

**ASBESTOS MANAGEMENT PLAN  
NTB - 01005  
CHAN BUILDING – STATE SQUARE  
BENNETT STREET  
DARWIN  
NORTHERN TERRITORY**



Prepared for:

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# Asbestos Management Plan – Chan Building

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## **1. Introduction**

### **1.1 Purpose of this Asbestos Management Plan**

The success of any option involving Asbestos Containing Materials (ACM) remaining in-situ is contingent on the necessity to ensure the asbestos remains undisturbed and in good condition.

As such, the purpose of this Asbestos Management Plan (AMP) is to ensure that all practicable steps are taken to prevent, or minimise the risk of exposure to ACM, for all occupants and contractors of the Chan Building. This is driven by national legislation and is completed through the identification and listing of the known and typical locations of the ACM and the implementation of appropriate control measures including engineering and administrative systems.

This AMP has been prepared in accordance with the Safe Work Australia Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE and encompasses the following principles;

- The ultimate goal is for the site to be free of ACM;
- Consideration should be given to removal of ACM where practicable, in preference to other control measures such as enclosure, encapsulation or sealing;
- Reasonable steps must be taken to label all identified ACM;
- Control measures must be established to prevent exposure to airborne asbestos fibres (including monitoring the condition of ACM and minimising the possibility of damage to ACM);
- All workers, contractors and other persons who may be exposed to ACM as a result of being on the premises must be provided with full information about the consequences of exposure to asbestos and appropriate control measures.

The AMP must be made available to, and understood by, all participants involved in the management and operation of the site. The appropriate personnel at the site should be aware of the presence of the ACM and the need to ensure the ACM remain undisturbed. They should also understand their role in achieving this.

### **1.2 Objectives of this Asbestos Management Plan**

The Asbestos Management Plan represents an integrated risk management approach to ensure that practicable steps are taken to prevent or minimise the risk of exposure to ACM.

The AMP therefore:

- Outlines the necessary actions to control the risk as required by state legislation.
- Identifies and describes the administrative line of authority for the site/s, outlining responsibilities, procedures and systems for the effective management and control of ACM.
- Where appropriate instigates a work permit system, which ensures that any proposed maintenance, installation, alteration or renovation at the site/s is notified to the Management Plan Controller (see Section 3.1).
- Requires that all participants involved in the management and operations at the building are clearly informed and, where necessary, trained to manage the asbestos risks.

### **1.3 Asbestos Register**

The Asbestos Register forms an integral part of an effective AMP. This AMP should be read in conjunction with the Asbestos Register commissioned for the Chan Building (AEC Environmental document *NT0503 Chan Building - Register Sept 2012*) in September 2012.

The AMP, along with the Asbestos Register must be made available as required for inspection by employers, employees, union representatives, government representatives, contractors, maintenance personnel and others, as required, prior to commencing works which may impact any ACM identified in the building.

The asbestos register is used as a reference guide to outline specific locations of known ACM at the Chan Building. All personnel working at the site (building occupants and external contractors) must be made aware of the presence of the ACM in the sites they are visiting and the absolute necessity to ensure that these materials remain undisturbed.

#### **1.4 Limitations of the Asbestos Management Plan and Asbestos Register**

The Asbestos Register describes the known, visible and accessible sources of ACM identified within the Chan Building. Whilst we understand the registers were prepared with all due care and every attempt made during the survey to locate all ACM, it is important to note that, without substantial demolition of the buildings, fittings and equipment, it is not possible to guarantee that every source of asbestos has been located. Inherent with the nature and construction of the building, are areas that are either not physically or visually accessible. Such inaccessible areas fall into a number of categories:

- Inside set ceilings or wall cavities.
- Building facades or other height restricted areas.
- Those areas accessible only by dismantling equipment or performing minor local demolition works.
- Service shafts, ducts etc., concealed within the building structure or internal areas of the plant or equipment.
- Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure. These voids are only accessible during demolition works.
- Asbestos materials covered or concealed (partially or otherwise) by other materials/items preventing or limiting visual access or identification/recognition.
- Asbestos materials installed in non-typical applications, covered by other materials or installed in such a manner that disguises or conceals their nature in any way that may hinder their identification or recognition as an asbestos material.

Hence it is possible that ACM concealed within inaccessible voids and areas may not have been detected.

Therefore, it is important that personnel proceed with caution when opening up or entering any previously inaccessible areas to avoid disturbing concealed and/or previously unknown ACM. **If materials are encountered that are not listed in the asbestos register, unknown to the personnel or suspected of containing asbestos, then it is imperative that work cease pending further sampling and then precautions for dealing with asbestos materials should be implemented.**

## **2. Legislative Requirements**

This AMP must be revised at least once every 5 years, as required by the current Work Health and Safety Regulations, or when;

- There is a review of the Asbestos Register or control measure;
- Asbestos is removed from or disturbed, sealed or enclosed at the workplace;
- The AMP is no longer adequate for managing asbestos or ACM at the workplace; or
- A health and safety representative requests a review if they reasonably believe that any of the items listed above affects or may affect the health and safety of a member of their work group, and the Asbestos Management Plan was not adequately reviewed.

but should be reviewed after any works which have impacted on any identified or suspected Asbestos Containing Materials.

