
**Appendix L – Asbestos Materials Management Plan
New Environment (Heggies Australia Pty Ltd)**



NEW ENVIRONMENT

A Division of Heggles Australia Pty Ltd

ASBESTOS MATERIALS MANAGEMENT PLAN

ST VINCENT'S HOSPITAL VICTORIA STREET, DARLINGHURST

CLIENT: AURORA PROJECTS

REPORT NO:
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CONSULTANTS:

8268/01A/AMP
5 September 2006
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1 EXECUTIVE SUMMARY

The extent of asbestos containing material (ACM) on the site is considered to be moderate to high. The level of risk associated with these materials is generally considered to be moderate to high but may be significantly reduced by removal, enclosure and/or encapsulation of materials in association with other appropriate management practices.

The occurrences of asbestos building materials are listed in the Asbestos Register for the site (refer to Section 6). Appropriate recommendations are given in tabular form in the Asbestos Materials Management Plans (Sections 13-21).

2 SCOPE

Heggies Australia (incorporating the practice of New Environment) was requested by Rod Cameron of Aurora Projects to update the current Asbestos Materials Management Plan for St Vincent's Hospital, Victoria Street, Darlinghurst NSW (refer to New Environment Report No. 4892/01/AMP dated 6 November 2003) to reflect the current requirements of legislation and relevant standards/guidelines only. This update does not include re-inspection of the subject site and/or further assessment of asbestos materials previously identified therein.

The purpose of this Asbestos Management Plan is to assist persons with control of the premises to comply with the prohibition of asbestos and prevent human exposure to asbestos while these building materials remain in the workplace.

3 LIMITATIONS

This Asbestos Management Plan has been undertaken to update the previous Asbestos Management Plan for the site with respect to the current requirements of legislation and relevant standards/guidelines only. This update does not include re-inspection/assessment of the subject site and/or the asbestos materials previously identified therein.

All sections of this report should be read in conjunction with each other, the previous Asbestos Management Plan for the site (refer to New Environment Report No. 4892/01/AMP dated 6 November 2003) and the Asbestos Registers/Audits identified therein (refer to Section 4 of this report).

Work is conducted in a conscientious and professional manner. The nature of the task, however, and the likely disproportion between any damage or loss which might arise from the work, or any report prepared as a result, and the cost of our services is such that New Environment cannot guarantee that all asbestos building materials/issues of concern have been identified and/or addressed. Thus while we carry out the work to the best of our ability, we totally exclude any loss or damages which may arise from services we have provided to Aurora Projects and/or any other associated parties.

All work conducted and reports produced by Heggies Australia are prepared for a particular Client's objective and are based on a specific scope, conditions and limitations, as agreed upon between Heggies Australia and the Client. Information and/or report(s) prepared by Heggies Australia may therefore not be suitable for any use other than the intended objective. No parties other than the Client and the Client's asbestos materials Consultant should use any information and/or report(s) without first conferring with Heggies Australia. It is recommended that the Client's asbestos materials

Consultant confer with Heggies Australia before using any information and/or reports produced by Heggies Australia.

Before passing on to a third party any information and/or report(s) prepared by Heggies Australia, the Client is to inform fully the third party of the objective and scope, and all limitations and conditions, including any other relevant information which applies to the information and/or report(s) prepared by Heggies Australia.

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4 BACKGROUND

St Vincent's Hospital is situated between Victoria Street, Burton Street and Barcom Avenue in Darlinghurst NSW. The main campus includes the DeLacy, O'Brien, Cator, and Cahill Buildings (completed approximately circa 1880, 1938, 1965 and 1970 respectively), the Aikenhead Building, Private Hospital, Sacred Heart Hospice and St Vincent's Clinic (completed in 1988) and the new Xavier Building, completed in 2002. The Caritas Mental Health Centre, completed approximately circa 1870 (in-patients) and 1960 (out-patients) is located on Forbes Street away from the main campus area. A site plan is presented in Appendix I.

