbestos Register is intended to provide a starting point for project managers, trades, maintenance workers and others to assist in the identification and effective management of asbestos across all HBDHB sites. Any clearance inspections and certifications are also held within the Asbestos Register. A hard copy is also available in the Facilities Management office or on request.

HBDHB requires project managers, maintenance workers and contractors to review the Asbestos Register prior to commencement of work within any building where asbestos or ACM has been identified or likely to be present. Where positive results are indicated via laboratory testing an asbestos risk assessment is required to be undertaken for the proposed works prior to commencement.

The asbestos location and assessment are added to the overall HBDHB risk register. The update and communication of this information to the Health and Safety Manager is the responsibility of the Facilities Engineer and Property Manager.

Several buildings either owned or leased by the HBDHB have been cleared of asbestos containing materials due to their age and/or survey outcomes. These buildings are still included in the Asbestos Register, but designated as free from asbestos/ACM.

The Asbestos Register and other associated documentation (maps, aerial photographs) have been assigned a traffic light colour coding system based on the risk of asbestos present.

**Red** indicates extensive reports of asbestos presence

**Orange** indicates small areas of asbestos or areas where asbestos has been cleared but pockets could remain

**Green** indicates no asbestos presence and minimal risk of discovering asbestos

The aerial photographs Appendix 5 and 6 give an at a glance summary of the main campus areas where asbestos has been identified.

These photos and a summary of the register are available via the Health and Safety Manager and Facilities Management.

## Managing asbestos in the workplace

### History

HBDHB's current building and infrastructure assets have been inherited and/or developed over the past 80 years. Accordingly, these assets reflect the standard of the time of construction or redevelopment, where refurbishment has been undertaken.

In the decades preceding the development of this Asbestos Management Plan, several buildings containing large amounts of asbestos or ACM were extensively refurbished, facilitating the removal and disposal of any asbestos/ACM that was found. These buildings are assigned an orange traffic light colour overall, as we cannot confirm that all asbestos containing material has been removed.

HBDHB provides all documentation on presence and condition of asbestos within buildings.

### Our Strategy

HBDHB's strategy for asbestos management is currently strongly driven by the Capital Works programme. HBDHB's Facilities Management team take the opportunity wherever possible to incorporate asbestos removal into capital and maintenance projects. There are also several other options available to physically manage the asbestos within our workplace, as noted in Appendix 3.

### Condition monitoring of identified asbestos

An independent monitoring programme ensures that the asbestos is not at risk of deteriorating and releasing fibres. Risk assessments are conducted during surveys and monitoring of asbestos. Where the asbestos is in sound and good condition, removal of ACM may not immediately necessary, as the risk to occupants and the community may be deemed negligible. All condition monitoring are based on the WorkSafe NZ Good Practice Guidelines for Conducting Asbestos Surveys (2016), which is found in Appendix 2. The risk assessments undertaken during the surveying and monitoring process identify the best option for management of the asbestos or ACM.

Documenting the ongoing condition of asbestos is a continual process and added to the Asbestos Register. Where the asbestos has been identified as damaged or deteriorating, condition-monitoring frequency can be either increased or the current management option is reviewed based on a risk assessment.

### Asbestos Labelling

All work conducted on ACM must be undertaken in such a way that health risks are minimised.

All asbestos or ACM that has not been removed will be progressively labelled where practicable. The details regarding a location are recorded within the HBDHB Asbestos Register.

Communication of the labelling and what labels mean will be included in induction material of all Workers and will be available in accessible area for visitors to sites.

Any labelled asbestos/ACM must not be disturbed by any person until the proposed action has been identified and risk assessed.

## Asbestos Removal Works

All asbestos removal works undertaken on behalf of HBDHB must be in accordance with Health and Safety at Work Act (Asbestos) Regulations 2016 and the Approved Code of Practice for the Management and Removal of Asbestos 2016.