This AMP is designed to assist in discharging general obligations to ensure the health and safety of employees, contractors, visitors and others accessing the site. The AMP also addresses specific asbestos related legislative requirements and guidelines in approved industry standards.

Should this AMP conflict with any legislative requirements, the state legislation will prevail.

The following legislation and industry standard documentation are relevant to this AMP and are to be construed as forming an integral part of this AMP:

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

### 3. Organisational Responsibilities

The AMP is an operation and maintenance program, designed in accordance with the Safe Work Australia Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE, to ensure that future works at the Chan Building do not result in asbestos-related risks. All asbestos-related activities carried out at the site shall be employed under the auspices of the AMP. The key personnel (overleaf) are responsible for its implementation.

#### 3.1 Management Plan Controller

The Asbestos Management Plan Controller is responsible for administration and supervision of asbestos-related tasks at the Building. The person appointed as the Asbestos Management Plan Controller for the purposes of this AMP is;

Name:	Title:	Contact Details:
Mr. Bill Heath (bill.heath@nt.gov.au)	Property Manager – Financial Services Department of Infrastructure	Department of Infrastructure PO Box 61 Palmerston, NT 0831

The following tasks are to be conducted by the Management Plan Controller:

- Maintain the Asbestos Register for the site and ensure that the **ACM are regularly re-assessed** to comply with the Work Health and Safety (National Uniform Legislation) Act 2011 and the Safe Work Australia Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE.
- The register of ACM should be reviewed at least every 12 months and a visual inspection of identified ACM should be undertaken as part of any review. More frequent reviews may be required where a risk assessment indicates the need for reassessment;
- **Maintain the AMP** and ensure the AMP is reviewed whenever the Asbestos Register is reviewed/updated;
- **Liase with staff, contractors and maintenance personnel** and ensure that all contractors whose work may impact on ACM are informed of the presence of asbestos at the site;
- Administer **asbestos inductions and asbestos awareness training** for contractors, site management and other key personnel as necessary;
- In the event of remedial works to be carried out, the Management Plan Controller must ensure that a **risk assessment** with recommendations are performed by a competent person prior to the asbestos removal and that the licensed asbestos removal contractor takes the risk assessment and recommendations into account when developing the asbestos removal control plan. The Management Plan Controller should supply precise details of its asbestos removal requirements to the asbestos removalist, in the form of a technical asbestos removal specification;
- Ensure the appropriate notification of **all** asbestos removal works to NT WorkSafe;
- **Inform occupants** of all asbestos remedial works and air monitoring results;
- Engage a **licensed asbestos removal contractor** as required by legislative requirements to conduct asbestos abatement works;
- Administer the **Permit to Work** system;
- Prior to **renovation or demolition** works, ensure materials identified as containing asbestos are safely removed by an appropriately licensed removal contractor from any proposed work area or appropriately contained so as to prevent accidental damage;
- Ensure exposure to asbestos is kept as low as reasonably achievable and that no person is exposed to airborne asbestos fibres in excess of the exposure standard;
- **Ensure asbestos-related records are maintained** with this AMP. File all asbestos related documentation on an on-going basis including summaries of asbestos register updates, asbestos removal specifications, contractor asbestos removal control plans, air monitoring and clearance inspection certificates and asbestos waste disposal documents.

### 3.2 Tenants

All tenants or nominated representatives **must** notify the Management Plan Controller of proposed refurbishment, demolition or maintenance works that involves the disturbance of the building fabric/structure, or areas where ACM exist.

Tenants must coordinate and cooperate with property management to ensure ACM are not inadvertently disturbed and that all appropriate asbestos controls are put in place.

The Tenant, in conjunction with the property owner, is to complete the Tenant Agreement in Appendix A of this AMP.

### 3.3 Contractors

All contractors working at the site shall be responsible for ensuring that works are conducted in accordance with the AMP and all permits and inductions have been completed.

Contractors must ensure proper safety procedures are followed and works are conducted in accordance with all relevant legislative requirements, this AMP and best industry practice.

### 3.4 Asbestos Consultant

As with occupational health and safety issues, if ACM are present or thought to be present in a workplace, there must be full consultation, information sharing and involvement by everyone in the workplace, including employees, workers, contractors and others.

The Management Plan Controller should appoint a suitably qualified occupational hygiene (asbestos) consultant to assist in the following areas:

- Conduct surveys to assess risk involved with proposed works where disturbance of ACM is likely to occur prior to commencing proposed works and regular review of ACM as required by legislation;
- Develop '**Scope of Works**' documentation for removal of ACM;
- Provide **occupational hygienist** services during asbestos abatement works (e.g. airborne fibre monitoring, clearance inspections); and
- Review the AMP on a regular basis.