This report is based on the previous Asbestos Management Plan for the subject site (refer to New Environment Report No. 4892/01/AMP dated 6 November 2003) which was based on a brief walkthrough inspection of the DeLacy, O'Brien, Cator and Cahill buildings and the Caritas Centre, and information provided in the following reports:

- Amdel Ltd., St Vincent's Hospital Asbestos Register, Report No. 1136/BL6, 1985;
- Sydney Hospital Occupational Health and Safety Service (SHOHSS), Asbestos Audit – Sacred Heart Hospice – 1st May 1989;
- Sydney Hospital Occupational Health and Safety Service (SHOHSS), Asbestos Register – Selected Areas of Hospital – 1991;
- New Environment Asbestos Survey Report No. 2085/2/ASR dated December 1997 and January 1998; and
- New Environment Hazardous Materials Report No. 3223/01/HMR, dated 17 January 2001.

It is noted that the inspection conducted as part of New Environment Report No. 4892/01/AMP was limited to a brief walkthrough of readily accessible areas and did not constitute a thorough investigation and assessment of these areas.

It is the understanding of Heggies that the O'Brien Building is to be demolished.

5 HOW TO USE THIS DOCUMENT

This document is an Asbestos Management Plan for St Vincent's Hospital, Victoria Street, Darlinghurst NSW as outlined in the scope of this report. It covers the management of asbestos building materials which were identified in the previous inspections by various organisations as outlined in Section 4 of this report.

The purpose of this Management Plan is to assist persons with control of the premises to comply with the prohibition of asbestos and prevent human exposure to the identified asbestos building materials while these remain in the workplace. The ultimate goal is for the workplace to be free of asbestos materials.

The Site Manager responsible for the buildings surveyed should hold this document on site. It is to be made available to any persons having a legitimate interest in it. It is the responsibility of the Site Manager to ensure that each time action is taken on one of the asbestos materials listed in this Asbestos Management Plan that the action is recorded and signed off (refer to Sections 14-21 of this report). It is recommended that Heggies Australia be consulted prior to any asbestos materials management works being undertaken in order to ensure that the works are completed to a satisfactory standard and in accordance with relevant legislation, codes, standards and guidelines.

Any queries regarding the interpretation and/or implementation of this Management Plan should be directed to Heggies Australia before work is undertaken.

6 ASBESTOS REGISTER

For the purposes of this Asbestos Management Plan, New Environment Report No. 4892/01/AMP dated 6 November 2003 is considered to constitute the current Asbestos Register for the site. New Environment Report No. 4892/01/AMP was based on a brief walkthrough inspection of the DeLacy, O'Brien, Cator and Cahill buildings and the Caritas Centre, and previous inspections by various organisations as outlined in Section 4 of this report.

7 RISK ASSESSMENT CRITERIA

It is a legal requirement for an employer to identify hazards in the workplace. An assessment of the potential risk of harm to health and safety arising from the identified hazards must also be undertaken. Such a risk assessment assists in identifying and selecting appropriate management options.

Risk levels associated with the identified asbestos building materials have been assessed using the following criteria:

1. Type/condition of the asbestos material.
2. Location of the asbestos material.
3. Potential for disturbance of the asbestos material.
4. Propensity of the type/condition, location and potential for disturbance of the asbestos building material to facilitate significant human exposure to airborne asbestos fibres.

The results of the risk assessment are documented in Sections 13-21 of this Asbestos Materials Management Plan. Appropriate management options have been selected on the basis of the level of risk determined for the asbestos containing materials identified.

8 CONTROL OPTIONS

The following hierarchy of controls should be consulted when implementing control measures to eliminate the risks arising from asbestos containing materials:

1. Elimination/removal.
2. Isolation/enclosure/sealing.
3. Engineering Controls.
4. Safe Work Practices (administrative controls).
5. Personal Protective Equipment.

A combination of these controls may be required in order to manage ACM. The documents identified in Section 12 of this report should be consulted prior to implementing any control option.

Since the ultimate goal is for the workplace to be free of all ACM, preferential consideration should be given to removing ACM during renovation, refurbishment and maintenance activities etc where removal is practicable.

Notwithstanding the above, ACM and any areas of a workplace that contain ACM including plant, equipment and components should be signposted with appropriate warning signs to ensure that asbestos is not unknowingly disturbed without the correct precautions being taken. These signs should be placed at all of the main entrances to the work areas where asbestos is present and should conform with Australian Standard 1319-1994 *Safety Signs for the Occupational Environment*.

9 RESPONSIBILITIES

Responsibilities of parties involved in the management of ACM are outlined below. Reference should be made to the documents identified in Section 12 of this report for a more detailed account of these responsibilities.

