

HSE

ASBESTOS MANAGEMENT PLAN

HIBISCUS SHOPPINGTOWN

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18th February 2015

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Laura Milne
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Dear Laura,

Health Safety Environment Australia would like to thank you for the opportunity to provide consultancy services to Hibiscus Shoppingtown Pty Ltd, and are pleased to present your Asbestos Management Plan.

Should you have any queries regarding this work, please contact the undersigned on (08) 89843222 on receipt of this letter.

Yours sincerely



Darren Kenny
Senior Asbestos Consultant

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EXECUTIVE SUMMARY

Health Safety Environment Australia was requested to prepare and provide an Asbestos Management Plan (AMP) for Hibiscus Shoppingtown Pty Ltd. The Asbestos Management Plan is a document providing information, advice and management strategies in order to effectively manage foreseeable asbestos issues that may arise from asbestos containing materials on site.

The Asbestos Management Plan details the roles and responsibilities of management, staff, and contracting personnel working for Hibiscus Shoppingtown Pty Ltd, and the requisite of persons conducting a business or undertaking and their officer(s).

Under the Northern Territory WHS Regulations 2012 a person conducting a business or undertaking (PCBU) must ensure the health and safety of workers, contractors and visitors by, so far as reasonably practicable, eliminating or minimizing risks at the workplace.

In this context the PCBU and their officer(s) are responsible for the overall management and control of the asbestos management plan. Historically, this role was the employer and responsible officer but the new WHS regulation has broadened this responsibility using the PCBU definition to encompass employers, sole traders, bodies' corporate, unincorporated bodies, associations, partnerships and volunteer organizations with any employed workers.

An officer of a PCBU is a person who makes decisions, or participates in making decisions that affect the whole or substantial part of the business and has the capacity to significantly affect the financial standing of the business or undertaking. If a person is responsible for only implementing decisions, they are not considered to be an officer.

In effect, an officer or officers of the PCBU must exercise due diligence to ensure the PCBU complies with the duties under the WHS legislation.

The officer(s) manages, facilitates, and implements the Asbestos Management Plan. The Officer must be appropriately trained and should consider attending some form of approved asbestos awareness course, in order to understand and improve their knowledge on the risks and subsequent management of asbestos in the workplace.

An Officer or Officers should be appointed by CLIENT with the specific role to implement, manage, control and review the Asbestos Management Plan.

Furthermore, it is recommended than an officer appoints trained and designated persons to assist in their capacity.

The Asbestos Management Plan (AMP) itself provides general information and advice in administrative controls, project management and supervision, warning signs and labeling, work procedures and controls, and information on the relevant codes and practices for the management, control and removal of asbestos in the workplace.

An Asbestos Register for the Hibiscus Shoppingtown Pty Ltd site was prepared by Health Safety Environment Australia in February 2015. It was undertaken to identify, prioritize and advise of the appropriate course of actions for installed Asbestos Containing Materials (ACMs) of which some items present an elevated risk.

The Executive Summary for the Asbestos Registers and accompanying Hazard Management Table summarizes those items that require more immediate actions to reduce the risk of exposure to airborne asbestos fibres.

Those asbestos containing items requiring some form of removal or remediation have been assigned a priority status based on assessment of risk on site. In particular, an item with a priority status of "P1" or "P2" is defined as high priority with short term action required.

Some "P3" items have also have been identified for make safes, repairs, qualifications upon further access or simply noted as a slightly higher risk than the myriad of Priority 4 (P4) items.

"P4" asbestos containing items can simply be managed in place and present a low risk in their current condition.

All asbestos containing items within this Hazard Management Table are required to be addressed by:

- Delegating a person responsible for each line item,
- Provision of adequate funds and budgets for remediation/removal by the officer,
- Scheduled remediation or removal dates,
- Sign off for completed work,
- Interim short term controls in the event that removal/remediation cannot be resolved immediately (for example, due to financial constraints, consideration of other hazards during remediation/removal etc.).

For the remainder of ACMs identified at Hibiscus Shoppingtown Pty Ltd, advice is provided for the planning of minor maintenance and/or repair work to ensure the material remains serviceable, together with advisory inspection periods for these items, to minimize risk.

The asbestos management plan shall be reviewed at least annually to ensure the short term objectives of removals and clean up are achieved (i.e. to maintain recognition of risk and proper management thereof).

The visual inspection of installed asbestos containing materials (ACM) itself shall consider the physical material condition of the product, accessibility, likelihood of fibre liberation, and a review of recommendations required to maintain a safe working environment.

The PCBU and Officer(s) are therefore responsible for a timetable of action for managing risks of exposure based on reliable and current information collected in the field.

1.0 INTRODUCTION

Under the Northern Territory WHS Regulations 2012, a person conducting a business or undertaking (PCBU) must ensure the health and safety of workers, contractors and visitors by, so far as reasonably practicable, eliminating or minimizing risks at the workplace

Hibiscus Shoppingtown Pty Ltd, as a PCBU, therefore has a legal obligation to manage asbestos in the workplace.

Hibiscus Shoppingtown Pty Ltd has recognized that asbestos related issues must be adequately addressed, and as such, has undertaken actions to enable compliance under the Northern Territory Work Health and Safety Act, and Regulations, 2012.

To ensure compliance, Health Safety Environment Australia has prepared this Asbestos Management Plan (AMP) which relates specifically to the presence of asbestos at the Hibiscus Shoppingtown Pty Ltd owned or leased properties, in order to effectively manage all foreseeable asbestos issues that may arise, and to ensure that an integrated approach to controlling the risks associated with asbestos are implemented.

The AMP is a working document designed to effectively manage and minimize asbestos-related health risks to personnel on site.

The AMP is to be read in conjunction with the latest asbestos register inspection report, the accompanying Asbestos Register Executive Summary and Hazard Management Table.

In buildings where asbestos has been identified or may occur, the AMP will be implemented, which requires:

- At least annual inspections to determine the condition of the asbestos,
- Procedures and protocols for the management and control of potential asbestos fibre release, and
- Mechanisms to communicate the location and condition of asbestos.
- An annual review of the plan to ensure effectiveness.

It is also expected that prompt and appropriate controls are implemented where asbestos-containing materials (ACMs) are disturbed, acted upon, or located in areas not previously accessible during the conduct of the original asbestos survey.