### **3.5 Licensed Asbestos Removal Contractor**

The Management Plan Controller must engage a licensed asbestos removal contractor as prescribed by national legislation to conduct asbestos abatement works. The asbestos removal contractor must perform all works in accordance with licensing requirements and standard industry practice.

The asbestos removal contractor must develop a site-specific asbestos removal control plan (ARCP) before commencing any asbestos removal works.

Further information on licensed asbestos removal contractors is detailed under *Abatement of Asbestos Containing Materials* (section 6).

## **4. Proposed Refurbishment or Demolition**

In the event of any proposed refurbishment or demolition works, an asbestos refurbishment/demolition risk assessment & scope of works documentation (technical specification) must be carried out. This will specify appropriate work procedures and identify necessary asbestos abatement works required.

The Management Plan Controller must ensure that a risk assessment or works specification is prepared by a competent person prior to the asbestos removal and that the asbestos removalist takes this into account when developing the asbestos removal control plan.

The Asbestos Risk Management Report should not be used for the purposes of costing for removal or programming of future refurbishment or demolition works unless accompanied by an appropriate and site-specific scope of works (technical specification) as part of an asbestos management and abatement program.

## 5. Contractor & Maintenance Personnel Asbestos Induction

All contractors and maintenance personnel visiting the site must report to the Management Plan Controller/Person Conducting Business or Undertaking (PCBU) prior to commencing any works. The Management Plan Controller/PCBU will provide a induction for the building, examine the works to be performed and advise what can, and cannot, be done. The induction will include the dissemination of the following information:

- Areas of the Building that are known to contain ACM;
- Provide access to the Asbestos Register and Asbestos Management Plan for the site and these are made available on site to all contractors for reference prior to conducting works;
  - The Asbestos Management Plan provides direction on how to work safely with the ACM and work on site is controlled by the Permit to Work system;
- Any asbestos abatement works must be approved by the Management Plan Controller and conducted by suitably qualified and licensed contractors;
- During normal routine maintenance work, external contractors and other personnel must report any residual, deteriorating or damaged ACM (or suspected ACM) to the Management Plan Controller as soon as possible so that the appropriate corrective action can be initiated;
- There is no guarantee that all ACM have been identified on site due to access limitations. Any suspect materials encountered during building, demolition or maintenance works must also be reported to the Management Plan Controller.

Contractors and maintenance personnel will need to confirm they understand the requirements of the AMP.

Details of contractors or other personnel who have attended the induction are to be kept on file.

## 5.1 Work Permit System

## 5.2 Background

An integral part of the Asbestos Management Plan is the Work Permit System. The Work Permit System has been implemented to minimise the risk of exposure to asbestos as a result of building works including maintenance, upgrades, refurbishment and demolition projects. Even seemingly minor projects of short duration may require implementation of the Work Permit System, and this must be ascertained (in conjunction with the Management Plan Controller) prior to commencement of the works.

## 5.3 Request for service

Before any works on site can commence a 'Request for Service Form' must be completed and forwarded to the NTG Agency responsible for providing Infrastructure maintenance. Within the form there are asbestos management fields for Clients to indicate the presence of an asbestos management plan / register. These are to be filled out with the relevant details for the tenant's building.

This form is available at the following hyperlink:

<http://www.nt.gov.au/infrastructure/services/asbestos/index.shtml>

## 5.4 When is a work permit required?

After a Request for Service raised but prior to performing any works on the site that may impact on the building fabric/structure, it must be ascertained if the works will disturb, or potentially disturb, any ACM. As such the staff member / contractor **must** obtain a **Work Permit** from the Management Plan Controller when either of the following applies.

- The **Asbestos Register** has identified or suspects the presence of ACM in the area of the proposed works; or
- The area where proposed works are to be conducted has not been fully assessed with regard to the presence of ACM.
- NT WorkSafe will also require notification of any intended asbestos removal work, to be lodged by the contractor no less than 5 working days in advance of the proposed work.

## 5.5 Why is a work permit required?

The Work Permit is required to ensure that future works at the building are conducted in a controlled manner to prevent the accidental disturbance of ACM.

Any works likely to disturb the building fabric require the completion of the Work Request Form. During the completion of the Work Request Form, it is to be determined if an Asbestos Work Permit is required.

The Work Request and Asbestos Work Permit forms are located overleaf.

## **5.6 Recommended Safe Working Practices**

As a first priority, planning for the maintenance of asbestos at the workplace must include consideration of the removal of the asbestos as the most preferred control option. In the instance work has to be done on asbestos please refer to Appendix F, in the Safe Work Australia Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE. This document gives legislative guidance in relation to drilling, sealing, painting, coating, cleaning and inspection of asbestos products.

The above Code of Practice also provides direction on Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE).