9.1 Controllers of Premises

Controllers of premises used as a workplace may include:

- The owner of the premises.
- A person who has, under any contract or lease, an obligation to maintain or repair the premises.
- A person who is occupying the premises.
- A person who is able to make decisions about work undertaken at the premises.
- An employer at the premises.

Persons with control of premises used as a workplace have a duty of care to:

- Investigate the premises for the presence/possible presence of ACM. This responsibility may not be abdicated to the Contractor.
- Develop and maintain a register of ACM, including details of the location & condition of ACM, risk assessments and control measures.
- Develop, implement and maintain an Asbestos Management Plan.
- Ensure control measures are implemented as soon as possible and are maintained as long as ACM remain in the workplace.
- Develop measures to remove ACM or minimize the risks and prevent exposure.
- Consult with health and safety representatives and other workers at the workplace on occupational health and safety issues and consult with any person who may be affected by the presence of ACM (e.g. building occupants and all relevant contractors).

There must be full consultation, information-sharing and involvement by everyone in the workplace including employers, workers, contractors and others throughout the process of identifying ACM, developing an Asbestos Management Plan, assessing risks and developing and implementing control measures.

In the case of removal of asbestos containing materials any person with control who commissions the asbestos removal is responsible for:

- Ensuring an asbestos removalist carries out the removal of ACM.
- Nominating person(s) to liaise with the asbestos removalist.
- Requesting asbestos removal license details from the asbestos removalist if such a license is required for the removal being undertaken.
- Providing the asbestos removalist with a copy of the site Asbestos Register before removal commences.
- If there is no register of ACM, to establish a register before removal commences.
- Ensuring a site specific emergency plan is developed and implemented before any asbestos removal commences.

If ACM are to be removed there must be full consultation, information sharing and involvement by everyone in the workplace, including employers, workers and contractors at each step of the removal process using established consultative mechanisms. Persons in adjoining properties that might also be affected by the removal must also be consulted.

9.2 Employees & Contractors

Employees and contractors are to take all due care and all reasonable steps to ensure the health and safety of all persons on site. They shall co-operate with management in relation to any requirement imposed in the interests of health, safety and welfare under the *Occupational Health and Safety Act 2000 (NSW)*, the *NSW Occupational Health and Safety Regulation 2001*, Asbestos Codes of Practice, WorkCover NSW guidelines and any other occupational health and safety legislation to enable compliance.

Employees and contractors should not carry out any work that may disturb asbestos materials without adequately referring to the site Asbestos Register and Asbestos Management Plan and liaising with management.

9.3 Asbestos Removalist

The asbestos removalist must hold an appropriate asbestos removal license before being permitted to remove ACM. An AS-1 license is required for friable asbestos removal and an AS-2 or demolition license for bonded asbestos removals > 200 m³. The removalist must provide their license details to their clients. Other requirements include:

- For friable asbestos removal, and removal of > 200 m³ of bonded asbestos, permission to proceed with removal must be obtained from WorkCover NSW prior to any work commencing.
- Asbestos removal operatives to complete appropriate Risk Assessments and Safe Work Method Statements prior to work commencing.
- The asbestos removalist to develop a site specific asbestos removal control plan in consultation with their client before commencing any asbestos removal work. The client should receive a final copy of this plan.
- The asbestos removalist to ensure the removal is adequately supervised and carried out by competent persons in a safe manner.

10 AWARENESS & TRAINING

All workers, contractors and any other persons on site who may be exposed to ACM 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.

Information and training must be provided to persons who may come into contact with ACM in the workplace including workers, contractors and others. The training may include the following:

- The purpose of the training.
- The health risks associated with asbestos.
- Types, uses and likely occurrence of ACM in workplace buildings/plant etc.
- Role and responsibilities of the trainee under the Asbestos Management Plan.
- Location, access and use of the site Asbestos Register.
- Timetable for removal/remediation of ACM.
- Process and procedures required to eliminate exposure.
- Maintenance and control measures, personal protective equipment and work methods required to minimise asbestos risk including potential contamination of other areas.
- Control levels and exposure standards for asbestos.
- The purpose of any air monitoring or health surveillance undertaken.

11 REVIEW

This Asbestos Management Plan should be reviewed whenever the site register of ACM is reviewed. These reviews should critically assess all asbestos management processes and their effectiveness as

outlined in NOHSC *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC:2018(2005)], Section 8.3.