### Procedure for Asbestos Removal

1. Facilities Management will select a licensed asbestos removalist. The selection must follow the guidelines as set out under the regulations to ensure a trained, certified and experienced company/person is engaged.
2. An Asbestos Removal Control Plan is a document that identifies the specific control measures the licensed asbestos removalist will use to make sure workers and other people are not put at risk when carrying out the work.
3. The licensed asbestos removal contractor must provide a copy of the Asbestos Removal Control Plan as part of a Site Specific Safety Plan to the responsible person for review and approval prior to the start of any asbestos removal works
4. All contractors must be inducted to HBDHB sites to undertake works.
5. Notification of asbestos removal
  - **Notification to WorkSafe**

Before undertaking asbestos removal works at HBDHB site, the asbestos removal contractor must notify WorkSafe NZ in writing at least 5 days before the removalist commences licensed removal work. The contractor is to inform WorkSafe via their website, using the *Notification of Licensed Asbestos Removal* form in accordance with regulation 34.

In the case where immediate removal is required, the licensed asbestos removalist must give notice to WorkSafe immediately by telephone and in writing within 24 hours of notice given by telephone.
  - **Notification to workers and other occupants**

HBDHB will ensure that the following person(s) are informed, where appropriate, that asbestos removal work is to be carried out at the workplace and when the work is to commence, prior to the work commencing:

    - Executive Director of Provider Services
    - Health and Safety Manager
    - Workers and any other persons at the workplace; and
    - Anyone occupying premises in the immediate vicinity of the workplace
    - Visitors to the immediate vicinity by way of tags and signage
6. Limited access to asbestos removal area

HBDHB will ensure, as far as reasonably practicable, that no one other than the following has access to an asbestos removal area:

  - Workers engaged in the removal of asbestos;
  - Other persons associated with the asbestos removal work;

- Anyone allowed under Asbestos Regulations or other enactments to be in the asbestos removal area.

HBDHB will refuse entry to anyone who does not comply with a control measure implemented for the workplace regarding asbestos or who does not comply with the direction of a licensed asbestos removalist.

#### **7. Clearance inspections and certificates**

HBDHB will engage an independent licensed asbestos assessor to undertake clearance inspections upon the completion of asbestos removal works. The clearance inspection, for Class A removal works is a four stage process:

- Stage 1 – Preliminary check of site condition and job completion
- Stage 2 – Thorough visual inspection of work area
- Stage 3 – Air monitoring and swab samples (where applicable)
- Stage 4 – Final assessment post work in area of asbestos removal

Class B removal works comprise of Stage 1 and 4. Upon successful completion of the clearance inspection, the independent assessor will issue a clearance certificate verifying that the area is safe to re-occupy. This document also certifies that the safe removal of asbestos within the area specified and in accordance with the Asbestos Removal Control Plan, has been completed.

Should any staff have concerns about reoccupying an area where asbestos removal works has been undertaken, a copy of this document is provided for their reassurance. These certificates will be available on request from the Facilities Department.

#### **8. Background air monitoring**

HBDHB will engage an independent licensed assessor to undertake integrity testing of containment areas where required under Asbestos Regulations, prior to works beginning. The independent assessor will also be engaged where required under Asbestos Regulations, to undertake background air monitoring during the removal and provide results as necessary to assure the health and safety of individuals within the vicinity of the removal works.

#### **9. Updating the Asbestos Register and Risk Register**

Upon the completion of asbestos removal works, the Facilities Engineer or competent designate will update the Asbestos Register with the relevant documentation and actions taken. Asbestos that was not removed will be labelled. This information will also be shared with the Health and Safety Manager to update the Risk Register.

## Procedures for incidents, emergencies and Health Monitoring

### Discovery of Unknown Suspected Asbestos

HBDHB has developed a standalone document, which is provided to contractors, maintenance staff and in house project managers outlining the procedure should previously unknown asbestos be discovered or suspected. The procedure is included as part of this document as Appendix 1 and forms part of tender documentation and/or as part of contract/work scoping.

### Incident Response

In the event of a high-risk incident, such as ceiling tile collapse, earthquake or storm damage extra precautions will be taken to minimise the spread of asbestos fibres from the damaged ACM. The potential release of asbestos fibres within a building or building exterior may necessitate the isolation and/or evacuation of an area.