**FORM 1 - SERVICE REQUEST FORM**  
**CONSTRUCTION DIVISION**  
**REQUEST FOR SERVICE (RFS)**

Requisition No:				Project No:		
<input type="checkbox"/> NEW WORKS PROJECT				<input type="checkbox"/> SUPPLEMENTARY FUNDING		
Location of work:						
Region:						
Project Title:						
Agency:						
Asset #:	Suburb:	Electorate:		Location:		
Budget/Program:	RW <input type="checkbox"/> <small>Recoverable Works</small>	CO <input type="checkbox"/> <small>Consultancy</small>	MNW <input type="checkbox"/> <small>Minor New Works</small>	R&M <input type="checkbox"/> <small>Repairs/Maintenance</small>	<input type="checkbox"/> SM	<input type="checkbox"/> CM
					<input type="checkbox"/> UM	
ORIGINAL Funding Amount:	\$		Fees:	\$		
SUPPLEMENTARY Funding Amount:	\$		Fees:	\$		
GAS Code:			Sub-Program:			
Project Relating to Consultancy:						
Scope of Work or Service (Long Description): (as detailed as possible)						
Estimate History: Include previous estimated price and Project No. if known						
Communication / Project Team: eg Who contacts who for what	Title		Name		Phone no	
	Client	Applicant				
		Contact				
Site Contact						
Attachments / Special Considerations / Constraints: eg Approvals, Associated Works, Required Deadlines.	Description:					
ASBESTOS MANAGEMENT	Asbestos Register # .....Is there an Asbestos Management Plan (AMP) for this building <input type="checkbox"/> Yes <input type="checkbox"/> No. Will the work require a permit under the AMP <input type="checkbox"/> Yes <input type="checkbox"/> No If yes complete DoI Asbestos Work Permit application from AMP					
<b>DELEGATED OFFICER OF REQUISITIONING AGENCY</b>						
Signature:				Date:	/ /2013	
Name:						
Position Title:						
<b>Office use only</b>						
Date Received:	Date Advised Project:		Processed By:			
Plant:	NODE: NTG - _____ - _____ - _____ - _____ - _____					
Person Responsible:	Client Manager			PAS:		
Released <input type="checkbox"/>	Budget Applied & DIST <input type="checkbox"/>		Sales Order <input type="checkbox"/>		DMS <input type="checkbox"/>	

Please Forward completed form to [worksprogramming.DOI@nt.gov.au](mailto:worksprogramming.DOI@nt.gov.au)

**FORM 2 - WORK REQUEST FORM**

Any occupants / staff / contractors, prior to requesting any works likely to disturb the building fabric or structure, must complete the work request form.

**Section 1 - Staff / Contractor to Complete**

<b>Date:</b>		<b>Reference No:</b>	
<b>Block:</b>			
<b>Location:</b>			
<b>Start Date:</b>		<b>Completion Date:</b>	
<b>Proposed Works:</b>			
<b>Contractor:</b>			
<b>Signed By:</b>		<b>Position:</b>	
<b>Print Name:</b>		<b>Date:</b>	

**Section 2 - Management Plan Controller to Complete**

Is the location clearly defined (If NO request further information from tenant)			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Proposed plans appended			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Is asbestos containing material present in work area (refer current Asbestos Register)			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Has contractor been inducted to site and provided sufficient evidence of qualifications / licences.			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Risk management consultant advised			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Are permits required (if YES state type/s of permits)			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Asbestos <input type="checkbox"/>	Hot Works <input type="checkbox"/>	Other (nominate) <input type="checkbox"/> .....		
Asbestos likely to be disturbed:				
Approval to Proceed.			YES <input type="checkbox"/>	NO <input type="checkbox"/>
Signed:				
Dated:				

Original to be retained by the **Management Plan Controller**.  
Copy to be retained by **Tenant / Instigator of Work Request**.

**FORM 3 - ASBESTOS WORK PERMIT**

**WORK REQUEST FORM REFERENCE:**

**VALID UNTIL (Date):**

Description of Asbestos Containing Materials (ACM):

- Has work specification altered from Work Request Form? YES  NO
- Will asbestos consultant be required? YES  NO
- Is contractor inducted / qualified for all tasks? (if no, sub-contractors must be listed) YES  NO
- Will a licensed asbestos removal contractor be required? YES  NO
- Is notification of the asbestos works to NT WorkSafe required? YES  NO

Company Name: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Contact Number: \_\_\_\_\_

**SPECIFIC PERMIT REQUIREMENTS (TICK AS REQUIRED)**

- Scope of works / technical specification for asbestos removal? YES  NO
- \*NOTE\* [NT WorkSafe notification](#) required 5 days in advance for removal
- Contractor Asbestos Removal Control Plan (ARCP) issued for review and approval prior to commencement of work? YES  NO
- Safe Work Method Statement (SWMS) prepared. Must be in place prior to commencement of work YES  NO
- Other Items (list details): \_\_\_\_\_

**CONTRACTOR ACCEPTANCE STATEMENT**

I have read and understood the permit requirements and will undertake to work in accordance with all necessary procedures and specifications.

**Signed:** \_\_\_\_\_

**Print Name and Position:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Date Work Completed: \_\_\_\_\_

Clearance certificate & asbestos air monitoring results received (list reference numbers): \_\_\_\_\_

I am satisfied that the works have been completed in accordance with the work permit and the area has been cleaned to the required standard. Inspections and asbestos air monitoring confirm that the area can be safely re-occupied.