The site Asbestos Register, including any risk assessments, should be reviewed every 12 months or earlier where a risk assessment indicates the need for reassessment or an asbestos material has been removed and/or disturbed. **Based on the age and content of the information in New Environment Report No. 4892/01/AMP, and the proposed demolition of the O'Brien building and reuse of the Cahill building, it is recommended that the site asbestos register be updated immediately.** Visual inspection of asbestos materials should be included in any review of the Asbestos Register.

Risk assessments should be reviewed regularly in accordance with Australian Government and State Legislation and whenever:

- There is evidence a risk assessment is no longer valid.
- There is evidence that any control measures are not effective.
- A significant change is proposed for the workplace or work practices/procedures relevant to the risk assessment.
- There is a change in the condition of the asbestos material.
- The asbestos material has been removed, enclosed or sealed.

Only competent persons should perform and revise risk assessments.

12 LEGISLATION, CODES & STANDARDS

Occupation health and safety in NSW is regulated under the *NSW Occupational Health and Safety Act 2000* (OHS Act 2000) and the *NSW Occupational Health and Safety Regulation 2001* (OHS Reg. 2001). The OHS Act 2000 and OHS Reg. 2001 contain particular provisions regarding asbestos.

The National Occupational Health and Safety Commission (NOHSC) has also developed the following documents relating to Asbestos:

- *Code of Practice for the Safe Removal of Asbestos 2nd Edition* [NOHSC:2002(2005)].
- *Code of Practice for Management and Control of Asbestos in Workplaces* [NOHSC:2018(2005)].
- *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition* [NOHSC:3003(2005)].

These documents set the industry standard for hazard control and safe removal methods for asbestos materials and should be referred to at all times in the management of asbestos.

13 RECOMMENDATION DESCRIPTION TABLE

The following recommendations are referred to in subsequent sections of this report. Note that where recommendations are made to re-inspect the condition of materials (eg every 12 months), the period until the next re-inspection commences immediately (eg re-inspection is to be undertaken within 12 months of the issuing of this report).

RECOMMENDATION NO.	RECOMMENDED ACTION	ACTION PRIORITY
1	<p>Minimal risk if intact and left undisturbed. Leave in place unless works are likely to cause disturbance or significant damage occurs. Re-inspect condition every 12 months.</p> <p>Remove when practical and prior to demolition. Refer to Sections 9, 12 and Appendix II for removal requirements.</p>	Low (5-10 years)
2	<p>Minimal risk if intact and left undisturbed. Leave in place unless works are likely to cause disturbance or significant damage occurs. Re-inspect condition every 6-12 months.</p> <p>Remove when practicable and prior to demolition. Refer to Sections 9, 12 and Appendix II for removal requirements.</p>	Moderate (2-5 years)
3	<p>Restrict access and install warning signs at entry points. Anyone entering the area is to wear appropriate PPE including respiratory protection and disposable coveralls.</p> <p>Engage an appropriate consultant to conduct a program of material/settled dust sampling and analysis and airborne asbestos monitoring etc to help assess the location and extent of asbestos contamination that may be present in the area, and determine the requirements for asbestos removal.</p> <p>Remove asbestos materials as soon as possible. Refer to Sections 9, 12 and Appendix II for removal requirements.</p>	<p>Immediate</p> <p>Immediate (0-1 years)</p> <p>Immediate (0-1 years)</p>

RECOMMENDATION NO.	RECOMMENDED ACTION	ACTION PRIORITY
4	<p>Engage an appropriate consultant to conduct further investigative sampling and analysis of suspected asbestos materials.</p> <p>Minimal risk if intact and left undisturbed. Leave in place unless works are likely to cause disturbance or significant damage occurs. Re-inspect condition every 12 months.</p> <p>Remove when practicable and prior to demolition. Refer to Sections 9, 12 and Appendix II for removal requirements.</p>	<p>Immediate (0-1 years)</p> <p>Low (5-10 years)</p>
5	<p>Ensure access is restricted and install appropriate warning signs. Anyone accessing the area is to use appropriate PPE including respiratory protection and disposable coveralls until the presence and condition of asbestos material can be adequately assessed.</p> <p>Engage an appropriate consultant to conduct further investigative sampling and analysis of suspected asbestos materials.</p> <p>If damaged asbestos materials are identified, engage an appropriate consultant to conduct a program of settled dust sampling and analysis and airborne asbestos monitoring etc to help assess the location and extent of asbestos contamination that may be present in the area, and determine the requirements for asbestos removal.</p> <p>Remove any damaged asbestos materials as soon as possible.</p> <p>Remove any intact asbestos materials as soon as practical.</p> <p>Refer to Sections 9, 12 and Appendix II for removal requirements</p>	<p>Immediate</p> <p>Immediate (0-1 years)</p> <p>Upon identification of damaged asbestos materials</p> <p>Immediate (0-1 years)</p> <p>Moderate (2-5 years)</p>