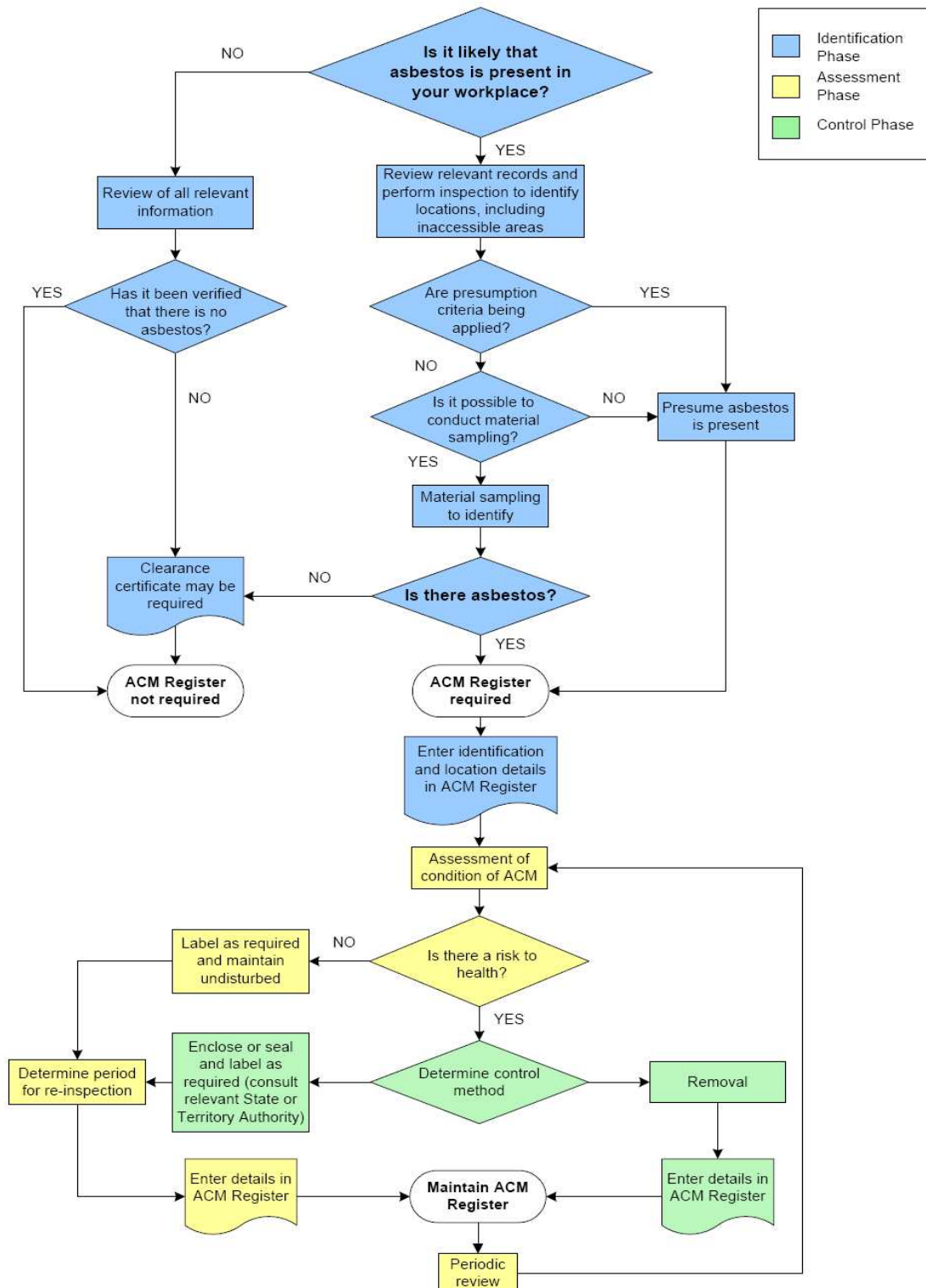
This document outlines the procedures and controls to be adopted within buildings where ACMs have been identified, and include:

- Administrative controls,
- Co-ordination and awareness strategies,
- Project management and supervision,
- Warning signs and labeling,
- Work procedure controls,
- Airborne asbestos fibre monitoring,
- Health surveillance requirements, and
- Disposal of asbestos wastes issues.

These general principles of an Asbestos Management Plan (AMP), derived from the Worksafe Australia Code of Practice for “How to Manage and Control Asbestos in the Workplace” are presented below in the following flow chart (Figure 1).

The objective of these measures is to assist persons with control of the premises to comply with the asbestos prohibition, and prevent workplace exposure to airborne asbestos fibres while ACMs remain in the workplace, and thereby reduce the incidence of asbestos-related diseases such as mesothelioma, asbestosis and lung cancer.

Figure 1. General principles of an asbestos management plan



Source: NOHSC 2018(2005)

2.0 POLICY

Hibiscus Shoppingtown Pty Ltd is committed to ensuring that no person or the environment will be subject to the adverse effects of asbestos materials located in properties occupied or under their control.

This will be achieved by following the Northern Territory Work Health and Safety Regulations 2012 and the NT Worksafe Code of Practice for "How to Manage and Control Asbestos in the Workplace" December 2011, together with the implementation of the Asbestos Management Plan (AMP).

It is the ultimate goal of Hibiscus Shoppingtown Pty Ltd is to remove all asbestos containing materials. However, the identified item would only require to be removed during upgrades and / or refurbishment of buildings and structures, until such time as their condition due to age or deterioration warrants removal and replacement with non-asbestos containing products. This is a long-term plan.

In the interim, Hibiscus Shoppingtown Pty Ltd intends to manage asbestos hazards based on prioritization and assessment of risk. These measures, along with the management of the Hibiscus Shoppingtown Pty Ltd Asbestos Register, may include the following:

- A risk assessment being conducted for all identified or presumed ACM
- Control measures established to prevent exposure to airborne asbestos fibres which should take into account the results of risk assessments conducted for the identified or presumed presence of ACMs.
- The identification of ACMs and associated risk assessments should only be undertaken by competent persons (e.g. a qualified asbestos assessor).
- All workers, contractors, users and visitors on the premises where ACMs are present or presumed to be present, and all other persons who may be exposed to ACMs as a result of being on the premises, must be provided with full information on the occupational health and safety consequences of exposure to asbestos and appropriate control measures. The provision of this information should be recorded.

3.0 REGULATORY REQUIREMENTS

The former National Health and Safety Commission (NOHSC) declared a prohibition on all uses of asbestos. Under the National Model Regulations for the Control of Workplace Hazardous Substances, the ban prohibited the use (i.e. manufacture, supply, storage, sale, use, re-use, installation and replacement) of asbestos.

The current Work Health and Safety Regulation requires that a Person Conducting a Business or Undertaking (PCBU), shall ensure that appropriate measures are undertaken to identify all hazards at work which may affect the health and safety of a worker and any other person who could be affected by the work. The Regulations also requires that the PCBU and their Officer(s) shall have regard to the relevant Act, Regulations and Codes of Practice.

Any asbestos-related issues associated with Hibiscus Shoppingtown Pty Ltd owned or leased property, including the identification, removal, encapsulation, transport, disposal or otherwise potential disturbance of asbestos materials, shall be performed in accordance with all relevant State and Commonwealth Acts, Regulations, Advisory Standards, Codes of Practice and industry standards, including, but not limited to, the following:

- Work Health and Safety (National Uniform Legislation) Act 2011
- Work Health and Safety (National Uniform Legislation) Regulations 2012
- Code of Practice: HOW TO SAFELY REMOVE ASBESTOS
- Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition NOHSC:3003 (2005)

Any asbestos removal work is required by legislation to be carried out by a suitably qualified or licensed contractor.