**Management Plan Controller Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Contractor Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

The contractor must retain a copy of the permit & work request form on site for the duration of works.

## 6. Abatement of Asbestos Containing Materials

Materials identified as containing asbestos should be removed from any proposed work area or satisfactorily contained prior to commencement of refurbishment or demolition works. A site specific scope of works document (works specification) must be produced to manage the asbestos abatement project.

The removal of asbestos must be controlled within a strict asbestos removal technical specification. This specification must be prepared in accordance with the National Health and Safety Acts & Regulations, and appropriate codes of practice and should include:

- Work area isolation (barrier protection, buffer zone);
- Removal methods (friable/non-friable);
- Contamination control methods (negative air pressure/decontamination procedures); and
- Health and safety procedures (respiratory protection, working at heights, scaffolding).

Asbestos abatement works must be performed in accordance with all legislative requirements. The statutory requirements for asbestos removal are prescribed in the Work Health and Safety (National Uniform Legislation) Act 2011 and the Work Health and Safety (National Uniform Legislation) Regulations 2012 and require compliance with the Safe Work Australia Code of Practice: HOW TO SAFELY REMOVE ASBESTOS.

By law, an A-class licensed asbestos removal contractor will need to be engaged for any friable asbestos removal work. Licensing requirements for the removal of any bonded ACM (such as asbestos cement sheeting) depends on the quantities to be removed. However it is recommended that any works involving the removal, encapsulation or any other abatement of ACM in any form or quantity, be performed by a licensed asbestos removal contractor (refer *Asbestos Removal Contractor* in section 6.2 below).

A suitably qualified consultant must provide independent verification of the work practices, engineering controls and standard of workmanship employed during removal operations (refer *Occupational Hygiene Consulting Services* in section 6.3 below).

### 6.1 Site Owner

The site owner (or person acting on the owner's/client's behalf) must perform the following in relation to proposed asbestos removal works:

- Ensure an **appropriately licensed asbestos removalist** carries out the asbestos removal work;
- Give a copy of the **current asbestos register** to the asbestos removalist;
- Supply **precise details of asbestos removal requirements** (e.g. in the form of an asbestos removal technical specification or scope of works document) to the asbestos removalist;

### 6.2 Asbestos removal contractor

As prescribed by the Work Health and Safety (National Uniform Legislation) Regulations, only an A-class licensed asbestos removal contractor can conduct works involving the removal of friable ACM.

Only a contractor holding either an A- or B-class license can remove bonded ACM (such as asbestos cement sheeting) in quantities equal to or exceeding 10m<sup>2</sup>. The asbestos removal contractor must prepare an asbestos removal control plan (ARCP) / Safe Work Method Statement (SWMS), detailing the proposed work methodologies to be used to safely and effectively remove, enclose or encapsulate the

ACM. This Work Method Statement must be submitted to the nominated Occupational Hygienist for review and approval prior to commencing work on site.

### **6.3 Occupational Hygiene Consulting Services**

#### **6.3.1 Prepare an Asbestos Removal Scope of Works Document**

The building owner/client may wish to engage a suitably qualified asbestos consultant to prepare the technical documentation/specification to describe how the ACM is to be removed safely from the site.

#### **6.3.2 Asbestos Removal Tendering Process**

The building owner/client may engage a suitably qualified asbestos consultant to manage the asbestos removal tendering process on behalf of the building owner/client.

#### **6.3.3 Review of Contractor ARCP/SWMS**

The contractors Asbestos Removal Control Plan/Safe Work Method Statement must be reviewed to ensure it adequately covers the safe working requirements of the project. The Management Plan Controller may request a suitably qualified occupational hygienist undertake such a review.

#### **6.3.4 Visual Inspections**

A suitably qualified occupational hygiene consultant must inspect the removal works and a clearance certificate for each work area must be issued. Further, the Management Plan Controller may require asbestos abatement works to be supervised on site full time by the consultant.

#### **6.3.5 Asbestos Fibre Air Monitoring**

In accordance with the Code of Practice: HOW TO SAFELY REMOVE ASBESTOS and the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2<sup>nd</sup> Edition NOHSC: 3003 (2005), air monitoring should be performed whenever ACM are being removed to ensure the control measures are effective. The requirements for air monitoring must be established prior to commencement of works.

All asbestos fibre air monitoring must be conducted in accordance with the Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres by a NATA accredited laboratory.

#### **6.3.6 Bulk Sample Analysis**

Suspected ACM may from time to time be uncovered at the site (e.g. during demolition works). Where additional sample analysis is required, analysis will normally be by polarised light microscopy including dispersion staining. Other approved methods may be used where required. All analysis work must be conducted by a NATA accredited laboratory.

## **7. Transport and Disposal of Asbestos Waste**

Asbestos, or asbestos waste must be stored and transported in a receptacle designed to prevent the release of its contents. This can include standard 200µm thick, clear, clearly labelled polythene asbestos waste bags or suitably sealed and labelled drums.

Asbestos waste must be disposed of at local authority approved landfills.

