Asbestos Management Plan

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## Appendices

Appendix A: Qualitative Risk Assessment

Appendix B: Control Work Form
1.0 Introduction

Pattle Delamore Partners Limited (PDP) has been engaged by Christchurch International Airport Limited (CIAL) to prepare this Asbestos Management Plan (AMP) to assist CIAL with their role and general duties for ‘persons conducting a business or undertaking’ (PCBU) under the Health and Safety at Work Act 2015 to ensure, so far as is reasonably practicable, that the workplace is without risks to the health and safety of any person. For the purposes of CIAL’s management of asbestos, the definition of the ‘workplace’ in this Plan relates to the CIAL-owned buildings and structures and CIAL operated areas. This Plan is not intended to address the potential presence of asbestos associated with the operation of a tenant’s activity. This will need to be addressed separately by the individual tenant.

This AMP has been developed for CIAL to document the procedures in place for minimising the risks to human health relating to the exposure to asbestos in the workplace. The AMP has been developed to assist CIAL to comply with their legal obligation to identify and manage asbestos in the workplace in accordance with the Health and Safety at Work (Asbestos) Regulations 2016 (referred to as the Asbestos Regulations).

This AMP provides information on managing the in-situ asbestos in building materials and provides control measures in place to reduce the risk of exposure to asbestos in the workplace. This AMP also provides details on the procedures to disturb or remove asbestos containing material (ACM) within CIAL owned buildings or structures.

While this AMP relates to buildings and above ground structures within CIAL-owned properties, it should be noted that CIAL have prepared a Site Management Plan¹ to support a global resource consent from Christchurch City Council (CCC) under the NES² to address ground contamination issues (including asbestos in soil) associated with soil disturbance activities for CIAL development sites. As such, reference should also be made to the SMP when asbestos is discovered during soil disturbance/removal activities on CIAL-owned properties.

This AMP is limited to the identification and management of ACM and is not intended to address other hazards that may be present at a workplace, such as falls from heights or electrical risks. These risks must also be identified and controlled. Contractors undertaking the work will need to develop a site specific health and safety plan and comply with all necessary CIAL health and safety procedures and protocols.

¹ Site Management Plan: Excavation and handling of contaminated soils at Christchurch International Airport. Tonkin & Taylor Limited, April 2016.
2.0 Statutory Requirements

There are a number of regulatory requirements and codes of practice that apply to the identification and management of asbestos products in the workplace in New Zealand. The most important of these are:

- *Health and Safety at Work Act 2015*
- *Health and Safety at Work (Asbestos) Regulations 2016*
- *Code of Practice for the Management and Removal of Asbestos* (September 2016)
- *Code of Practice for Conducting Asbestos Surveys* (October 2016)

It is important that all CIAL staff/contractors are familiar with and operates in accordance with these regulations and codes of practice.

3.0 Background to Asbestos

Asbestos is a naturally occurring mineral fibre that was used in various building and other products, mainly between the 1940s and late 1980s. Buildings constructed after 1990 are generally less likely to contain asbestos. However, as materials containing asbestos were still permitted to be imported into New Zealand until recently, some buildings constructed after 1990 may still contain ACMs.

Asbestos is a versatile product, which withstands heat, erosion and decay, and has fire and water resistant properties. The common types of asbestos available commercially have been chrysotile (white), crocidolite (blue) and amosite (brown). These asbestos types vary in physical and chemical properties but all show good qualities of tensile strength, flexibility and resistance to heat and chemical attack.

Asbestos containing materials can exist in two distinct forms – bonded (generally quite stable) and friable (a more unstable form). Bonded (or stable) forms of asbestos can be found in materials such as asbestos-cement sheets, roof tiles, vinyl floor tiles and electrical switchboards. Friable asbestos, when dry, is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure. Friable forms of asbestos materials include sprayed asbestos insulation, pipe and boiler insulation and woven asbestos fabric.