Any maintenance work done on, or in the vicinity of, materials which contain asbestos is required to be carried out in accordance with the WHS Regulations and Codes of Practice. An exception exists where a license is not required for removal work for less than 10m² for non-friable asbestos containing material. However, performance of any asbestos related work shall not be carried out without prior authority of the Officer. Suitable risk assessments and training evidence must be provided for asbestos related work.

It is also necessary to ensure that all asbestos products are identified and removed prior to any demolition, removal, maintenance, operational or construction work which may damage or disturb asbestos product(s).

4.0 ADMINISTRATIVE CONTROLS

4.1. OFFICER

Hibiscus Shoppingtown Pty Ltd shall appoint an Officer or Officers who have the authority and responsibility to implement and maintain the Asbestos Management Plan.

The officer(s) shall ensure accurate, timely and appropriate controls are actioned, shall co-ordinate and provide advice and assistance on asbestos related issues at CLIENT. By definition, an officer is a person who makes decisions, or participates in making decisions that affect the whole or substantial part, of a business or undertaking and has the capacity to significantly affect the financial standing of the business or undertaking. If a person is responsible for only implementing those decisions, they are not considered an Officer.

The Officer and any other people involved in the asbestos management of the building(s) shall be adequately informed and trained in the purpose and use of the Asbestos Management Plan.

The Officer is also required to ensure that education and training on the presence of asbestos at Hibiscus Shoppingtown will be included into the worker's induction and reinforced on a regular basis, and that they are aware of the Asbestos Management Plan and the Asbestos Register.

4.2. ROLES AND RESPONSIBILITIES

Role of Officer

The appointed Officer(s) will have a coordination role to ensure the effective implementation and functioning of the Asbestos Management Plan, and is responsible for the following:

- Provide an advisory service and develop awareness on asbestos matters at Hibiscus Shoppingtown.
- Undertake and/or arrange for the annual physical inspection and review of the condition of identified ACMs at appropriate time frames;
- Maintain the Hibiscus Shoppingtown Pty Ltd Asbestos Registers;
- Obtain up to date asbestos registers from properties where Hibiscus Shoppingtown Pty Ltd lease or operate on shared sites.
- Record incidents or hazards that may arise at Hibiscus Shoppingtown in regards to ACMs; and
- Annually review the management plan and documentation.

For maintenance work by Hibiscus Shoppingtown Pty Ltd staff, the Officer shall ensure that personnel are advised of their responsibility in regards to the management and appropriate procedures for undertaking work on or near ACMs in the workplace.

In addition to the inspection and review requirements above, the regulations also stipulate that: a person with management and control of the work place must ensure the asbestos management plan is reviewed when:

- When asbestos is identified.
- There is a review of the asbestos register or a control measure
- Asbestos is removed, disturbed, sealed or encapsulated at the workplace
- The plan is no longer adequate
- A health and safety representative requests a review

This includes ensuring the asbestos register is maintained so that:

- it is up to date including removal and maintenance/disturbance records
- visual inspections reflect the correct condition of the identified material at that time
- recommendations are relevant to the hazard
- further asbestos is identified by assessing newly acquired plant/equipment, property or assets
- further asbestos is identified through continual sampling programs and accessibility

This information is used to ensure that priorities are established and hazard management is in place according to those current priorities identified.

An officer(s) shall also ensure that the asbestos management plan and asbestos register are accessible and available on each site.

An asbestos control plan must also be created for each specific asbestos removal project. This is formulated by the licensed asbestos removalist as prescribed in the Code of Practice "How to Safely Remove Asbestos," December 2011; however this must be done in consultation with the person commissioning the removal work (i.e. the Officer).

In line with the policy to continually remove, make safe and remediate asbestos containing items, the officer or officers are responsible for addressing items requiring action as identified from the inspection process. This includes utilising the hazard management table of identified priorities to:

- Delegate a person responsible for each line item for action,
- Provide adequate funds and budgets for remediation/removal,
- Schedule remediation or removal dates,
- Sign off for completed work,
- Provide interim short term controls in the event that removal/remediation cannot be resolved immediately (for example, due to financial constraint, consideration of other hazards during remediation/removal etc.).

An Officer is also responsible for health monitoring when a worker is at risk of exposure. The need for health monitoring shall be determined on the basis of:

- The potential for exposure
- Frequency of exposure
- The duration of the work to be undertaken

All records relating to asbestos work shall be maintained for at least 40 years.

Responsibilities of Those Planning Refurbishment and / or Maintenance Works

Before any refurbishment, alterations, modifications or maintenance works are carried out those responsible for planning these works must notify the Officer who will review the Hibiscus Shoppingtown Pty Ltd Asbestos Register for the presence of ACMs in the area(s) of concern. This applies to any work involving the potential disturbance of walls, floors, ceilings, etc., and includes scraping, screwing, drilling, cutting or painting of surfaces or materials. It should be noted that the existing Asbestos Register was prepared using a non-destructive visual inspection only and doesn't always identify all asbestos and non-asbestos materials within the room or area.

A specific pre-demolition or intrusive asbestos survey is required prior to any demolition or for any building or earthworks of a substantial nature (Reg 451). This is required to assist identification of previously unidentified or hidden asbestos containing materials, for example (but not limited to) hidden locations in ceilings, walls and floor areas.

Workers, contractors or other personnel involved in design and refurbishments must also consult with the Officer during the planning stage, so that should asbestos be present, then alternative methods can be used wherever possible to avoid disturbing the asbestos material.

In specifying works which involves the potential to disturb asbestos-containing products during refurbishments or alterations, reference should be made to the presence of ACMs in the area, and that the Asbestos Register and any Intrusive Survey information should be made available to the tender applicants for review.

Role of Other Staff

Workers have a 'Duty of Care' not to place themselves or their co-workers at risk. Therefore, all personnel are responsible to report any damaged asbestos materials and undertake any relevant duties in accordance with procedures, contract and legislative requirements pertaining to the management of ACMs. Further responsibilities may also include:

- Where appropriate, provide advice to the Officer(s) when Contractors and/or trades people are present at the site;
- Ensure reasonable precautions are taken to keep people clear of areas where ACMs are being repaired, removed or upgraded;
- Report all incidents or potential hazards for risk assessment and/or action to the Officer(s) as soon as practicable;
- Report to the Officer(s) where Contractors or trades people are seen not to follow agreed work practices;
- Ensure they are informed of the responsibilities of the Officer(s) and measures in place to control risks associated with ACMs; and
- Comply with all policies, procedures and instructions as stipulated in the Asbestos Management Plan.

Responsibility of Contractors

For construction work, contract documents shall specify that the contractor is to advise his/her employees and sub-contractors of their responsibilities in management and appropriate procedures for undertaking work on or near ACMs in the workplace. The transfer of information to personnel (such as operational contracts) will be formalized by the issue of an Access/Work Permit (or similar, as required by Hibiscus Shoppingtown Pty Ltd). Further responsibilities may also include:

- Ensure that their employees and sub-contractors are aware of their responsibilities;
- Report to the Officer(s) before commencing work on site on ACMs;
- Responsible for complying with the procedures stated in this document and any other procedures stipulated or specified in contract documents; and
- Report incidents or potential hazards to the Officer(s) before further work is carried out.