## **8. Damaged Asbestos Containing Materials**

Any damaged ACM are to be reported to the Management Plan Controller as soon as possible. Property Management will instigate the appropriate corrective action and arrange to have the damage assessed if necessary and the materials repaired or removed as required.

The emergency response procedure for damaged asbestos or suspected ACM is detailed overleaf in the ***Emergency Procedure for Accidental Damage or Discovery of New Asbestos Containing Materials***.

A list of local licensed asbestos removal contractors that can be contacted to provide emergency clean up works is provided in Appendix C of this AMP. This list is not exhaustive and other reputable organisations may be available.

All reports of damaged ACM are to be kept on file with the AMP.

# Emergency Procedure for Accidental Damage or Discovery of New Asbestos-Containing Materials

This procedure shall be followed when accidental damage or the discovery of new asbestos-containing materials occurs:

Step	Who	Action
1 Stop work	Property Manager / Contractor	On discovery / accidental damage of ACM stop work immediately. Go to Step 2.
2 Restrict access to affected area & shut-off air handling system (where relevant)	Property Manager / Contractor	Restrict access to the area by closing doors, taping off access points and installing temporary signage to prevent site occupants or members of the public from entering the immediate area, and to prevent any further disturbance of ACM in the area.  Any air handling systems (including air conditioning units) in the area must be shut-off to prevent further contamination to other building areas.  Go to Step 3.
3 Notify the Management Plan Controller	Property Manager / Contractor	Notify the Management Plan Controller of the incident. Go to Step 4.
4 Implement Incident Notification Process	Management Plan Controller	Management Plan Controller to notify by telephone and email key stakeholders as per occupant's incident notification process . Go to Step 5.
5 Notify Asbestos Consultant	Management Plan Controller	Management Plan Controller to notify asbestos consultant to arrange risk assessment and advise appropriate control strategies. Go to Step 6.
6 Risk Assess Damage & Sample Material (if required)	Asbestos Consultant	Asbestos Consultant to attend site to risk assess material and if necessary, take sample of suspected asbestos materials: <ul style="list-style-type: none"> <li>• If sample <i>positive</i>, notify Management Plan Controller Go to Step 7.</li> <li>• If sample <i>negative</i>, notify Management Plan Controller Go to Step 9.</li> </ul>
7 Engage Licensed Asbestos Removal Contractor for clean-up	Management Plan Controller in consultation with Asbestos Consultant	Management Plan Controller, in consultation with Asbestos Consultant to engage a Licensed Asbestos Removal Contractor to undertake asbestos cleanup and decontamination works.  (In conjunction with Step 8)

8	Asbestos Consultant / Hygienist	<p>Conduct asbestos fibre air monitoring adjacent to the contaminated work area to ensure that dust levels do not exceed acceptable exposure levels.</p> <p>After clean-up works have been completed, an independent visual clearance inspection shall be conducted to ensure that the asbestos removal has been completed to a satisfactory standard.</p> <p>Airborne asbestos fibre clearance monitoring shall also be conducted as required within removal work areas to ensure areas are safe for re-occupation by unprotected personnel.</p> <p>Asbestos Consultant to issue clearance documentation.</p> <p>Go to Step 9.</p>
9	Management Plan Controller / Asbestos Consultant	<p>Debrief staff</p> <p>Management Plan Controller and Asbestos Consultant to review the Asbestos Management Plan procedures and controls to ensure they were being followed properly.</p> <p>Go to Step 10.</p>
10	Management Plan Controller / Asbestos Consultant	<p>Asbestos Consultant to update Chan Buildings Asbestos Register as necessary.</p> <p>Management Plan Controller to archive incident documents and re-issue the updated Asbestos Register.</p>

## 9. Unknown or Suspected Asbestos Containing Materials

It is not possible to guarantee that every source of asbestos at the site has been identified because the Chan Building was constructed at a time when ACM's were widely used in building materials. It is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during previous surveys. Such inaccessible areas fall into a number of categories;

- Locations behind locked doors;
- In set ceilings or wall cavities;
- Those areas accessible only by dismantling equipment or performing minor localised demolition works;
- Service shafts, ducts etc, concealed within the building structure;
- Voids or internal areas of plant, equipment, air conditioning ducts etc;
- Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible during major demolition works);
- Height restricted areas;
- Confined Spaces.

Prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered.

**If any ACM, or suspected ACM, are encountered which are not listed in the Asbestos Register, work should cease immediately pending further inspection, sampling and assessment by a suitably experienced asbestos consultant.**

## 10. Signage and Labelling

### 10.1 Displaying of Asbestos Warning Signs

In accordance with the Safe Work Australia Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE, any areas of a workplace which contain ACM should be sign posted with warning signs to ensure that the asbestos is not unknowingly disturbed without the correct precautions being taken.

### 10.2 Labelling of Asbestos Materials Requirements

The Safe Work Australia Code of Practice: HOW TO MANAGE AND CONTROL ASBESTOS IN THE WORKPLACE states that all identified or presumed ACM should be clearly labelled. All labels should comply with AS1319 Safety Signs for the Occupational Environment.