Where ACMs have been damaged or damaged materials/suspected deterioration are identified during inspection or following an event, the emergency procedure below is to be followed:

- No person(s) should attempt to clean up potential asbestos containing materials
- Contact Health and Safety Manager and isolate the area where possible (close doors, windows, turn off extraction etc)
- Secure the area affected ensuring no access is permitted (signage to be displayed and barriers erected where appropriate)
- Health and Safety Manager to review impact on business as usual for hospital, employ alternatives as per Emergency Management Policies and Procedures for area
- Get professional advice from licenced assessor and/or consultant as necessary. This may include but not be limited to, inspecting the damage reported, arranging air monitoring test(s) and arranging and managing any remedial works required
- Maintain controlled access to the area until such time as formal clearance has been confirmed; *and*  
maintain good communication with staff and all other relevant parties, providing updates as necessary to ensure the access arrangements are not breached

### Health Monitoring

HBDHB has a requirement to monitor the health of workers who are or could have been exposed to asbestos.

To do this there is an Asbestos Health Monitoring register held by the Occupational Health Nurses, they add workers to this register and organise monitoring as they are alerted to workers being exposed.

The testing is annual and is a lung function test and results are maintained to see any changes in the function of the workers lungs. These records must be kept for 40 years.

Workers who leave the DHB will have their records and details added to the National Asbestos register and from here the Workers GP will organise testing.

There will be regular reporting on the amount of workers on the register and data of tests and summary results.

## Review

The Asbestos Management Plan is a living document. As aspects of the HBDHB's property portfolio and asbestos register changes this plan will be updated to match.

A review of this asbestos management plan will be conducted on an annual basis by the Health and Safety Advisor to ensure the content accurately reflects the asbestos management intentions of the Hawke's Bay District Health Board.



## Appendices

### Appendix 1 – Procedure for discovery of unknown asbestos

Step	Who	Action
1. Stop work	HBDHB Staff or contractor	<ul style="list-style-type: none"> <li>- Cease work activities</li> </ul>
2. Restrict access to affected area & shut-off air handling system	HBDHB Staff/ Contractor	<ul style="list-style-type: none"> <li>- Restrict access to the area or site by closing doors, taping off access points and installing temporary signage to prevent site or building occupants or members of the public from entering the immediate area, and to prevent any further disturbance of asbestos materials in the area.</li> <li>- Air Conditioning, Ventilation and/or Air handling systems should be shut-off (where relevant).</li> </ul>
3. Notify: <ul style="list-style-type: none"> <li>• Project Manager or Maintenance Supervisor</li> </ul>	<p>HBDHB Staff/ Contractor</p> <p>Facilities staff</p>	<ul style="list-style-type: none"> <li>- Call Project Manager or Maintenance Supervisor (where maintenance work being undertaken)</li> <li>- Contact Facilities H&amp;S Representative, Facilities Manager</li> <li>- Contact H&amp;S Advisor to inform of discovery</li> </ul>
4. Notify Asbestos Consultant	Project Manager or relevant staff member	<ul style="list-style-type: none"> <li>- Facilities PM or relevant staff member to contact Asbestos Consultant to arrange risk assessment and advise appropriate control strategies.</li> <li>- Asbestos Consultant to advise WorkSafe where appropriate</li> </ul>
5. Risk Assess Damage & Sample Material (if required)	Asbestos Consultant	<ul style="list-style-type: none"> <li>- Asbestos Consultant to attend site to risk assess material and if necessary, take sample(s) of suspected asbestos materials:               <ul style="list-style-type: none"> <li>○ If sample or visual inspection <b>positive</b>, Asbestos Consultant to advise Project Manager &amp; H&amp;S Manager of best course of action- Go to <b>Step 6</b>.</li> <li>○ If sample <b>negative</b>, notify relevant parties &amp; H&amp;S - Proceed with project or maintenance works.</li> </ul> </li> </ul>