5.0 RESTRICTED AREAS

An area may be designated as a “restricted area” due to;

- The potential to dislodge intact asbestos material during access or entry,
- The area contains asbestos materials that presents a risk of inhalation from airborne fibres, either due to its condition, location or that it may be acted upon from planned or unplanned activities or;
- Works may be occurring in the area that could disturb asbestos materials.

Access to a restricted area should be prohibited unless an Access/Work permit (or similar) has been issued. The Officer is responsible for issuing Access/Work permits to personnel who are required to work within a restricted area.

Only the Officer or an appointed deputy may issue Access/Work Permits. All maintenance and construction personnel are to report to the Officer or an appointed deputy prior to entering the restricted area.

Before issuing an Access/Work Permit, each person will be required to understand the correct work procedures in the Asbestos Management Plan. Personnel must also be aware of the relevant statutory authority requirements and Codes of Practice relating to asbestos management and removal procedures.

Workers engaged in the removal of asbestos will not be issued with an access/work permit unless they are members of a company that hold a current SA asbestos removal license relevant to the work to be undertaken.

When a project involves a team of more than one worker, the leader of the team will be issued with the Access / Work Permit. This person will be responsible to ensure that team members are individually aware of their responsibilities. The leader will also be responsible to ensure that each worker’s signature appears on the appropriate section of the permit.

The issued permit must be displayed in a prominent position at the entrance to the work area.

When work is completed, or at expiry of the permit, the permit shall be returned to the Officer who will cancel it after ensuring that the work area is made safe for re-occupying through inspection and airborne fibre monitoring. In the event that asbestos removal works has not been completed, then the area must be suitably delineated and the area barricaded to prevent unauthorized entry into the area.

The Officer shall be advised immediately of any incidents or non-compliances with the Asbestos Management Plan or approved Codes of Practice.

6.0 ASBESTOS REMOVAL COMMUNICATION

The removal of asbestos will require certain people to be informed of the removal and process and is an integral component of any removal project for asbestos. Asbestos removals may be classified into three types, for which information of varying degrees and suitability is to be given to people involved in the building affected by the removal. For large asbestos removal projects, certain requirements are to be met to ensure that all necessary people have been informed of the nature of the removal of asbestos, and to ensure that the people involved and impacted upon have a better understanding of the process and risk to health. The three types of removal, and their appropriate communication channels, are described below as examples of communication strategies.

SMALL ASBESTOS REMOVAL PROJECT

This is a small project that may require a few items to be removed that are small in size, low in risk and in a location that has minimal or no disruption to occupants of the building. In this instance:

- The Officer is to inform the person in charge of the area of the removal of asbestos.
- Information may be given via email and should be provided at the earliest known time and at least one week in advance of the actual removal date.
- Information provided is to include size, location, risk, removal dates, removal method and any other special precautions associated with the removal process.
- The Officer must keep a record of the email or communications given.

LARGE ASBESTOS REMOVAL PROJECT

This is a large project that requires more than a few items or large areas of asbestos products to be removed, may be of a risk higher than low but may not always be the case, is in a location that will cause disruption to the building occupants during the removal process and that has large visible barricading and signage. In this instance:

- The Officer to set up a meeting with the person and building occupants in charge of the area. The meeting is to include details of the job including, areas/locations affected, times and dates of removal, safety precautions, risk of materials (being removed), areas that will be closed during the removal. The meeting should be held at least 10 days in advance of the actual asbestos removal.
- The Officer must arrange to have the appropriate staff health and safety representative, removal contractor, present for the meeting, and also possibly the consulting Occupational Hygienist (if deemed necessary).
- The Officer must keep a record of the meeting.

DEMOLITION OR BUILDING PROJECT DISCOVERING ASBESTOS

This is a project that did not originally involve the removal of asbestos but during the course of the demolition may discover asbestos. In this instance:

- An intrusive survey is to be carried out prior to the demolition proper in an attempt to identify some typical hidden locations of asbestos containing material with consideration to pre-existing items identified in the register.
- Normal demolition to take place until a suspect material has been found.
- If an unknown item is uncovered during the course of works the Officer and Contractor to liaise with the appropriate staff health and safety representative and follow the process as per the Asbestos Emergency Response Flow Chart located in the Asbestos Management Plan.
- The Officer is to notify the person in charge of the area of asbestos identification and removal process to take place including, its location, dates and times of removal, risk, removal dates, removal method and any other special precautions associated with the removal process and areas closed.
- The Officer must keep a record of the meeting and events for incident reporting purposes (if any).

7.0 SUPERVISION OF PROJECTS

Prior to the removal of asbestos, an appropriately qualified asbestos consultant or occupational hygienist, with experience in asbestos abatement works, shall be engaged at the cost of the project to work independently of the asbestos removal contractor. The consultant or hygienist will be responsible for ensuring the asbestos removal contractor achieves a satisfactory level of workmanship, and complies fully with statutory requirements and the requirements of the technical specification.

In effect the asbestos consultant or occupational hygienist will take on the defined regulation role of an assessor.

Commensurate with the above requirements, the specific duties of the consultant or occupational hygienist may include:

- Inspection of the integrity of the containment prior to commencement of asbestos removal works;
- Inspection of the asbestos removalists equipment, including decontamination and negative air units, water filtration systems, vacuum equipment, personal protective equipment (PPE) etc.;
- Assessment of the asbestos removalists work methods, use and maintenance of PPE and decontamination procedures;
- Visual clearance inspections of the work area after the removal of asbestos to ensure the asbestos has been removed to a satisfactory standard; and
- Asbestos fibre air monitoring in accordance with the Membrane Filter Method, during asbestos removal works and as clearance air monitoring after the removal of asbestos, but before dismantling of the containment.

8.0 WARNING SIGNS AND LABELS

The purpose of installing warning signs and labels is to advise all people in the building that asbestos materials have been identified, their presence in the structure or building, and that an Asbestos Materials Management Plan exists. They also assist in advising all construction and maintenance workers to report to the Officer before commencing maintenance, repairs or alteration work.

Any areas that have been identified in the Asbestos Register which contain ACM, including plant, equipment and components, should be signposted with warning signs to ensure that the asbestos is not unknowingly disturbed without the correct precautions being undertaken. All identified or presumed ACM or their enclosures, if the ACM are inaccessible, should also be clearly labeled.

The location of these warning signs and labels should be consistent with the location of the ACM as outlined by information in the Asbestos Register. Labels used for this purpose must identify the material as containing asbestos, and should comply with Australian Standard 1319 Safety Signs for the Occupational Environment.

Examples of warning signs and labels are presented below in Figure 2. Note that the examples of warning signs and labels presented in Figure 2 are only an indication of the words that may be used to alert persons to the presence of ACM and asbestos hazards. The wording is not mandatory. Other warning signs and labels may be used, provided they meet the requirements of AS 1319.