14 ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING

Note: For the purposes of this report the DeLacy Building is divided into three sections - the North Wing (closest to Burton Street), the South Wing (closest to Oxford Street) and the Middle Section (parallel to Victoria Street).

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
GENERAL INTERIOR (LEVELS 15 - II)					
Fire doors throughout that have 1970 date stamps on compliance label	Likely to contain asbestos cores	Generally intact	1		
Backing boards in old electrical cupboards throughout	Likely to contain asbestos	Generally intact	4		
Majority of steam, hot water, and condensate pipes located in service ducts/risers, ceiling and floor cavities	Asbestos lagging	Generally intact where readily accessible.	2		
Riser cupboards throughout	May contain asbestos lagging debris	Poor if present.	5		

ASBESTOS MATERIALS MANGAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 14					
North Wing: Ceilings of corridors facing courtyard and majority of adjacent rooms	Asbestos cement sheeting	Generally intact	1		
North Wing: Panels above and below windows in corridor facing courtyard	Asbestos cement sheeting	Generally intact	1		
North Wing: Panels above and below windows in walkway connecting DeLacy and O'Brien buildings	Asbestos cement sheeting	Generally intact	1		
LEVEL 13					
North Wing: Ceilings of corridors facing courtyard and majority of adjacent rooms	Asbestos cement sheeting	Generally intact	1		

ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 13 (continued)					
North Wing: Panels above and below windows in corridor facing courtyard	Asbestos cement sheeting	Generally intact	1		
North Wing: Panels above and below windows in walkway connecting DeLacy and O'Brien buildings	Asbestos cement sheeting	Generally intact	1		
South Wing: Duct in northwestern corner of Balcony	May contain asbestos rope-lagged pipes	Unknown/Not accessed	5		
South Wing: Middle section of floor cavity	May contain asbestos rope-lagged pipes	Unknown/Not accessed	5		
Middle Section: Pipes in ceiling cavity of office adjacent to open Balcony	Asbestos rope lagging	Generally intact	2		

ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 13 (continued)					
Middle Section: Floor above in ceiling cavity	Asbestos cement sheeting	Generally intact	1		
LEVEL 12					
North Wing: Pipes in risers in Male and Female Toilets	Asbestos lagging	Generally intact	2		
South Wing: Pipes in duct in northwestern corner of Balcony	Asbestos-rope lagging	Generally intact	2		
South Wing: Redundant pipe penetrations in Balcony floor	Asbestos-rope lagging	Generally intact	2		
South Wing: Pipe in riser in Rooms 12.20/12.21	Asbestos-rope lagging	Generally intact	2		

ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 12 (continued)					
Middle Section: Pipes in riser in Female Toilets south of lift	Asbestos-rope lagging	Generally intact	2		
North Wing: Panels above and below windows in corridor facing courtyard	Asbestos cement sheeting	Generally intact	1		
North Wing: Attached to old ceiling joists in false ceilings above corridor connecting to walkway to O'Brien Building, adjacent rooms; and corridor leading to rotunda	Broken asbestos cement sheeting may be present	Potentially Damaged	5		

ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 12 (continued)					
North Wing: Panels above and below windows in walkway connecting DeLacy and O'Brien buildings	Asbestos cement sheeting	Generally intact	1		
North Wing: Behind tiled walls, in ceiling and in cubicle partitions in Male Toilet adjacent to walkway	Asbestos cement sheeting	Generally intact	1		
LEVEL 11					
Cable tray in Subfloor	Asbestos cement	Generally intact	1		
Panels above and below windows in walkway connecting DeLacy and O'Brien buildings	Asbestos cement sheeting	Generally intact	1		
Above timber ceiling in Room R3	Asbestos cement sheeting is likely to be present	Unknown/Not accessed	4		
Insulation on steam and hot water pipes	Asbestos and asbestos rope lagging	Generally intact	2		

ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
BUILDING EXTERIOR					
North and South Wings: Majority of panels above and below windows in walls facing courtyard	Asbestos cement sheeting	Generally intact	1		
Middle Section: Some of the panels above and below windows in wall facing courtyard	Asbestos cement sheeting	Generally intact	1		
Middle Section, Level 15: Roof balcony – wall to room	Asbestos cement sheeting	Generally intact	1		
Middle Section, Level 15: Panels above and below windows	Asbestos cement sheeting	Generally intact	1		
Middle Section, Level 15: Eaves	Asbestos cement sheeting	Generally intact	1		
Middle Section, Level 13: Bituminous malthoid membrane in Open Balcony	Contains asbestos	Generally intact	2		

ASBESTOS MATERIALS MANAGEMENT PLAN: DELACY BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
BUILDING EXTERIOR (continued)					
Middle Section, Level 13: Pipes in Open Balcony on walls adjacent office and Plant Room	Asbestos-rope lagging	Generally intact	2		
Middle Section, Level 13: Bituminous malthoid membrane on Credit Union roof	Likely to contain asbestos	Generally intact	4		

15 ASBESTOS MATERIALS MANAGEMENT PLAN: CAHILL BUILDING

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
ROOF LEVELS					
Housing on cooling towers for Cahill Tower and Chemical Pathology	Asbestos cement sheeting	Generally intact	1		
LIFT MOTOR ROOMS					
Zelomite electrical backing boards	Likely to contain asbestos	Generally intact	4		
Sheathing on electrical cables	Likely to contain asbestos	Damaged in areas	5		
Arc shields	Likely to contain asbestos	Generally intact	4		
Brake shoes	Likely to contain asbestos	Unknown/Not accessed	5		
ALL LEVELS					
Fire doors throughout corridors, Fire Stairs, and Plant Rooms that have 1970 date stamps on compliance label	Likely to contain asbestos cores	Generally intact	1		

ASBESTOS MATERIALS MANAGEMENT PLAN: CAHILL BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
ALL LEVELS (continued)					
Electrical/Riser Cupboards: Internal lining of majority of doors	Asbestos cement sheeting	Generally intact	1		
Electrical/Riser Cupboards: Backing boards in electrical cabinets	Likely to contain asbestos	Generally intact	4		
Ceiling cavities and cupboards/risers of all levels	May contain asbestos lagging debris	Damaged if present	5		
LEVELS 9-21 (EXCLUDING LEVEL 17)					
Majority of steam, hot water, radiator and condensate pipes which are located in the risers/cupboards of the corridors/rooms/wards and in the ceiling cavity	Asbestos lagging	Damaged in areas	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: CAHILL BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 15					
Pipes in Plant Room adjacent to the northern fire stairs	Asbestos lagging	Damaged in areas	3		
Back of fume cupboards in Laboratories	Asbestos cement sheeting	Generally intact	1		
Pipe in northeastern corner of Plant Room adjacent to northern fire stairs	Asbestos lagging	Damaged - torn sheathing	3		
LEVEL 14					
Pipe in ceiling cavity adjacent to Fire Cupboard near southern walkway to O'Brien Building	Asbestos lagging	Damaged - torn sheathing	3		
LEVEL 12					
Pipes in riser cupboard adjacent to Room 12/26	Asbestos lagging	Damaged - deteriorating sheathing	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: CAHILL BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 12 (continued)					
Pipes in riser cupboard adjacent to Room 12/36	Asbestos lagging	Damaged - deteriorating sheathing	3		
Pipe in ceiling cavity in corridor outside Room 12/24	Asbestos lagging	Damaged - deteriorating sheathing	3		
Pipe in ceiling cavity in corridor outside Room 12/08	Asbestos lagging	Damaged in areas	3		
LEVEL 11					
Pipes in southwest Plant Room	Asbestos lagging	Damaged in areas	3		
Pipe in ceiling cavity in corridor to Cator Building	Asbestos lagging	Damaged - torn sheathing	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: CAHILL BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 8 - BASEMENT PLANT ROOM					
Majority of steam (silver), hot water (blue) and condensate (green) pipes in the main plant room and in the north-south corridor for the air handling units	Asbestos lagging	Damaged in areas	3		
Pipe in empty room at south end off air handling unit	Asbestos lagging	Damaged in areas	3		
Majority of calorifiers and pipes in Boiler Room	Asbestos lagging	Damaged in areas	3		