6. HBDHB event reporting process (via Our Hub)	Project Manager or relevant staff member	<ul style="list-style-type: none"> <li>- Staff member to log Event Report, risk register and asbestos register updated</li> <li>- Notify other key stakeholders as required e.g.: <ul style="list-style-type: none"> <li>o Facilities Project Manager</li> <li>o Localised area staff</li> <li>o Subcontractors</li> <li>o EMT (Exec Management Team)</li> </ul> </li> </ul>
7. Engage Licensed Asbestos Removal Contractor for clean-up	Project Manager  Asbestos Removalist	<ul style="list-style-type: none"> <li>- Project Manager to engage a Licensed Asbestos Removal Contractor to undertake asbestos clean up, removal and/or decontamination works.</li> <li>- Asbestos Removalist to inform WorkSafe of Notifiable Works - Asbestos, 5 days written notice required OR immediate notification (0800 030 040) and written notice within 24 hours if urgent removal required.</li> <li>- Go to <b>Step 8</b>.</li> </ul>
8. Conduct asbestos removal and fibre air monitoring (where applicable)	Asbestos Removalist	<ul style="list-style-type: none"> <li>- Asbestos Removalist to undertake removal of asbestos – Class A or B as per Approved Code of Practice – Management and Removal of Asbestos</li> <li>- Conduct asbestos fibre air monitoring adjacent to the contaminated work area to ensure that dust levels do not exceed acceptable exposure levels (where applicable)</li> <li>- Airborne asbestos fibre clearance monitoring shall also be conducted as required within any removal work areas, to ensure areas are safe for re-occupation by unprotected personnel.</li> <li>- Go to <b>Step 9</b>.</li> </ul>
9. Clearance certification	Asbestos Assessor	<ul style="list-style-type: none"> <li>- After clean-up works have been completed, an independent visual clearance inspection shall be conducted to ensure that the asbestos removal has been completed to a satisfactory standard.</li> <li>- Asbestos Assessor to issue clearance documentation.</li> <li>- Update risk register via Health and Safety Manager</li> </ul>

		- Go to <b>Step 10.</b>
10. Update Asbestos Register & Event notification close out	Project Manager or relevant staff member	- Project manager or relevant staff member to communicate completion and provide details to the Facilities Engineer or allocated staff member
	Facilities Engineer or Facilities H&S Representative	- Facilities Engineer or allocated staff member to update Asbestos Register and corresponding Asbestos Management Plan
11. Event notification close out	Project Manager or relevant staff member	- Project Manager or relevant staff member to close out event notification
	H&S team	- H&S to record/archive incident documents as per HBDHB procedures

## Appendix 2 – Risk Assessment of Asbestos

### Material Assessment Algorithm

*Risk assessments source: WorkSafe NZ Good Practice Guidelines: Conducting Asbestos Surveys (2016)*

Sample Variable	Score	Examples of Scores
Product type (or debris from product)	1	Asbestos-reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc)
	2	AIB, millboards, other low-density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.
	3	Thermal insulation (eg pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing.
Extent of damage/deterioration	0	Good condition: no visible damage
	1	Low damage: a few scratches or surface marks, broken edges on boards, tiles etc.
	2	Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres.
	3	High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.
Surface treatment	0	Composite materials containing asbestos: reinforced plastics, resins, and vinyl tiles.
	1	Enclosed sprays and lagging, AIB (with exposed face painted or encapsulated) asbestos cement sheets etc.
	2	Unsealed AIB, or encapsulated lagging and sprays.
	3	Unsealed lagging and sprays.
Total		

Score	Potential to Release Fibres
7-9	High
4-6	Medium
1-3	Low

Non-asbestos materials have no potential to release asbestos fibres.

## Material Assessment Scoring Key

*Risk assessments source: WorkSafe NZ Good Practice Guidelines: Conducting Asbestos Surveys (2016)*

**HIGH RISK**      Score of 7 or more      High potential to release fibres

**MEDIUM RISK**      Score of 4-6      Medium potential to release fibres

**LOW RISK**      Score of 3 or less      Low potential to release fibres

Non-asbestos containing products have no potential to release asbestos fibres.