Figure 2 – Examples of warning signs and labels



9.0 WORK PROCEDURE CONTROLS

GENERAL CONTROL STRATEGIES

Asbestos presents a risk if it is disturbed, becomes airborne and is inhaled, with the fibres lodging in the lungs. The risk is proportional to the amount of fibre deposited in the lungs (dose / response relationship). Without inhalation of (respirable) fibres, there is no risk.

Minimize Disturbance

The primary control strategy is to minimize the potential for disturbance of the ACM. This is achieved by prohibiting tasks such as cutting, grinding or drilling asbestos materials (where practicable), walking on asbestos cement roofs, or allowing damaged materials such as debris to be crushed or further damaged. This is achieved by using the Asbestos Register as a guide to identify the presence of ACMs in the work area prior to when any maintenance work is to be carried out, and identifying the appropriate safe work procedure to minimize disturbance of the identified materials.

Restrict Airborne Release of Fibres

This is achieved by ensuring that ACMs remain in good condition with minimal exposed friable (or partially-friable) exposed surfaces. Techniques such as sealing, painting, encapsulating or covering asbestos materials can be used. It is important that damaged material is reported promptly to allow for immediate repairs. Ultimately, removal of the items from the site will reduce the existence of the hazard.

Prevent Inhalation of Fibres

This is achieved by restricting access into specific areas where ACMs may present a risk to personnel, evacuation of the area to protect personnel following an incident involving ACMs, and the use of approved respirators and other protective clothing if access to these areas is required.

The Officer(s) shall ensure that all of the above control strategies are applied during all activities involving asbestos containing materials.

EMERGENCY SITUATIONS

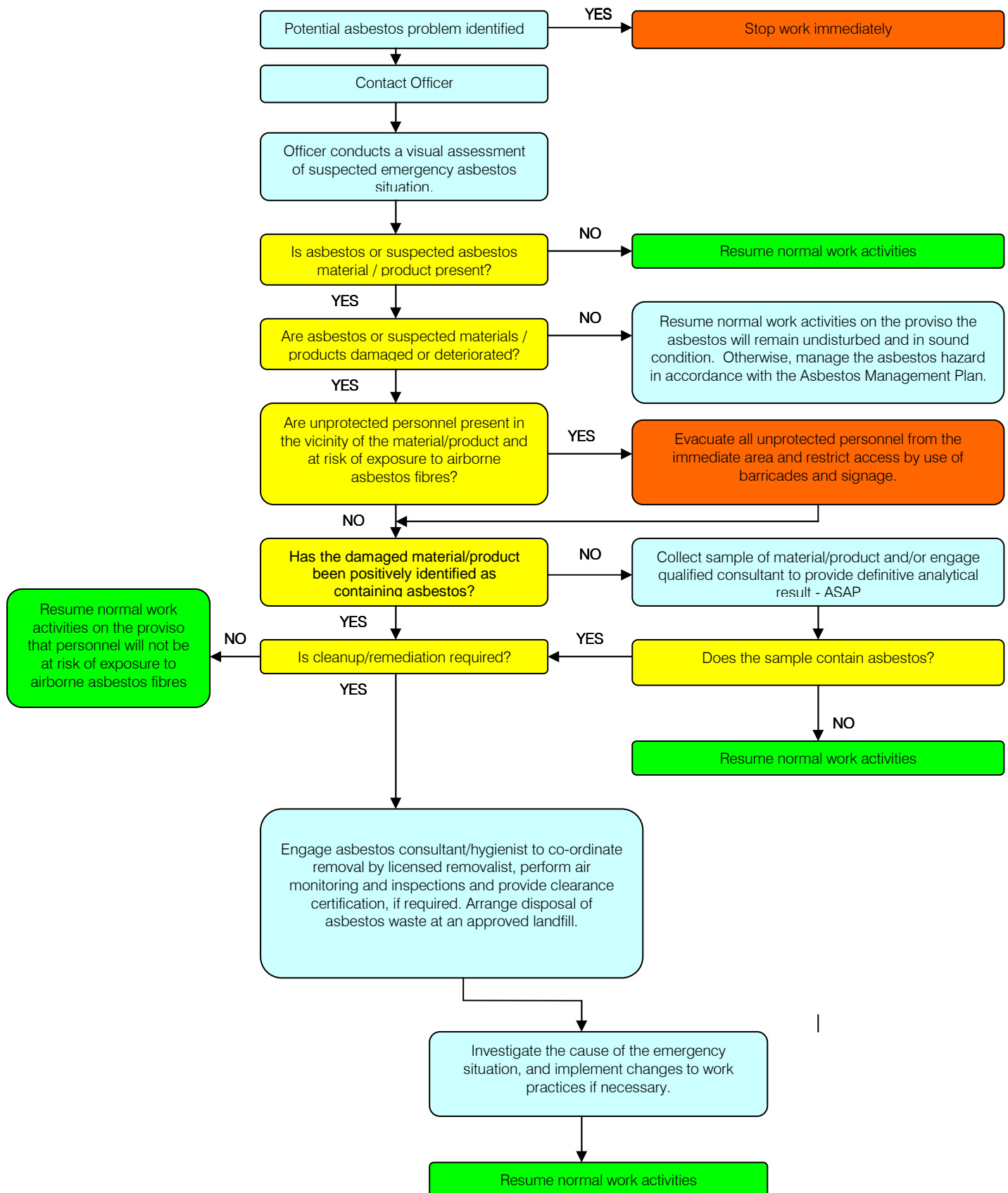
An emergency situation is most likely to entail such a scenario where asbestos materials present on site, have been inadvertently disturbed through actions of Hibiscus Shoppingtown Pty Ltd workers, maintenance personnel, contractors, visitors, acts of vandalism or when damaged by severe weather conditions (e.g. hail damage to a corrugated asbestos cement roof). In these instances, personnel should advise the Officer(s), who then must undertake the following actions:

- Isolate the area and impose access restrictions and permit procedures where required.
- Consult the asbestos register. If the material is not identified in the Asbestos Register, then
- Have material sampled and analyzed to determine if the material is an ACM (if required).
- Determine “clean up” or other remedial action, including undertaking airborne fibre monitoring.
- Conduct remedial action.
- Ensure Clearance Inspection Certificates are provided and fibre monitoring results allow re-occupancy of the area.
- Document the situation and revise the Asbestos Register (if necessary).

Note that in some circumstances, it may be prudent to “assume” that a material is asbestos where an immediate risk to personnel exists. In these instances, clean-up actions using appropriate asbestos procedures should be implemented immediately, rather than delaying actions whilst waiting for analytical results to be received. The results of analysis after the “clean-up” occurs may then be used to update the register and document the findings.

An Emergency Response Procedures flow chart diagram is presented below in Figure 3.

Figure 3: Asbestos Emergency Response Flow Chart



10.0 AIRBORNE ASBESTOS FIBRE MONITORING

Air monitoring shall, as a minimum, be conducted whenever ACMs are being removed, in accordance with the requirements of the Code of Practice "How to Safely Remove Asbestos" December 2011.