16 ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 9 – BASEMENT PLANT ROOM					
Majority of steam, hot water and condensate pipes	Asbestos lagging	Damaged in areas	3		
LEVEL 11					
Riser cupboard above sterilizer in Sterilizer Room 1124	May contain asbestos-rope debris	Unknown/Not accessed	5		
Patio Roof of Cobalt Plant Room	Asbestos lagging debris may be present	Damaged if present	5		
Steam and condensate pipes external to Occupational Therapy, North Side	Asbestos lagging	Damaged in areas	3		
Pipes in service duct in Dressing Rooms of Outpatients Clinic	Asbestos lagging	Damaged in areas	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 11 (continued)					
Service duct in Dressing Rooms of Outpatients Clinic	May contain asbestos lagging debris	Damaged if present	5		
Pipe on wall adjacent manhole in Pharmacy Store (Room 11/18)	Asbestos lagging	Damaged in areas	3		
Pipe running north-south along wall of Bottle Room (Room 11/17)	Asbestos lagging	Damaged in areas	3		
LEVEL 12					
Riser cupboard adjacent to lifts	May contain asbestos-lagged pipes	Unknown/Not accessed	5		
Pipes in ceiling cavity of Male Toilet opposite Medical Records	Asbestos lagging	Damaged in areas	3		
Ceiling cavity of Male Toilet	May contain asbestos lagging debris	Damaged if present	5		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 12 (continued)					
Ceiling cavity of Room 12/26	May contain asbestos-lagged pipes	Unknown/Not accessed	5		
LEVEL 13					
Kitchen: Pipes in riser cupboard adjacent to lifts	Asbestos lagging	Damaged in areas	3		
Kitchen: Riser cupboard adjacent to lifts	May contain asbestos lagging debris	Damaged if present	5		
Kitchen: Pipe in ceiling above food service area	Asbestos-rope lagging	Damaged in areas	3		
Kitchen: Pipes in central service duct near boilers	Asbestos and asbestos-rope lagging	Damaged in areas	3		
Kitchen: Pipe in duct adjacent to clock on west wall	Asbestos lagging	Damaged in areas	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 13 (continued)					
Kitchen: Pipes associated with PRV opposite gas stove	Asbestos lagging	Damaged in areas	3		
Kitchen: Pipes in riser cupboard at southern end	Asbestos lagging	Damaged in areas	3		
Diet Kitchen: Pipes in service duct	Asbestos and asbestos-rope lagging	Damaged in areas	3		
Diet Kitchen: Pipe in ceiling cavity	Asbestos-rope lagging	Damaged in areas	3		
LEVEL 14					
Old Theatre Office: Pipes in service duct	Asbestos and asbestos-rope lagging	Damaged in areas	3		
Old Theatre Office: Inner door lining of service duct	Asbestos cement sheeting	Generally intact	1		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 14 (continued)					
Old Theatre Office: Service duct	May contain asbestos lagging debris	Damaged if present	5		
Old Theatre Office: Numerous pipes in ceiling cavity	Asbestos and asbestos-rope lagging	Damaged in areas	3		
Old Operating Theatres: Pipes behind sterilizers	Asbestos-rope lagging	Damaged in areas	3		
Old Operating Theatres: Pipe in ceiling cavity in Theatre 3	Asbestos lagging	Damaged in areas	3		
Old Operating Theatres: Pipes in corridor outside Theatres 3 and 4	Asbestos-rope lagging	Damaged in areas	3		
Old Operating Theatres: Pipe in corridor ceiling outside Theatre 4	Asbestos lagging	Damaged in areas	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 14 (continued)					
Old Operating Theatres: Pipes in corridor ceiling between theatres	Asbestos lagging	Damaged in areas	3		
Old Operating Theatres: Corridor ceiling cavity between theatres	May contain asbestos lagging debris	Damaged if present	5		
LEVEL 15					
Pipes in ceiling above toilet off lunchroom in Microbiology	Asbestos lagging	Damaged in areas	3		
Pipes in Haematology hallway ceiling cavity	Asbestos lagging	Damaged in areas	3		
Southern wall of Room 1508	Asbestos cement sheeting	Generally intact	1		
Door lining of incubators located in main corridor and Chief Scientist's Office, Microbiology	Contains asbestos	Generally intact	1		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 15 (continued)					
Inner door lining of autoclave in Microbiology Sterilizing Room	Asbestos cement sheeting	Generally intact	1		
LEVEL 16					
Pipes on northern wall of Air-Conditioning Plant Room	Asbestos-rope lagging	Damaged in areas	3		
Majority of insulation on eastern portion of air-conditioning plant	Contains asbestos	Damaged in areas	3		
Pipe in manhole in southwestern corner of floor	Asbestos lagging	Damaged in areas	3		
Riser duct adjacent lifts	May contain asbestos lagging debris	Damaged if present	5		
Pipe in ceiling cavity in Room 16/03 (Male WC)	Asbestos lagging	Damaged in areas	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: O'BRIEN BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 17					
Pipes on ceiling of Room 1701	Asbestos lagging	Damaged in areas	3		
Above cement render in air fan duct	Asbestos cement sheeting	Generally intact	1		
LEVEL 18					
Pipes in roof-top air heater to ventilation duct	Asbestos lagging	Damaged in areas	3		
Ventilation duct	May contain asbestos lagging debris	Damaged if present	5		