There are a number of adverse health effects associated with exposure to asbestos, including asbestosis (progressive and irreversible scarring of lung tissue that impairs breathing), lung cancer and mesothelioma (cancer of the linings around the lungs and abdomen). It should be noted that, without exception, the primary risk driver for asbestos exposure is via inhalation of airborne fibres. If there are no airborne asbestos fibres, there is no risk to human health.
4.0 Key Roles and Responsibilities

The responsibility to ensure asbestos is appropriately managed in the workplace is managed from Board level, CIAL staff and contractors/sub-contractors.

Responsibilities Flow Chart

Some of the key roles and responsibilities for managing asbestos at the operational level are detailed below.

4.1 CIAL Property Team

The CIAL Property Team has a coordination role to ensure the effective implementation and functioning of the AMP and the overall management, monitoring and control of asbestos in the workplace.

4.2 CIAL H&S Group

The CIAL H&S Group shall provide specialist advice to the CIAL Property Team and assist with the approval of the asbestos removal control plans and SSSP (Site Specific Safety Plan).

4.3 CIAL Employees

All CIAL employees are required to:

- Report all incidents or potential hazards for risk assessment and/or action to the CIAL Property Team;
- Understand the responsibilities of the CIAL Property Team and measures adopted to control risks associated with ACM; and
- Comply with all policies, procedures and instructions as stipulated in the AMP.
4.4 Tenants/Occupiers

All tenants/occupiers of CIAL-owned buildings are required to:

- Where appropriate, provide prior notification to the CIAL Property Team when contractors and tradespeople are required to be on site;
- Report all damage/incidents relating to identified or suspected ACM to the CIAL Property Team; and
- Comply with all policies, procedures and instructions as stipulated in the AMP.

4.5 Contractors

All contractors of CIAL and tenants/occupiers of CIAL-owned buildings are required to:

- Ensure that their employees and sub-contractors are aware of their responsibilities regarding asbestos management;
- Complete CIAL’s health and safety induction;
- Report to the CIAL Property Team before commencing work on site containing ACM;
- Ensure the asbestos management survey (particular to the work area), is inspected prior to any works to determine whether ACM is knowingly present;
- Comply with the procedures stated in this document and any other procedures stipulated or specified in contract documents (signing the ‘Work Control Form’ on the building survey to acknowledge compliance);
- Follow all legislation, regulations and codes of practice associated with ACM in the workplace; and
- Report incidents or potential hazards pertaining to asbestos to the CIAL Property Team.

The following sections provide further detail on the principles, identification and management of asbestos in the workplace.

5.0 CIAL Principles of Asbestos Management

CIAL’s general principles of asbestos management are summarised below:

- CIAL will take reasonable steps to identify all possible locations of ACM within CIAL owned buildings and structures;
- CIAL will take reasonable steps to label all identified ACM. Where ACMs are identified or presumed, the locations will be recorded in an asbestos management survey for each CIAL-owned building;
- The main goal for CIAL is for the ongoing, long-term management of asbestos in the workplace rather than removing all asbestos containing materials from buildings within CIAL-owned properties. ACMs are only likely to be removed by CIAL during future demolition/refurbishment works or when a high risk to human health is identified;
Consideration may be given by CIAL to the removal of ACM during any renovations, refurbishments or maintenance work in preference to other control measures such as encapsulation, enclosure and sealing;

CIAL will perform a risk assessment on identified or presumed ACM;

CIAL will take reasonable steps to prevent exposure to airborne asbestos fibres and take into account the results of risk assessment conducted for identified or presumed ACM;

Only competent persons should undertake the identification and risk assessment of ACM;

Tenants/occupiers of CIAL-owned buildings will provide all workers and contractors on premises where ACMs are identified present or presumed to be present, and all other persons who may be exposed to ACM as a result of being on the premises, with a copy of the asbestos management survey for that building/structure; and

Prior to any work involving the disturbance of ACM, tenants/occupiers will ensure the ‘Work Control Form’ specific to that building/structure is signed by all workers and contractors to acknowledge that they are aware of the presence of asbestos and will comply with this AMP and the asbestos regulations and relevant codes of practice (attached to the individual asbestos management surveys held at each site).