Airborne asbestos fibre monitoring is used to assist in the risk assessment process but should not be used as the only criteria. Three levels of air monitoring are used:

- Baseline air monitoring, where monitoring may be undertaken to determine background airborne fibre concentrations prior to removals, or for verification of acceptable air quality.
- Control monitoring, such as during an asbestos removal operation or when an unplanned disturbance of ACMs has occurred.
- Clearance Monitoring, when, following removal of ACMs, the area in which the asbestos removal occurred must have a concentration <0.01 fibres/ml, in order to allow re-occupancy of the area. Note that control and background monitoring may at times be undertaken concurrently.
- Airborne asbestos fibre monitoring shall be conducted by a NATA (or government approved) person or agency in accordance with the NOHSC "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC: 3003 (2005)].

11.0 RECORDS

Records must be kept of any incidents regarding the unauthorized or unplanned disturbance of ACMs, or from works performed on ACMs, which must include;

- Details of the incident and / or the scope of the works performed
- Names of those involved in the incident and / or those performing the work
- Date(s) of the incident and / or work performed (include clean-ups or removals), and
- Include copies of all reports associated with the event, Clearance Inspection Certificates, results of airborne fibre monitoring, Permits and Waste Disposal Receipts.

These records must be retained in the Asbestos Register for a period of at least 40 years, where provisions/proformas have been made for their entry.

12.0 HEALTH SURVEILLANCE

Any exposure or potential exposure to personnel from airborne asbestos fibres must be reported to the Officer and the appropriate health and Safety Coordinator using Hibiscus Shoppingtown Pty Ltd standard accident / incident reporting form. For individuals who may have been potentially exposed, Hibiscus Shoppingtown Pty Ltd will consult, and where indicated, may arrange for an appropriate personal health surveillance, which may include a chest X-ray. Details of any potential exposures will be kept on their personal staff records.

13.0 DISPOSAL OF ASBESTOS WASTE

Asbestos waste comes in a variety of forms ranging from fine dust, produced by machining operations, to large sheets of asbestos stripped from buildings under demolition. Other forms include lagging materials; loose fibre, swarf, small off-cuts and floor sweeping which may accumulate around or under machines and on floors.

All asbestos waste must be disposed of in accordance with the Code of Practice "How to Safely Remove Asbestos" December 2011 and the relevant State Environment Protection Agency (EPA) requirements.

All asbestos waste shall be double bagged prior to its removal from site, using 200 μm (0.2 mm) thick polyethylene bags. Asbestos waste shall be bagged once at the workface and a second time away from the workface, but prior to leaving the removal area enclosure. It is recommended that a maximum bag size of 1200 mm (length) x 900 mm (width) be used. Bags should be filled to no more than 50 per cent capacity, and contents should be wet before sealing. Consistent with good manual handling practice, bags should not exceed 16 kg in weight. Alternatively, other approved containers may be used. In the case of non-friable materials such as asbestos cement, such materials can be placed into a plastic lined industrial waste bin or like container. Each bag or container shall be labeled on its outermost surface, with the following warning statement:

CAUTION – ASBESTOS WASTE
AVOID CREATING DUST
SERIOUS INHALATION HEALTH HAZARD

Transport and final disposal of asbestos waste material shall be carried out in a manner that will prevent the liberation of asbestos dust to the atmosphere. All asbestos waste material shall be buried at an approved landfill site and in a manner approved by the local and state authorities. The Responsible Officer must also ensure that they receive copies of waste disposal receipts, as provided by the approved landfill authorities.

14.0 DISCLAIMER

The procedures and guidelines contained within this Management Plan shall not abrogate a person of their responsibility to work in accordance with Statutory Requirements, Codes of Practice, Guidelines, Material Safety Data Sheets, Work Instructions or reasonable work practices.

The recommendations, and priorities provided in this report are based upon the available information at the time of report compilation. All care and consideration in regards to accuracy has been undertaken in the provision of this document.

Further information on the management or removal of asbestos containing materials can be obtained by contacting Health Safety Environment Australia.

15.0 DEFINITIONS

The following listing provides the definitions of typical terms used within for Asbestos Management.

Accredited Laboratory	Testing laboratory accredited by the National Association of Testing Authorities, Australia (NATA) or that otherwise granted accreditation by the appropriate State or Territory authority.
Air Monitoring /Control Monitoring	Air sampling to estimate the concentration of airborne fibres, undertaken at fixed locations (usually between 1 to 2m above floor level), in accordance with the NOHSC Membrane Filter Method.
Air Monitoring / Personal Monitoring	Air sampling to estimate the concentration of airborne fibres collected within the breathing zone of a person in accordance with the NOHSC Membrane Filter Method.
Airborne Asbestos Fibres	Airborne asbestos fibres generated by mechanical disintegration of asbestos-containing materials and subsequent dispersion of fibres into the air. Airborne asbestos fibres have the potential to contain respirable asbestos fibres.
ALARP	As low as reasonably practicable
Asbestos	Collective term given to a group of naturally occurring fibrous or 'asbestiform' silicate minerals. These include Chrysotile (white asbestos), Amosite (brown asbestos), Crocidolite (blue asbestos), as well as Actinolite, Anthophyllite, and Tremolite.
Limpet Asbestos	Sprayed asbestos insulation
Asbestos-Containing Materials (ACMs)	Items containing asbestos such as insulation materials, asbestos cement products, vinyl tiles and sheeting, mastics and resin of bituminous impregnated products.
Asbestos Removal Area	Area in which the removal of materials containing asbestos is taking place.
Asbestos Removal Site	The region surrounding, and adjacent to, the asbestos removal area.
Bonded asbestos-containing material	Any material that contains asbestos in a solid bonded matrix. It may consist of Portland cement or various resin / binders and cannot be crushed by hand when dry. Asbestos fibres are usually not released when rubbed between the fingers, but the structure of the matrix is destroyed by mechanical abrasion such as cutting or hammering. Asbestos cement products, which have been subjected to weathering, severely damaged by hail, damaged by heat/fire or other mechanical action, or illegal water blasting can then become a friable asbestos product.

Breathing Zone	A hemisphere of 300mm radius extending in front of the face and measured from the midpoint of an imaginary line joining the ears.
Competent Person	A person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill for the safe performance of the specific work.
Exposure Standard	means an exposure standard in the Workplace Exposure Standard for Airborne Contaminants
Friable	Material when dry may be crumbled, pulverized or reduced to powder by hand pressure and liberate airborne fibres.
Friable asbestos-containing material	Means a non-bonded asbestos fabric; or is in the form of powder or may be crumbled, pulverized or reduced to powder by hand pressure when dry. Sprayed limpet, millboard, pipe and boiler lagging are examples of friable asbestos.
Hazard	An intrinsic capacity associated with a material or process capable of causing harm.
Health Surveillance	The monitoring of individuals for the purpose of identifying changes in health status due to occupational exposures to a hazardous substance.
In situ	In its (original) place; and in position
Licensed	License obtained from the relevant State or Territory authority to remove asbestos-containing material.
Membrane Filter Method (MFM)	Technique outlined in the NOHSC <i>"Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres"</i> 2 nd Edition [NOHSC: 3003(2005)].
Officer	An officer of a PCBU is a person who makes decisions, or participates in making decisions that affect the whole or substantial part of the business and has the capacity to significantly affect the financial standing of the business or undertaking. If a person is responsible for only implementing decisions, they are not considered to be an officer.
PCBU	Person Conducting a Business or Undertaking encompassing employers, sole traders, bodies' corporate, unincorporated bodies, associations, partnerships and volunteer organizations with any employed workers.