## Priority Assessment Score

**Potential for fibre release: Highest to lowest**

- 10 – Spray coatings, lagging & loose fill
- 9 – Insulating boards, insulating blocks, millboard, paper & paper products (including Duratherm)
- 8 – Ropes, yarns & cloths
- 7 – Gaskets & friction products
- 6 – Asbestos cement products (Fibrolite asbestos cement sheeting)
- 5 – Textured coatings
- 4 – Asbestos bitumen, mastics, sealants, putties & adhesives
- 3 – Vinyl flooring & floor tiles
- 2 – Asbestos reinforced PVC, plastics & resins

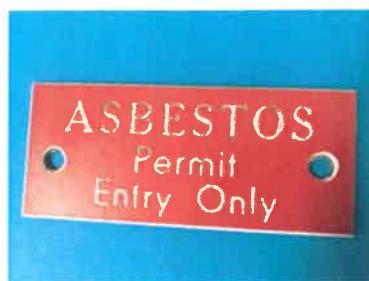
*Note: The material assessment and the priority assessment scores are combined, then the combined score can be ranked with the highest scores needing the most immediate action.*

## Appendix 3 - Asbestos Management options

Asbestos management option	Option involves	Appropriate when	Not appropriate when	Advantages	Disadvantages
<b>Removal</b>	Complete removal of asbestos of ACM from building	<ul style="list-style-type: none"> <li>Surface is friable or poorly bonded</li> <li>Asbestos is severely water-damaged or liable to damage or deterioration</li> <li>There is lichen growth or lichen damage</li> <li>Asbestos is located in air conditioning ducts</li> <li>Airborne asbestos levels exceed trace level</li> <li>Other control techniques are inappropriate</li> </ul>	<ul style="list-style-type: none"> <li>Asbestos is located on complex or inaccessible surfaces</li> <li>Removal would be extremely difficult and other techniques are satisfactory</li> </ul>	<ul style="list-style-type: none"> <li>Hazard and risk eliminated</li> <li>No further action required</li> </ul>	<ul style="list-style-type: none"> <li>Increase in immediate risk of exposure, particularly to removal workers</li> <li>creates significant disruption to building occupants</li> <li>may be the most costly, complex and time-consuming option</li> <li>removal may increase fire risk in a building, requiring a substitute material</li> <li>potential to contaminate building if removal not carried out correctly</li> </ul>
<b>Encapsulation</b>	Coating ACM with a product that penetrates into and hardens the material	<ul style="list-style-type: none"> <li>Asbestos removal is difficult or not feasible</li> <li>Minimal likelihood of asbestos being damaged</li> <li>Building has a short life expectancy</li> <li>Asbestos is readily visible for regular assessment</li> </ul>	<ul style="list-style-type: none"> <li>Asbestos is deteriorating or is water-damaged</li> <li>Applying the sealant may damage the asbestos</li> <li>Area of damaged asbestos is large</li> </ul>	<ul style="list-style-type: none"> <li>Quick and cost-effective</li> <li>Asbestos dust is contained</li> </ul>	<ul style="list-style-type: none"> <li>Hazard is not eliminated</li> <li>If the area of asbestos is large, it may be similar in cost to removal</li> <li>Eventual removal may be more difficult and costly</li> <li>Enclosure and clearance procedures are still required</li> </ul>