6.0 Identification and Management of Asbestos

CIAL will ensure, so far as is reasonably practicable, that all asbestos or ACM giving rise to a risk at the workplace is identified and managed. In summary, the adopted process for the identification and management of ACM in the workplace involves the following steps:-

1. Identification of asbestos and ACMs (Section 6.1)

2. Asbestos risks assessment (Section 6.2)

3. Asbestos Management Options (Section 6.3)

A flowchart showing how asbestos is identified and managed in the workplace by CIAL is presented below. The flowchart has been based on the management principles outlined in the Australian Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)].

Further details on the identification, risk assessment and management options for asbestos are provided on the following sections.
Asbestos Management Flow Chart
6.1 Identification of Asbestos and ACMs

It is important that, so far as reasonably practicable, all asbestos or ACM is identified so that suitable management of the risk posed by asbestos can be implemented. The primary method for identifying ACM in the workplace is through the completion of an ‘asbestos management survey’.

For the purposes of this Plan, any building/structure built prior to January 2000 has been identified as potentially containing ACM and requires an asbestos management survey to be completed on it. Despite this, there is the potential that old building materials may have been used or materials imported from other countries that may contain asbestos. Where there is reasonable doubt of any such building material (regardless of the age) an asbestos management survey will be carried out.

Asbestos management surveys will typically be non-destructive in nature and involve inspecting all accessible areas within a structure to identify materials suspected of containing asbestos.

An asbestos management survey will be undertaken by a competent person who is responsible for identifying and sampling the suspect materials. The asbestos management surveys will include the following:-

- Location of asbestos material
- Type of asbestos material
- Approximate area/size
- Condition
- Risk rating
- Recommendations for warning signs, remedial works
- Any general comments

A copy of the asbestos management survey for a building will be kept at that building as well as with the CIAL Property Team. The information in the asbestos management survey will be used to help manage any risk identified to site occupiers and also help manage any routine work that may disturb ACM (discussed further in Section 7.0).

Annual re-inspections will be conducted by a competent person and will comprise a visual assessment of the condition of the previously identified ACM to determine whether the material remains in a satisfactory condition, or if deterioration has occurred since the previous inspection. Such re-inspections will determine if any remedial action, such as encapsulation, isolation or removal of the asbestos containing materials, is required. The competent person will update and re-issue the asbestos management survey at the completion of the re-inspection process.

CIAL may require more intrusive asbestos surveys where additions or alterations and/or demolition works are carried out on existing buildings. The requirements of when to carry out a refurbishment or demolition survey are outlined in Section 7.0.
6.2 Asbestos Risk Assessment

Where ACM has been identified by CIAL, a qualitative assessment of the risk posed by the asbestos present will be undertaken by the competent person preparing the management survey. The risk assessment will be based upon an evaluation of a number of factors such as the nature of the particular material, location and condition of the materials identified, the potential for liberation of asbestos material, the potential for personal exposure, the area’s occupancy or likelihood/frequency of maintenance and any other factors considered important or relevant.

The qualitative risk assessment includes a condition rating system and a priority ranking system to rank the occurrence of asbestos material by location and risk to help facilitate the most appropriate management measures/controls. This rating ultimately assists in the management of asbestos in the workplace. Table 1 below shows the risk ranking matrix. Further explanation of the risk ranking matrix with respect to the condition, friability and disturbance potential are detailed in Appendix A.

Table 1 - Asbestos Risk Ranking Matrix

<table>
<thead>
<tr>
<th>Friability</th>
<th>Friable Asbestos Materials</th>
<th>Bonded Asbestos Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Condition</td>
<td>Unsatisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Disturbance Potential/Exposure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Med</td>
<td>High</td>
<td>Med</td>
</tr>
<tr>
<td>Low</td>
<td>Med</td>
<td>Low</td>
</tr>
</tbody>
</table>

6.3 Asbestos Management Options

Depending on the risk ranking allocated to the building/structure, CIAL may require site specific controls to manage the risk to tenants/occupiers of CIAL-owned buildings as a result of ACM being identified. The following controls and management options have been identified by CIAL:

- Deferral (i.e. leave in-situ, manage and monitor)
- Seal / encapsulate
- Enclose / isolate
- Remove

The control and management options implemented by CIAL will be appropriate to the level of risk identified. The following information will be used by CIAL as a guideline when determining the appropriate control and management option for the management of ACM within the building/structure.