Practicable	Means 'practicable' as defined in jurisdiction and takes into account the severity of potential injury, the degree of risk, state of knowledge and the availability, suitability and cost of control.
Representative Sample	A sample that represents the material as a whole.
Respirable Asbestos Fibre	A particle of asbestos with a width less than 3 um and greater than 5 um in length, with a length to diameter ratio of greater than 3:1 (as per the Membrane Filter Method definition).
Risk	The likelihood that a hazard will cause harm.
Shadow Vacuuming	Where asbestos-vacuuming equipment (refer AS3544) is directly attached to tools, or hand-held by a second worker, and used as close as possible to the source of the asbestos to prevent fibre release throughout the duration of the task.
Structure	Includes any construction including building, bridge, industrial plant, erection, edifice, wall, chimney, fence, dam, reservoir, wharf, jetty, earth works, reclamation, ship, floating structure or tunnel
Worker	Anyone who carries out work for a PCBU whether an employee, contractor, sub-contractor, employee of labour hire company, an apprentice or trainee, a student gaining work experience, an outworker, or a volunteer.

Source: NOHSC 2018(2005) and Safework SA Fact Sheets (01-2011)

16.0 REFERENCES

The following documents have been used as references within the Asbestos Management Plan:

- Work Health and Safety Act, 2012
- Work Health And Safety Regulations, 2012
- Code of Practice for “How to Safely Remove Asbestos” December 2011.
- Code of Practice for “How to Safely Manage and Control Asbestos in the Workplace” December 2011.
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres” 2nd Edition [NOHSC:3003 (2005)
- National Occupational Health and Safety Commission (NOHSC) Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(1999). Australian Government Publishing Service. Canberra.

APPENDIX A

EXAMPLE OF HAZARD MANAGEMENT TABLE WITH COMMITTED BUDGETS, SCHEDULE AND DELEGATION

APPENDIX B

HEALTH HAZARDS & EXPOSURE STANDARDS

HEALTH HAZARDS

Asbestos fibres are made up of many fine fibrils, so that when it is further processed such as when subject to impact, drilling, boring, cutting, filing, brushing, grinding, sanding, breaking, or blowing with compressed air. These actions readily separate the fibres into increasingly fine, long fibres, and they therefore become more hazardous. The most dangerous fibres are the ones invisible to the naked eye, but which penetrate to the deepest parts of the lungs. State and Territory legislation prohibits most of these actions, and the relevant laws should be checked before performing *any* activity on asbestos-containing materials.

Chrysotile fibres are curly and are less likely to become airborne to the same extent as the straight amphibole fibres such as amosite and crocidolite.

Breathing in the fibres increases the risk of asbestosis, lung cancer and mesothelioma. There is some evidence to suggest that asbestos can cause gastrointestinal and laryngeal cancers, but to a far lesser extent than lung cancer.

Asbestos-related diseases have a delay or lag usually in the order of 20 – 40 Years, between first exposure and the onset of symptoms and detection of the disease. Asbestos disease can appear or progress even after a person is no longer exposed. There are even instances where people have contracted an asbestos-related disease, even though the person has had no known exposures to asbestos.

Asbestosis is the scarring of lung tissue that can result from inhalation over periods of Years of substantial amounts of asbestos. This usually results in breathlessness, which may lead to disability, and in some cases, causes early death. Minor changes in X-ray pictures may exist for many Years without symptoms or progression of the disease.

Lung Cancer risk is related to the amount of fibres inhaled, and is also greatly increased in persons that smoke. Currently, no safe exposure level of asbestos exposure for lung cancer has been identified.

Mesothelioma is a cancer of the outer lung lining (or pleura), or of the abdominal cavity (peritoneum). The risk of mesothelioma is less with chrysotile than with other types of asbestos, and both pleural and peritoneal mesothelioma can result from exposure to amosite and / or crocidolite. Exposure of humans to chrysotile alone has caused few pleural mesotheliomas; but has never produced peritoneal mesothelioma without exposure to either amosite or crocidolite. Mesothelioma rarely occurs in less than 15 Years from first exposure, and most cases occur after 25 Years after first exposure.

EXPOSURE STANDARDS

The Exposure Standards represent airborne concentrations of individual chemical substances which, according to current knowledge, should neither impair the health of nor cause undue discomfort to nearly all workers. The exposure standards do not represent 'no-effect' levels which guarantee protection to every worker. Given the nature of biological variation and the range of individual susceptibility, it is inevitable that a very small proportion of workers who are exposed to concentrations around or below the exposure standard may suffer mild and transitory discomfort. An even smaller number may exhibit symptoms of illness. It follows from the foregoing that the exposure standards are not fine dividing lines between satisfactory and unsatisfactory working conditions, but rather that they are best used to assess the quality of the working environment and indicate where appropriate control measures are required.

The time-weighted average (TWA) exposure standards for airborne contaminants are expressed as the average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.

The amount of asbestos fibre in the air people breathe is the important factor in determining the risk of exposure. The highest risk involves the breathing of air which contains high concentrations of asbestos fibres.

The amount or concentration of fibres in the air can be determined by an occupational hygienist or other competent person, using equipment to capture a sample of air. The number of fibres in a set volume of air can then be counted under a microscope. This method is set out in the NOHSC document 'Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres', 2nd Edition [NOHSC: 3003 (2005)].

Safework Australia has also set out personal exposure standards for the airborne concentrations of asbestos fibres, based upon the above sampling methodology which, for the most part, should not present a risk to health for workers. The exposure standards for asbestos are:

- Chrysotile (white asbestos) 0.1 fibres/ml
- Amosite (brown asbestos) 0.1 fibres/ml
- Crocidolite (blue asbestos) 0.1 fibres/ml.

Accordingly, exposure should be prevented, and the national exposure standard of 0.1 fibres/ml should never be exceeded. The *Code of Practice for "How to Safely Remove Asbestos" December 2011* provides additional information on control levels and methods for minimising the release of airborne asbestos fibres during removals or maintenance work.

APPENDIX C

SPECIAL CONDITIONS

Special Conditions to HSE Australia Standard Terms and Conditions (Asbestos Assessments)

1. General

This report and associated services performed by HSE Australia are in accordance with the scope of services set out in the contract and discussions between HSE Australia and the Client. The scope of work was defined by the time and budgetary constraints imposed by the client. The data, findings, observations, conclusions and recommendations in the report are based solely upon the state of the site at the time of the investigation. The passage of time, manifestation of latent conditions or impacts of future events (ie changes in legislation scientific knowledge, land uses, etc) may render the report inaccurate. In circumstances such as this, HSE Australia shall not be liable for any loss or damage that may be occasioned directly or indirectly through the use of or reliance on the contents of this report.