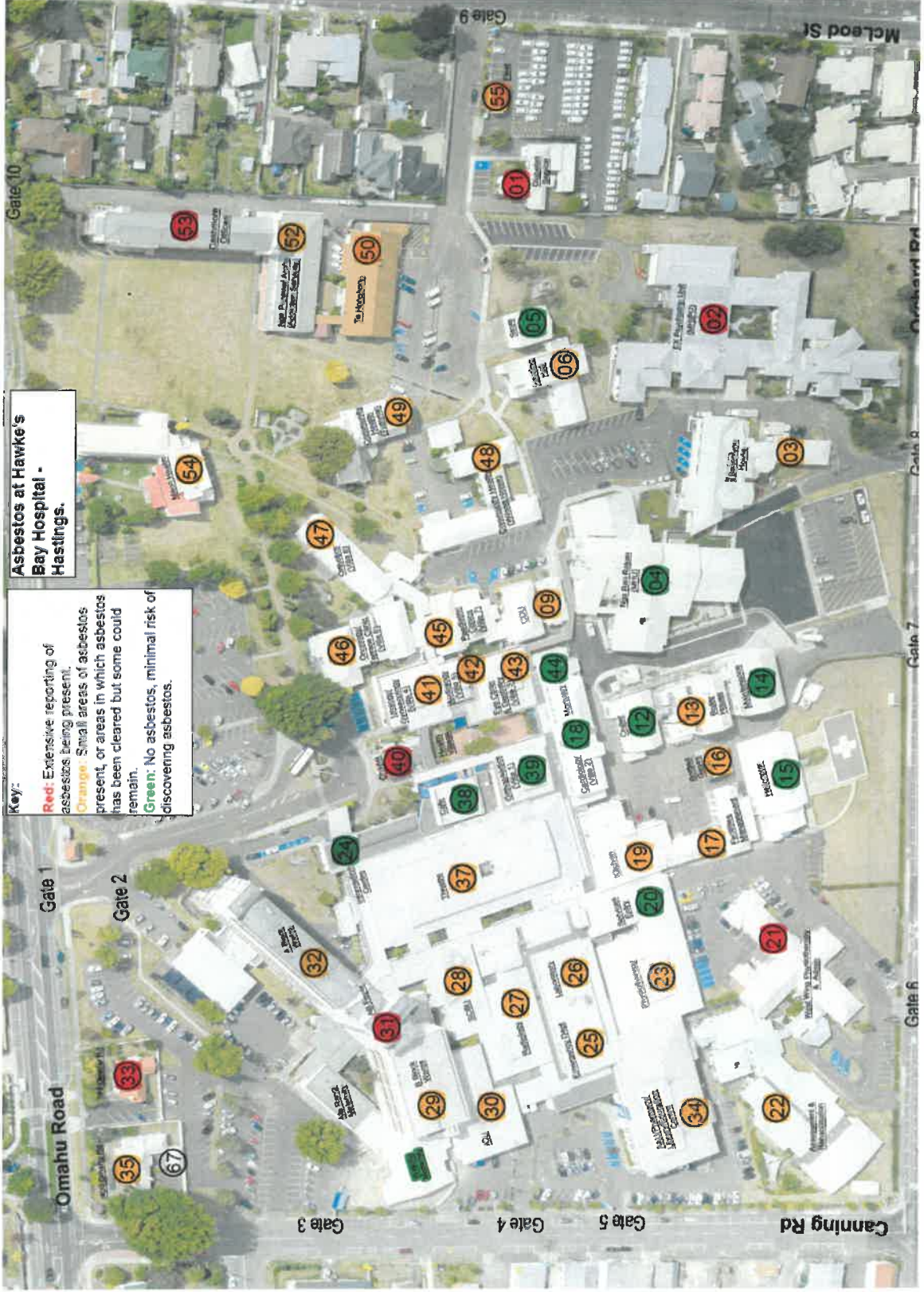
Asbestos management option		Option involves	Appropriate when	Not appropriate when	Advantages	Disadvantages
<b>Sealing</b>	Applying a protective coating that creates an impermeable seal for the asbestos	<ul style="list-style-type: none"> <li>Asbestos removal is difficult or not feasible</li> <li>Minimal likelihood of asbestos being damaged</li> <li>Building has a short life expectancy</li> <li>Asbestos is readily visible for regular assessment</li> </ul>	<ul style="list-style-type: none"> <li>Asbestos is deteriorating or has been water-damaged</li> <li>Applying the sealant may damage the asbestos</li> <li>Area of damaged asbestos is large</li> </ul>	<ul style="list-style-type: none"> <li>Quick and cost-effective</li> <li>Asbestos dust is contained</li> </ul>	<ul style="list-style-type: none"> <li>Hazard is not eliminated</li> <li>If the area of asbestos is large, it may be similar in cost to removal</li> <li>Eventual removal may be more difficult and costly</li> <li>Enclosure and clearance procedures are still required</li> </ul>	
<b>Enclosure</b>	Placing a barrier between ACM and the surrounding environment	<ul style="list-style-type: none"> <li>Asbestos removal is extremely difficult</li> <li>Fibres can be fully contained with the enclosure</li> <li>Most of the surface is inaccessible (enclosed)</li> <li>Disturbance to, or entry into the enclosure is unlikely</li> </ul>	<ul style="list-style-type: none"> <li>Enclosure is liable to be damaged or water damage may occur</li> <li>Asbestos cannot be fully enclosed</li> </ul>	<ul style="list-style-type: none"> <li>Minimal disruption to occupants</li> <li>Provides an adequate method of asbestos control for some situations</li> </ul>	<ul style="list-style-type: none"> <li>Asbestos hazard remains</li> <li>Ongoing maintenance of enclosure required</li> <li>Asbestos management programme required</li> <li>Enclosure has to be removed before removing asbestos</li> <li>Entry into the enclosure is prohibited</li> </ul>	
<b>Deferral</b>	No action taken at the present time	<ul style="list-style-type: none"> <li>Risk of asbestos exposure is negligible, and</li> <li>Asbestos is inaccessible and full contained or asbestos is stable and unlikely to be damaged</li> </ul>	<ul style="list-style-type: none"> <li>There is a possibility of asbestos damage or deterioration</li> <li>Airborne asbestos dust levels exceed trace level</li> </ul>	<ul style="list-style-type: none"> <li>No initial cost</li> <li>Cost of removal is deferred</li> </ul>	<ul style="list-style-type: none"> <li>Asbestos hazard remains</li> <li>Ongoing assessment and monitoring is required</li> <li>Asbestos management programme required</li> </ul>	