- If the ACM is friable and not in a stable condition, and there is a risk to health from exposure, it will be removed as soon as reasonably practicable;
If the ACM is friable and is in a stable condition but is accessible and may be disturbed, consideration will be given to its removal;

If removal is not immediately practicable, short-term control measures, such as encapsulation or isolation, may be implemented until removal is possible; and

If the ACM is bonded and in a stable condition, encapsulation may be implemented if the ACM is unsealed. Encapsulation is not necessarily required if the ACM is unsealed. ACM that is bonded, stable and sealed, which is unlikely to be disturbed during normal activities, will be left in-situ, managed and monitored. The disturbance and removal of ACM is discussed in Section 7.0.

A table of the various control and management options as detailed in the WorkSafe’s Managing Asbestos Information Sheet 4 is provided on Table 2 below.

This table will be used as a guide by CIAL to help it determine the appropriate asbestos management option. The assessment will be carried out by a competent person.
<table>
<thead>
<tr>
<th>OPTION</th>
<th>OPTION INVOLVES</th>
<th>APPROPRIATE WHEN</th>
<th>NOT APPROPRIATE WHEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Removal</td>
<td>complete removal of asbestos or ACM from building</td>
<td>▶ surface is friable or asbestos is poorly bonded</td>
<td>▶ asbestos is located on complex or inaccessible surfaces</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ asbestos is severely water-damaged or liable to damage or deterioration</td>
<td>▶ removal would be extremely difficult and other techniques are satisfactory</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ there is lichen growth or lichen-related damage</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ asbestos is located in air conditioning ducts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ airborne asbestos levels exceed exposure standard</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ other control techniques are inappropriate</td>
<td></td>
</tr>
<tr>
<td>Encapsulation</td>
<td>coating ACM with a product that penetrates into and hardens the material</td>
<td>▶ asbestos removal is difficult or not feasible</td>
<td>▶ asbestos is deteriorating or has been water-damaged</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ minimal likelihood of asbestos being damaged</td>
<td>▶ applying the sealant may damage the asbestos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ building has a short life expectancy</td>
<td>▶ area of damaged asbestos is large</td>
</tr>
<tr>
<td>Sealing</td>
<td>applying a protective coating to the ACM that creates an impermeable seal for the</td>
<td>▶ asbestos is readily visible for regular assessment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>asbestos e.g. paint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enclosure</td>
<td>placing a barrier between ACM and the surrounding environment</td>
<td>▶ asbestos removal is extremely difficult</td>
<td>▶ enclosure is liable to be damage or water damage may occur</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ fibres can be fully contained within the enclosure</td>
<td>▶ asbestos cannot be fully enclosed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ most of the surface is inaccessible (enclosed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ disturbance to, or entry into the enclosure is unlikely</td>
<td></td>
</tr>
<tr>
<td>Deferral</td>
<td>no action taken at the present time</td>
<td>▶ risk of asbestos exposure is negligible, <strong>and</strong></td>
<td>▶ there is a possibility of asbestos damage or deterioration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ asbestos is inaccessible and fully contained, <strong>or</strong></td>
<td>▶ airborne asbestos dust levels exceed exposure standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▶ asbestos is stable and unlikely to be damaged</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1. If the enclosure, encapsulation or sealing options are used in commercial buildings, the location of the asbestos must be clearly indicated and recorded.
2. This option is only acceptable when ACM is in good condition and the barrier is designed to protect against mechanical damage.
7.0 Work Involving Asbestos

It is important that prior to any scheduled or routine maintenance work, additions, alterations, refurbishment or demolition of buildings or structures that determination of the potential of asbestos being present in the building/structure/equipment is carried out.

For routine maintenance/repair work, the asbestos management survey for that particular building can be reviewed to check if asbestos has been identified in intended work area.

For alterations, additions, refurbishment or demolition work, buildings constructed prior to January 2000, or if there is suspicion that ACM may be present in a building/structure, a ‘refurbishment/demolition survey’ will need to be undertaken by a competent person. Refurbishment/demolition surveys are an intrusive survey (i.e. inspection of areas that are usually inaccessible for management surveys such was wall cavities, floor spaces, etc.) to determine the presence of ACM within the building/structure that may require special handling and disposal during the intended refurbishment/demolition works.