The asbestos warning label should be affixed to an asbestos based material or access point to an area containing ACM in order to warn personnel of potential exposure to asbestos fibres if the material is disturbed, or if this area is accessed without precautions being taken.

A competent person should determine the number and positions of the labels and signposts required.

The practicability of labelling non-friable asbestos items in public access areas should be carefully considered in relation to the potential risks of exposure. Labelling is not always considered appropriate for asbestos situations in occupied areas as signs warning of the presence of asbestos may cause unnecessary alarm and disruption.

## **11. Asbestos Awareness Training**

It is recommended that selected staff be provided with asbestos awareness training. It may be prudent to also offer training to employees, tenants and contractors (especially long term/regular contractors) to increase their awareness of asbestos issues at the site. The information should cover the following aspects:

- Background information on asbestos;
- Asbestos related health effects and risks (e.g. asbestos is only a health risk when disturbed, resulting in the release of asbestos fibres into the airborne environment which may be subsequently inhaled);
- Asbestos-related legislation;
- Sources and general locations of ACM within the building (as noted in the asbestos register);
- An overview of the structure and function of the AMP (i.e. a summary of how asbestos issues are managed within the building); and
- Responsibilities of the building owner, management, tenants, staff and contractors.

The training should be designed to serve a number of purposes:

- To increase the awareness and knowledge of building management personnel with respect to their statutory obligations in respect of the management of asbestos hazards within the building;
- To provide valuable introductory information to staff/contractors who may have a requirement to handle asbestos, or enter areas where asbestos is present; and
- To assist the employer in addressing their statutory duties in respect of providing information, instruction and training to those potentially exposed to risk.

AEC Environmental has developed specific PowerPoint-based asbestos awareness training packages to meet such training requirements.

**Asbestos Management Plan**  
**Chan Building, State Square**  
**Bennett Street, Darwin**

**Appendix A: Tenant Agreement**

**Chan Building, State Square – Bennett Street, Darwin**

**TENANT AGREEMENT**

This agreement between the Tenants & Property Owner is to confirm that the information regarding the Asbestos Management Plan developed for the site has been fully explained and understood by all parties involved.

The Property Owner must fully explain the Asbestos Management Plan to the tenant, clearly outlining the responsibilities of the tenant and the procedures that must be undertaken by the tenant prior to commencing works likely to disturb any asbestos containing material at the site.

It is a condition of the tenancy agreement that the asbestos management plan developed for this site is to be **strictly** adhered to by the tenant.

The Property Owner must supply the following:

- Tenant's copy of the Asbestos Management Plan;
- Copy of current Asbestos Register; and
- Information, and if required, clarification of asbestos issues at the site.

**STATEMENT BY TENANT**

I have been made aware of the Asbestos Management Plan for this site and understand its implications regarding future building works at the site.

**Signed:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
(Tenant)

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(Name in full)

**Witnessed:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
(Property Owner)

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(Name in full)

This agreement is to remain with the Property Owner's copy of the Asbestos Management Plan.

## Chan Building, State Square – Bennett Street, Darwin

### TENANT RESPONSIBILITY

As a tenant of this site you are obliged by the Work Health and Safety (National Uniform Legislation) Act 2011 and the Work Health and Safety (National Uniform Legislation) Regulations 2012 to comply with the Asbestos Management Plan that has been developed for this site.

Your responsibilities require you to inform the Property Owner / Management Plan Controller of the following:

- ❑ When planning refurbishment works at the site;
- ❑ Of maintenance or repair works on the buildings; and
- ❑ Any other works likely to disturb the building structures or fabric.

### ASBESTOS REGISTER

It is a requirement of the Work Health and Safety (National Uniform Legislation) Act 2011 that the property owner makes the current Asbestos Register for the site available to you.

This register must state the location and condition of the asbestos containing material. Should you have any questions regarding this register, make enquiries to the Management Plan Controller.

Should the Asbestos Register not adequately cover the area of the proposed works, further asbestos surveys must be conducted prior to commencing work.

### ASBESTOS WORK PERMIT

An asbestos work permit system has been established for any works to be conducted at this site that could impact on asbestos containing materials.

It is important that this procedure is followed as the accidental disturbance of asbestos containing material is treated as a major issue to health and safety at the site.

### BEFORE YOU START

Before you commence any refurbishment, demolition or maintenance works at this site **YOU MUST;**

- **NOTIFY THE MANAGEMENT PLAN CONTROLLER BEFORE WORKS COMMENCE;**
- **CHECK THE ASBESTOS REGISTER TO DETERMINE IF ASBESTOS CONTAINING MATERIALS ARE PRESENT; and**
- **CONSULT WITH ACCOMODATION THE MANAGEMENT PLAN CONTROLLER TO ENSURE WORKS COMPLY WITH THE REGULATION AND SAFE WORK AUSTRALIA ASBESTOS CODES OF PRACTICE**

**Asbestos Management Plan**  
**Chan Building, State Square**  
**Bennett Street, Darwin**

**Appendix B: Asbestos Overview**

## Asbestos Overview

Asbestos is defined as the fibrous form of mineral silicates. There are two major groups of asbestos:

- **Serpentine** group minerals: **chrysotile** (white asbestos); and
- **Amphibole** group minerals: **amosite** (brown asbestos), **crocidolite** (blue asbestos) and minor forms including actinolite, tremolite and anthophyllite.