Appendix 4 – Labelling of Asbestos at Hawke’s Bay District Health Board  
Examples of indicative asbestos labels at HBDHB





Appendix 5 – Site map HBDHB: Hastings Fallen Soldiers Memorial Hospital



Appendix 6 – Site map HBDHB: Wairoa Hospital



## Appendix 7 – Definitions

Acronym/Word	Definition
<b>Accredited laboratory</b>	A testing laboratory accredited by the International Accreditation New Zealand (IANZ) or similar. Alternatively, granted recognition by IANZ, either solely or in conjunction with one or more other persons.
<b>Air monitoring</b>	Airborne asbestos fibre sampling to assist in assessing exposures and the effectiveness of control measures. Air monitoring includes exposure monitoring, control monitoring and clearance monitoring.
<b>ACOP</b>	Approved Code of Practice
<b>Asbestos containing materials (ACM)</b>	Any material, object, product or debris that contains asbestos.
<b>Asbestos<sup>1</sup></b>	Fibrous form of mineral silicates (rock-forming minerals) in the serpentine and amphibole groups. Includes: <ul style="list-style-type: none"> <li>a) Actinolite</li> <li>b) Grunerite/Amosite (brown asbestos)</li> <li>c) Anthophyllite asbestos</li> <li>d) Chrysotile (white asbestos)</li> <li>e) Crocidolite (blue asbestos)</li> <li>f) Tremolite asbestos</li> <li>g) Any mixture that contains 1 or more of the minerals listed in (a) to (f).</li> </ul>
<b>Asbestos Register</b>	The collated records held by Hawke’s Bay District Health Board, which contains all known occurrences of asbestos or ACM in its premises.
<b>Asbestos Removal Control Plan</b>	Document which identifies the control measures which are to be implemented to ensure workers and other persons are not at risk when removal of asbestos or ACM is being undertaken.
<b>Asbestos Removal Work</b>	Removal of asbestos or ACM.
<b>Asbestos Survey</b>	A survey carried out to support the workplace PCBU in identifying asbestos in the workplace. Its purpose is to identify, so far as reasonably practicable, the presence and location of any asbestos or assumed ACM in a building or site which could give rise to a risk of exposure to respirable asbestos fibres.
<b>Clearance Inspection</b>	An inspection, carried out by a competent person, to verify that an asbestos work area is safe to be returned to normal use after work involving the disturbance of ACM has taken place. A clearance inspection must include a visual inspection and may also include clearance monitoring and/or settled dust swab sampling.
<b>Clearance Monitoring</b>	Air monitoring using static or positional samples to measure the level of airborne asbestos fibres in an area