In order to manage the potential for exposure to asbestos, any work involving asbestos shall be directed through the CIAL Property Team who will determine whether asbestos has been identified in the building/structure and if so what level of controls are needed to carry out the work.

To assist with defining this process the flow chart below has been prepared and is further discussed in the following sections.
Work Process Flow Chart
If it has been determined that asbestos is to be disturbed or removed as part of a work programme/schedule, the work will be categorised as either ‘asbestos related work’ or ‘asbestos removal work’. This will enable the appropriate required level of competence of the contractor to be determined and whether the work needs to be carried out by a licenced removalist.

The Asbestos Regulations regulate the type of work people can do with asbestos, ACM and asbestos-contaminated dust or debris (ACD). The following is an overview of the permitted work involving asbestos and the definition of the type of asbestos work and the competency/licensing requirements. Any work involving asbestos outside of these definitions is prohibited by the Asbestos Regulations.

![Diagram of work involving asbestos]


These definitions are further detailed in the following sections.

7.1 ‘Asbestos Related Work’ Activity

This definition covers a number of ‘minor works’ involving minor disturbance of asbestos, including tasks such as cutting a small hole or hand-drilling a few holes in a cement sheet (i.e. purpose to maintain, install, reconfigure or repair a service). This could potentially cover a number of activities associated with general maintenance and repair works on CIAL-owned buildings, however, if any removal of ACM is required, then the works must be carried out as ‘asbestos removal work’ and Section 7.2 will apply.
Contractors involved in ‘asbestos related work’ do not need to be a licenced asbestos removalist, however, they must show a level of competency in the general handling, management and disposal of asbestos including knowledge of the hazards associated with exposure to asbestos.

7.2 ‘Asbestos Removal Work’ Activity

Unlicensed Asbestos Removal

If any work is to involve the removal of less than 10 m² of ACM (non-friable asbestos) then in accordance with the Asbestos Regulations the removal works shall be considered to be non-licenced removal works and shall be undertaken by a competent person.

The competent person shall be responsible for ensuring that the ACM is removed and disposed of in accordance with the Asbestos Regulations and any additional guidance or codes of practice issued by WorkSafe. This includes carrying out the work in accordance with prepared and approved safe work practices.

If there is uncertainty about whether the airborne contamination standard for asbestos might be exceeded during the works, air monitoring will be carried out by an independent licenced asbestos assessor or competent person.

No clearance inspection is required for non-licenced work in accordance with the regulations.

General asbestos management controls are detailed in Section 8.0. These must be followed for all work where exposure and disturbance of ACM is carried out.

Licensed Asbestos Removal

If any work is to involve the removal of more than 10 m² of ACM and/or friable asbestos, then in accordance with the Asbestos Regulations the removal works shall be considered to be licenced removal works and shall be undertaken by, or, under the supervision of a licenced asbestos removalist (Class A or Class B as appropriate).

The licenced removalist will be responsible for preparing an Asbestos Removal Control Plan and notifying WorkSafe at least 5 days prior to commencing the asbestos removal work. The Asbestos Removal Plan will be approved by the CIAL Property Team prior to the work being carried out.

In accordance with the regulations, a clearance inspection will be carried out by:

- An independent licensed asbestos assessor for Class A asbestos removal work; or
- An independent competent person in any other case.

The requirement for air monitoring during any licenced removal work will be determined by the licenced asbestos removalist and detailed in the Asbestos...
Removal Control Plan. Any air monitoring will be carried out in accordance with the Asbestos Regulations by an independent competent person. Air monitoring will be conducted during the removal works to check the effectiveness of control measures implemented by the contractor (e.g. isolating the removal work area with a sealed, airtight enclosure fitted with negative air generating units, etc).

All air monitoring is to be conducted in accordance with the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003 (2005)]*.

General asbestos management controls are detailed in Section 8.0. These must be followed (at a minimum) for all work where exposure and disturbance of ACM is carried out. Additional controls may be applied at the discretion of the removalist.