- (a) In addition to the HSE Australia Standard Terms and the terms of any Proposal, these special conditions (**Special Conditions**) to the Terms of Engagement apply where the Client has engaged HSE Australia to provide Services that include:
 - (i) undertaking an asbestos assessment (**Asbestos Assessment**); and
 - (ii) preparing verbal or written advice, reports, data, laboratory test results, general findings or recommendations relating to any Asbestos Assessment (**Asbestos Related Services**).
- (b) Capitalised terms appearing in this document not otherwise defined in these Special Conditions have the meaning given to them in the Standard Terms or the Proposal (as the case may be).

2. Special Conditions

2.1 Scope of Asbestos Assessment and Asbestos Related Services

The Client acknowledges and agrees that any Asbestos Assessment carried out, or any Asbestos Related Services provided by HSE Australia:

- (a) will be carried out or provided (as the case may be) under and in accordance with:
 - (i) the Terms of Engagement (including these Special Conditions); and
 - (ii) the terms and conditions of:
 - (A) any licence granted to, and held by, HSE Australia and any of its employees, agents, contractors and sub-contractors (as the case may be) from time to time for the purposes of undertaking any asbestos assessments, or handling, removing, disposing, storing or transporting any asbestos or ACM;
- (b) will not, subject to clause 2.1(c) of these Special Conditions, include Services that involve or require the removal, disposal, transportation or handling (by any means) by HSE Australia or its employees of any asbestos or asbestos containing material (**ACM**); and
- (c) may require, or result in, HSE Australia removing small samples of materials containing, or suspected of containing, asbestos or ACM for the purposes of further testing.

2.2 Qualifications to Asbestos Assessments and Asbestos Related Services

The Client acknowledges and agrees that:

- (a) Any Asbestos Assessment will be conducted by HSE Australia on the basis of the presence and condition of the site materials at the time of inspection.
- (b) No Asbestos Assessment can be regarded as absolute in locating all instances of asbestos or ACM on site. Accordingly the outcome and results of any Asbestos Assessment and Asbestos Related Services undertaken by HSE Australia and any resulting report prepared by HSE Australia is not (and is not to be considered, read or construed as) final confirmation of:
 - (i) the presence or absence of asbestos and/or ACM; or
 - (ii) all locations or locations of any asbestos and/or ACM.
- (c) It may not be possible for HSE Australia to locate all asbestos or ACM due to physical constraints and restrictions on site access.
- (d) As there is a need to avoid damage to the Client's property (e.g. through sample taking), as well as minimising disruption (e.g. dismantling equipment) and inconvenience during an inspection, no destruction or demolition of finishes or structures (walls, fixtures, plant or other equipment) will be carried out by HSE Australia unless the Client specifically requests or the Proposal indicates otherwise.
- (e) No specific Asbestos Assessment and inspection will be conducted under-floor spaces or under existing floor coverings, and the Asbestos Assessment is limited to those ceilings spaces that are (in HSE Australia's opinion) reasonably accessible.
- (f) Assessment of the presence of asbestos or ACM in soil is expressly excluded from any Asbestos Assessment or Asbestos Related Services unless soil assessments are specifically included as part of the scope of work set out in the Proposal.
- (g) Integral parts of plant/equipment will not be inspected unless requested by the Client and those items of plant and/or equipment are specifically de-energised, isolated, deactivated or otherwise rendered inert and safe, prior to any inspection. Where no inspection of items of plant and equipment is carried out, a presumption of the presence of asbestos or ACM may still be documented.
- (h) Asbestos or ACM may be located/ or identified in inaccessible areas such as (but not limited to) wall cavities, lift shafts, under floor slabs, along pipework and shrouds, within boilers, heater banks, ductwork, live electrical installations, within pipe chases, and the like. Buried fibre cement pipes, insulation, or pits may also be discovered during excavation.
- (i) The presence of Client or tenant plant/equipment, furniture or stock may (either partially or entirely) limit, impinge or obstruct HSE Australia from conducting a full visual assessment.
- (j) HSE Australia surveyors may collect samples at any known or suspected asbestos or ACM locations. Where no asbestos is detected (**NAD**), the samples and laboratory results will still be listed in HSE Australia's final report so as to provide information for use during future assessments and inspections.
- (k) Representative sampling is sometimes undertaken where similar or identical materials are recognized in similar locations or situations within the same building or structure (**Similar Materials**). This sample extrapolation is used only when a laboratory result

confirms the presence of asbestos or ACM in one instance of the Similar Material, so that the positive asbestos/ACM result may be applied to any other instances of Similar Material. Other instances of the Similar Material will be presumed to contain asbestos or ACM until otherwise qualified by further sample collection and laboratory analysis.

- (l) Successful laboratory analysis of any asbestos or ACM may be affected or compromised in instances where the material has been heat-affected, as heat may alter the morphology of the fibrous material.
- (m) The Asbestos Materials Register is to be read in conjunction with the whole of any Client report prepared by HSE Australia. HSE Australia can offer advice, upon request from the Client, on required Asbestos Management Plans for controlling asbestos or other hazards, however such advice is separate from, and does not constitute part of, the Services provided under the initial Terms of Engagement.
- (n) Any report that is or may be prepared by HSE Australia following an Asbestos Assessment or as part of any Asbestos Related Services:
 - (i) is prepared specifically for the Client and Health Safety Environment Australia accepts no liability or responsibility for any loss or damage suffered by any other person or organisation in relation to any matter contained within this report; and
 - (ii) may not, in whole or in part, be used or referred to for any other purpose or provided to, or relied on by, any other person, without the express written consent of HSE Australia, and then only in accordance with the provisions of that report and the terms of such consent.
- (o) All measurements or quantities stated or referred to in any report prepared by HSE Australia for the Client are approximations only, and should not be relied upon for estimation of asbestos or ACM removal costs or as a basis for contracts for such removal.

2.3 Recommendations

The Client acknowledges that HSE Australia makes the following recommendations regarding asbestos-related inspections generally:

- (a) An intrusive asbestos inspection is recommended by HSE Australia prior to all building upgrade work or demolition, in accordance with applicable regulatory requirements, to mitigate the risk of uncovering previously unidentified/hidden asbestos or ACM.
- (b) With some bulk material containing asbestos or ACM, it can be very difficult (or even impossible) to detect the presence of asbestos or ACM using the polarised light microscopy analytical method, even after ashing/disintegration of the sample. Similarly, some products and materials found may have material inconsistency and, consequently, a small sample taken and analysed may not accurately represent the material as a whole. HSE Australia recommends that a continuous asbestos sampling program be maintained, with samples taken prior to commencement of any disturbance work (unless, as a precautionary measure, the relevant materials, plant or equipment are assumed to be or contain asbestos or ACM).