<sup>1</sup> Health and Safety at Work (Asbestos) Regulations 2016

Acronym/Word	Definition
	following work on ACM. An area is 'cleared' when the level of airborne asbestos fibres is measured as being below 0.01 fibres/ml.
<b>Competent Person (Friable asbestos removal)</b>	A person who is competent under the regulations 2016 (requirements for a competent person to supervise work to remove friable asbestos containing material).
<b>Competent Person – Clearance Inspections (Independent Assessor)</b>	A person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work. Holding WorkSafe NZ registration.
<b>Control Monitoring</b>	Air monitoring, using static or positional to measure the level of airborne asbestos fibres in an area during work on ACM. Control monitoring is designed to assist in assessing the effectiveness of control measures. It results are not representative of actual occupational exposures, and should not be used for that purpose.
<b>Friable Asbestos</b>	Asbestos material that is in powder form or able to be crumbled, pulverised or reduced to a powder by hand pressure when dry.
<b>H&amp;S</b>	Health and Safety
<b>Health Monitoring</b>	Monitoring the person to identify changes in the person's health status because of exposure to particular substances. Health monitoring includes biological monitoring and medical assessments, but does not include atmospheric monitoring.
<b>Licensed Asbestos Removalist</b>	A PCBU with a Class A or Class B licence.
<b>Non-Friable Asbestos</b>	Bonded ACM that cannot be crumbled by hand pressure alone.
<b>Officer</b>	
<b>Person Conducting a Business or Undertaking (PCBU)</b>	<p>A person conducting a business or undertaking, whether the person conducts a business or undertaking alone or with others; whether or not the business or undertaking is conducted for profit or gain; but does not include—</p> <ul style="list-style-type: none"> <li>- a person to the extent that the person is employed or engaged solely as a worker in, or as an officer of, the business or undertaking;</li> <li>- a volunteer association;</li> <li>- an occupier of a home to the extent that the occupier employs or engages another person solely to do residential work;</li> <li>- a statutory officer to the extent that the officer is a worker in, or an officer of, the business or undertaking;</li> <li>- a person, or Class of persons, that is declared by regulations not to be a PCBU</li> </ul>
<b>Personal Protective Equipment (PPE)</b>	<p>Anything used or worn by a person (including clothing) to:</p> <ul style="list-style-type: none"> <li>- minimise risks to the person's health and safety;</li> </ul>

Acronym/Word	Definition
<b>Reasonably Practicable</b>	<p>and</p> <ul style="list-style-type: none"> <li>- includes air-supplied respiratory equipment</li> </ul> <p>That which is, or was, at a particular time, reasonably able to be done in relation to ensuring health and safety, taking into account and weighing up all relevant matters, including:</p> <ul style="list-style-type: none"> <li>- the likelihood of the hazard or the risk concerned occurring; and</li> <li>- the degree of harm that might result from the hazard or risk; and</li> <li>- what the person concerned knows, or ought reasonably to know, about— <ul style="list-style-type: none"> <li>(i) the hazard or risk; and</li> <li>(ii) ways of eliminating or minimising the risk; and</li> </ul> </li> <li>- the availability and suitability of ways to eliminate or minimise the risk; and</li> <li>- after assessing the extent of the risk and the available ways of eliminating or minimising the risk, the cost associated with available ways of eliminating or minimising the risk, including whether the cost is grossly disproportionate to the risk.</li> </ul>
<b>Respirable Asbestos Fibre</b>	<p>A particle of asbestos that:</p> <ul style="list-style-type: none"> <li>- is less than 3 micrometres wide; and</li> <li>- is more than 5 micrometres long; and</li> <li>- has a length-to-width ratio of more than 3:1.</li> </ul>
<b>Risk</b>	<p>The likelihood of a hazard causing harm to a person.</p>
<b>Worker</b>	<p>An individual who carries out work in any capacity for a PCBU, including work as—</p> <ul style="list-style-type: none"> <li>- an employee; or</li> <li>- a contractor or subcontractor; or</li> <li>- an employee of a contractor or subcontractor; or</li> <li>- an employee of a labour hire company who has been assigned to work in the business or undertaking; or</li> <li>- an outworker (including a homeworker); or</li> <li>- an apprentice or a trainee; or</li> <li>- a person gaining work experience or undertaking a work trial; or</li> <li>- a volunteer worker; or</li> <li>- a person of a prescribed Class.</li> </ul>
<b>Workplace</b>	<p>Any place where work is, or is to be, performed by a worker; or a person conducting a business or undertaking.</p>
<b>WorkSafe NZ</b>	<p>The Regulator of Health and Safety legislation in New Zealand.</p>

Appendix 8 – Workflow Process: Asbestos Management