### 7.3 Protocols for Contractors Working on CIAL Sites

All external contractors engaged by CIAL or tenants/occupiers of CIAL-owned buildings are required to go through the CIAL induction process prior to the commencement of any work on CIAL sites. The induction process outlines specific CIAL health and safety systems including the requirements of this AMP. Determination as to the presence of asbestos in the proposed work area will be carried out as part of this process (if not before as part of the planning phase). If asbestos is identified then the process outlined in Sections 6.0 and 7.0 shall be followed.

Prior to undertaking any work, external contractors shall sign the Work Control Form which forms part of the asbestos management survey for that particular building (example presented in Appendix B) to acknowledge they have read and understood this AMP and will carry out the work in accordance with the Asbestos Regulations and safe work practices.

Contractors involved in ‘asbestos related work’ and/or ‘asbestos removal work’ must provide CIAL with their company’s asbestos licence and/or show a level of competency in the general handling and management of asbestos for the specific work they are undertaking.

### 8.0 General Asbestos Management Controls

The following management controls (as a minimum) shall be followed for any work where ACM is exposed and/or disturbed. The exact management controls will be determined by the contractor/removalist undertaking the work based on the intended work scope and hazards identified, but will need to be approved by CIAL prior to any work commencing.

Minor maintenance or routine works (i.e. ‘asbestos related work’) must follow the Approved Code of Practice Work for the Management and Removal of Asbestos (WorkSafe NZ, 2016a) safe work practices. Where no safe work
practice has been prepared by WorkSafe, additional safe work practices shall be
developed based on the following principles and objectives:

- To undertake minor work in a way that minimises the potential for the
  release of asbestos into the air (i.e. wetting or using surfactants, shadow
  vacuuming or doing the work in a controlled environment);
- To capture any ACD and dispose of appropriately; and
- Where possible, avoid disturbance of actual/potential ACM.

An Asbestos Removal Plan must be prepared for any ‘asbestos removal work’
and will require approval by the CIAL Property Team before work commences.

8.1 Use of Equipment

The following are prohibited for use on actual/potential ACM in accordance with
Asbestos Regulations:

1. A high pressure water spray;
2. Compressed air; or
3. A power tool, broom or any other implement that causes the release of
   airborne asbestos into the atmosphere (except under controlled
   conditions where airborne asbestos is captured or suppressed safely).

8.2 Work Area Isolation

An exclusion zone will need to be setup to isolate the work area to ensure only
permitted personnel with appropriate training and those wearing the
appropriate PPE can enter.

Appropriate signage will also need to be installed and be clearly visible at all
entrances to the work areas.

8.3 Personal Protective Equipment

Protective safety equipment must be available and used by those workers
involved in all asbestos related and removal work to minimise exposure.  
Personal Protection Equipment (PPE) shall include but not be limited to the
following and be based on an assessment of the level of risk of exposure to
asbestos fibres:

- Safety boots (covers as required);
- Tyvek disposable coveralls;
- Protective gloves for any personnel handling ACM;
- Safety glasses;
- Appropriate particulate filter respirators (minimum P2); and
For licenced asbestos removal work, additional PPE may be required to complete the work, at the discretion of the licenced removalist.

Additional PPE may be required for other site hazards in accordance with CIAL procedures.

8.4 Personnel and Access

Personnel undertaking minor work involving ACM should be suitably trained in the identification and management of asbestos.

- All personnel must sign in prior to entry onto the site, with no unregistered personnel allowed onsite;
- The minimum number of personnel necessary to safely undertake the minor work should be within the work area when there is potential for the minor work to disturb ACM; and
- Outside normal working hours, access to the site is to be prevented by temporary fencing or other suitable barriers.

8.5 Decontamination

Decontaminating the work area, workers, PPE and tools used in asbestos related and asbestos removal work is vital to eliminate or minimise exposure to airborne asbestos fibres. Refer to WorkSafe’s *Approved Code of Practice for the Management and Removal of Asbestos* and specific safe work practices for further detail on decontamination.