Asbestos minerals have separable long fibres that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been historically used for a wide range of manufactured goods, mostly in building materials, friction products, heat-resistant fabrics, gaskets, and coatings.

Asbestos mainly affects the lungs, and breathing in high levels of asbestos fibres over time can lead to a number of diseases and cancers (asbestos is a known carcinogen). The aim is to reduce the risk of exposure to asbestos containing materials. This Asbestos Management Plan aids in ensuring that asbestos containing materials in the workplace are managed in such a way that they do not become damaged and increase the risk of exposure.

## Types of Asbestos Containing Materials

Asbestos containing materials can be classified into two main groups, **friable** and **non-friable**.

Asbestos containing materials considered to be **friable** are materials that can be crumbled, pulverised or reduced to powder under hand pressure when dry. Friable asbestos materials are considered higher risk materials as they are more readily damaged, thereby possibly releasing fibres into the air.

Those that cannot be pulverised are considered as **non-friable** and generally considered a lower risk if properly handled. Non-friable asbestos containing materials are often referred to as 'bonded', where asbestos is bound in a bonded matrix (e.g. fibre cement sheeting) or various resin/binders (eg vinyl floor tiles).

The following table details the common material found in the two groups:

Friable	Non-Friable (bonded)
<ul style="list-style-type: none"> <li>▪ Sprayed or trowelled asbestos materials applied to ceilings, walls and other surfaces for fire-rating purposes. This material is often referred to as 'limpet asbestos'.</li> <li>▪ Asbestos-containing insulation on pipes, boilers, tanks, ducts etc which is often referred to as asbestos lagging.</li> <li>▪ Asbestos paper products, millboard in electrical switchboards or underlay lining for linoleum or vinyl floor coverings.</li> <li>▪ Asbestos textiles, braided asbestos, rope, tape, gaskets etc (note that rope and millboard are potentially friable).</li> <li>▪ Asbestos millboard from inside auxiliary switchboxes/fuse boards or air-conditioning reheat boxes.</li> <li>▪ In ground/buried asbestos material.</li> <li>▪ Low Density Board Ceiling and Wall Panels</li> </ul>	<ul style="list-style-type: none"> <li>▪ Asbestos cement sheeting and corrugated sheeting products, i.e. cement-like or concrete-like products (eg 'fibro' and 'super six roofing').</li> <li>▪ Vinyl tiles and vinyl flooring mastic and associated adhesives.</li> <li>▪ Asbestos containing compounds, gaskets and mastic from mechanical fittings, and roofing membranes.</li> <li>▪ Electrical switchboards containing compressed asbestos tar electrical boards, asbestos-cement sheeting, and spark arresters.</li> <li>▪ Roofing sealants, bituminous membranes, tar composites and similar materials were occasionally mixed with asbestos materials.</li> </ul>

### Asbestos Cement Products

Asbestos Cement (AC) products are a very common type of asbestos containing material and were installed extensively throughout commercial, industrial and residential facilities up until the early to mid 1980's. AC products were manufactured in numerous shapes and sizes and include asbestos cement sheeting eaves, awnings/gables, walls, ceilings, cladding, corrugated/moulded asbestos cement sheeting roofs, ridge-capping and gutters.

AC products are examples of non-friable asbestos material, and typically contain between 5–15% of asbestos by weight, and usually Chrysotile asbestos (white asbestos) is the main type of asbestos present.

Asbestos cement products are comprised of Portland cement, sand, binders and various combinations of both asbestos and non-asbestos fibres. The asbestos is tightly bound or encapsulated within the cement matrix of the products.

In general, the asbestos fibres cannot be released to become airborne in significant quantities unless the cement matrix is disturbed or disrupted as in the case of cutting AC products with saws etc.

**Asbestos Management Plan**  
**Chan Building, State Square**  
**Bennett Street, Darwin**

**Appendix C: Asbestos Removal Contractors Contact List**

## Contacts

### Asbestos Removal Contractors

Below is a list of Darwin-based asbestos removal contractors independent of AEC Environmental, and in alphabetical order for remedial or emergency clean-up works. They are licensed by the Territory Government to perform friable asbestos material removal work. This list is not exhaustive, and other suitable qualified and licensed organisations may be available to assist.

<b>CONTRACTOR</b>	<b>CONTACT</b>	<b>PHONE</b>
ICC Australia	Shane Horton	Phone: 1800-ASBESTOS Mobile: 0401747338
KAEFER Integrated Services	Peter Younger	Phone: (08) 8947 2941 Mobile: 0409 615 836
McMahon Services, NT	Andrew Collins	Phone: (08) 8930 2500 Mobile: 0488 147 602