8.5.1 Decontamination of Work Area

The following decontamination methods shall be used:

- Wet decontamination, or wet wiping, using damp rags to wipe down contaminated areas. Rags should only be used once and then be treated as asbestos waste
- Dry decontamination by carefully rolling or folding up and sealing plastic sheeting and/or vacuuming the asbestos work area with a vacuum cleaner used for asbestos work

Dry decontamination may only be used when the wet method is not suitable or is risky because of other hazards such as electricity or slipping. All waste material shall be treated as potentially containing asbestos and disposed of accordingly (refer Section 8.6).

8.5.2 Decontamination of Equipment

All tools and equipment must be decontaminated using the wet or dry decontamination method before they are removed from the asbestos work area.
The appropriate method will depend on its practicality, the level of contamination and electrical hazards.

Any tools or equipment that cannot be decontaminated must be placed in a sealed and labelled container (as detailed in Section 8.6).

In some circumstances it may be better to dispose of contaminated tools and equipment, depending on the level of contamination and the ease of replacement. If tools and equipment are disposable, so far as is reasonably practicable, they need to be disposed of.

8.5.3 Personal Decontamination and Hygiene

Site personnel involved in the asbestos related and removal work should follow appropriate decontamination and personal hygiene measures as summarised below:

- PPE must be removed prior to leaving the work area and disposed of accordingly as asbestos contaminated waste (refer to Section 8.6);
- Hands and other exposed parts of the body are to be washed prior to entering any eating area and on leaving the site following excavation works. Running water will be available on site for hand washing; and
- For those activities involving licenced asbestos removal works, the removalist will outline the decontamination requirements, including the requirement to set up a dedicated decontamination unit.

8.6 Disposal of ACM and Asbestos Contaminated Waste

Any removed ACM and any asbestos contaminated waste (including used PPE/decontaminating consumables) shall be packaged, transported and disposed of in accordance with the Asbestos Regulations.

Disposal of ACM/asbestos waste shall be to a facility (landfill) licensed to accept ACM under a valid disposal permit. Waste manifest records and landfill dockets should be retained on file to document the ACM/asbestos waste disposal and produced to CIAL upon request.

8.7 Asbestos Warning Signs

All in-situ ACM’s should be labelled where practicable. All friable and high risk asbestos situations, as well as any location containing ACM’s where regular maintenance or repair work is likely to be carried out, must be labelled.

Any recommendation of asbestos warning signs will be made in the asbestos management survey. The warning signs must be clearly visible. These will be renewed (as required) during the annual inspection by CIAL to update the management survey.
9.0 Unexpected Discovery of Asbestos and Emergencies

If previously unidentified or suspected ACM is encountered by contractors/maintenance staff during any works or where damage has occurred to confirmed or suspected asbestos material, then the following shall be carried out:

- Works in that area should cease immediately and the area isolated to prevent exposure to site workers;
- The CIAL Property Team shall be contacted immediately to confirm what the control procedures appropriate for the situation are. CIAL may consult an asbestos assessor or licenced removalist to provide additional information to assist with managing the situation;
- If a potential exposure risk exists the area shall be covered, sealed or dust suppression measures implemented until removal and/or remedial works can proceed. This should be carried out in consultation with CIAL; and
- CIAL, in consultation with an asbestos assessor and/or licenced removalist, may advise a requirement for confirmation testing and to determine the appropriate course of action to allow the work to proceed or controls implemented for the long term to management of asbestos at that site.

10.0 Documentation, Monitoring and Record Keeping

10.1 Documentation

The following documentation shall be prepared, or approved by CIAL:

- An asbestos management survey will be prepared (or an existing survey annually updated) to record the presence and location of asbestos within each CIAL-owned building or structure constructed prior to January 2000.
- Prior to the refurbishment or demolition of a building or structure, a refurbishment/demolition survey will be prepared for buildings constructed prior to January 2000, or if there is suspicion that ACM may be present;
- This AMP will be made readily available to the tenant/occupier of a CIAL-owned building who shall make it available to all staff, contractors and maintenance workers involved in any physical/intrusive work on that building. The AMP should be reviewed and updated as and when required to ensure the AMP is current and valid (at least 5 yearly);
- Where licenced ‘asbestos removal work’ is to be undertaken, an Asbestos Removal Control Plan will be prepared by the licenced asbestos removalist. This must be approved by the CIAL Property Team prior to the work being carried out;
Where non-licenced asbestos removal work (less than 10 m² of non-friable asbestos) is to be undertaken, details of the removal process and competency of the contractor must be provided to the CIAL Property Team for approval prior to any work being carried. The level of detail will be appropriate to the scale and complexity of removal work; and

Where ‘asbestos related work’ is to be undertaken (i.e. minor maintenance works that may disturb asbestos), work must follow a pre-approved safe work practice for that activity (either prepared by Worksafe or developed for that particular activity).

10.2 Monitoring

Monitoring of work involving asbestos will depend on the nature of the activity being undertaken and the qualifications and experience of those undertaking the work. At a minimum, the CIAL Property Team must review the relevant documentation prior to the contractor commencing the works (refer to Section 7.0). For Class A asbestos removal, a licenced asbestos assessor or competent person should be engaged to observe the work, undertake air monitoring and clearance inspections, and issue clearance certificates as required.

For minor low risk works asbestos monitoring is expected to be an exception.

10.3 Record Keeping

CIAL will maintain records of known activities relating to asbestos works which have been undertaken on CIAL sites. The records will include:

- Copies of all asbestos ‘management surveys’ for each CIAL building/site, including updates and amendments to ensure that the surveys remain current and can be relied on for future works;
- Copies of all asbestos ‘refurbishment/demolition surveys’ prepared for specific works on buildings or structures;
- Copies of all asbestos Removal Control Plans and ‘close out’ reports from the removal contractor;
- Air monitoring results; and
- Asbestos clearance certificates indicating areas are safe to re-occupy after the asbestos removal works.
Appendix A: Qualitative Risk Assessment
## Asbestos Risk Ranking Matrix

<table>
<thead>
<tr>
<th>Friability</th>
<th>Friable Asbestos Materials</th>
<th>Bonded Asbestos Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Condition</td>
<td>Unsatisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Disturbance Potential/exposure</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>Med</td>
<td>Med</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

### Condition (Satisfactory/unsatisfactory)

The condition of the asbestos containing materials can have a significant effect on the health risks. The condition of the asbestos containing materials has been inspected for:

- Evidence of physical/water damage;
- Exposed surface areas;
- Debris and loose materials; and
- The extent to which friable materials are bound together.

### Friability

Friability is a measure of a material's ability to be easily crushed or pulverised. Examples are nominated below:

<table>
<thead>
<tr>
<th>Friable</th>
<th>Sealed or bonded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprayed/trowelled materials</td>
<td>Cement sheet products</td>
</tr>
<tr>
<td>Millboard</td>
<td>Vinyl tiles and sheeting materials</td>
</tr>
<tr>
<td>Pipe lagging</td>
<td>Bituminous membranes</td>
</tr>
<tr>
<td>Woven materials</td>
<td>Mastics</td>
</tr>
<tr>
<td></td>
<td>Electrical backing boards</td>
</tr>
</tbody>
</table>

### Disturbance Potential/Exposure

A wide range of factors impact on the potential for the asbestos materials to be disturbed including:

- Accessibility;
- Occupancy of an area or the likelihood/frequency of maintenance;
- Likelihood of general disturbance of asbestos materials; and
- Environmental conditions.

<table>
<thead>
<tr>
<th>High</th>
<th>Medium</th>
<th>Low</th>
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<tbody>
<tr>
<td>Easily accessible</td>
<td>Areas with controlled access</td>
<td>Inaccessible areas</td>
</tr>
<tr>
<td>Inside penetration risers</td>
<td>Areas inaccessible due to height restriction, locked doors or other access restrictions</td>
<td>Building voids</td>
</tr>
<tr>
<td>Attached to vibrating machinery or plant</td>
<td>Subject to impact damage</td>
<td>Areas behind wall /floor coverings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above set ceilings</td>
</tr>
</tbody>
</table>
Appendix B: Control Work Form
The persons listed below have seen the Asbestos Management Survey for the building and shall conform to the requirements of the CIAL Asbestos Management Plan

### Contractor Details and Nature of Site Works:

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Company</th>
<th>Nature of Work</th>
<th>Signature</th>
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<tr>
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