17 ASBESTOS MATERIALS MANAGEMENT PLAN: AIKENHEAD BUILDING

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 10 - PLANT ROOMS					
Gaskets in pipe joins and other equipment	May contain asbestos	Unknown	4		
LEVEL 11 - CARPARK					
Gaskets in pipe joins and other equipment in fire control room	May contain asbestos	Unknown	4		
LEVEL 15 - PLANT ROOMS					
Gaskets in pipe joins and other equipment	May contain asbestos	Unknown	4		
Emergency brake shoes on lift motors, lift motor room	Likely to contain asbestos	Unknown	5		
MULTILEVEL UNDERGROUND PARKING STATION					
Emergency brake shoes on lift motors (if present), lift motor room	Likely to contain asbestos	Unknown	5		

ASBESTOS MATERIALS MANGAGEMENT PLAN: AIKENHEAD BUILDING (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
BUILDING EXTERIOR					
Grey water-proofing sealant around edges of external fibre cement sheet and glass fibre panelling	Contains asbestos	Unknown	4		

18 ASBESTOS MATERIALS MANAGEMENT PLAN: CATOR BUILDING

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
LEVEL 9					
Service duct in Female Toilet, assumed to continue to lower floors	Asbestos lagging	Damaged in areas	3		
LEVEL 8					
Service duct in Staff Room	Asbestos lagging	Damaged in areas	3		

19 ASBESTOS MATERIALS MANAGEMENT PLAN: CARITAS CENTRE

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
SUBFLOOR					
Pipes underneath trapdoor off Kiln Room extending throughout subfloor area	Asbestos lagging	Damaged in areas	3		
Numerous locations throughout subfloor	Asbestos lagging debris	Damaged	3		
BASEMENT					
Pipes in Plant Room	Asbestos lagging	Damaged in areas	3		
Pipe on western wall of Plant Room near northern entrance	Asbestos lagging	Damaged	3		
Pipes on Toilet ceilings	Asbestos lagging	Generally intact	2		
Pipes in Pottery Room	Asbestos lagging	Damaged in areas	3		
Pipes in Chlorifier Room	Asbestos lagging	Damaged in areas	3		

ASBESTOS MATERIALS MANAGEMENT PLAN: CARITAS CENTRE (continued)

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
GROUND, FIRST, AND SECOND FLOORS					
West wall of store outside Switch Room, Ground Floor	Asbestos cement sheeting	Generally intact	1		
Pipes in Second Floor ceiling cavity	Asbestos lagging	Damaged in areas but reportedly contained	3		
Second Floor ceiling cavity	Asbestos lagging debris	Damaged if present but reportedly contained	3		
Insulation on underside of Second Floor Roof	Contains asbestos	Generally intact	2		
Pipe in service duct on north side of stairs between 1 st and 2 nd floors	Asbestos lagging	Damaged in areas	3		
BUILDING EXTERIOR					
Courtyard fascia	Asbestos cement sheeting	Generally intact	1		

20 ASBESTOS MATERIALS MANAGEMENT PLAN: SMOKER'S CLINIC

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
BUILDING EXTERIOR					
External cladding on rear balcony	Asbestos cement sheeting	Damaged in areas	3		

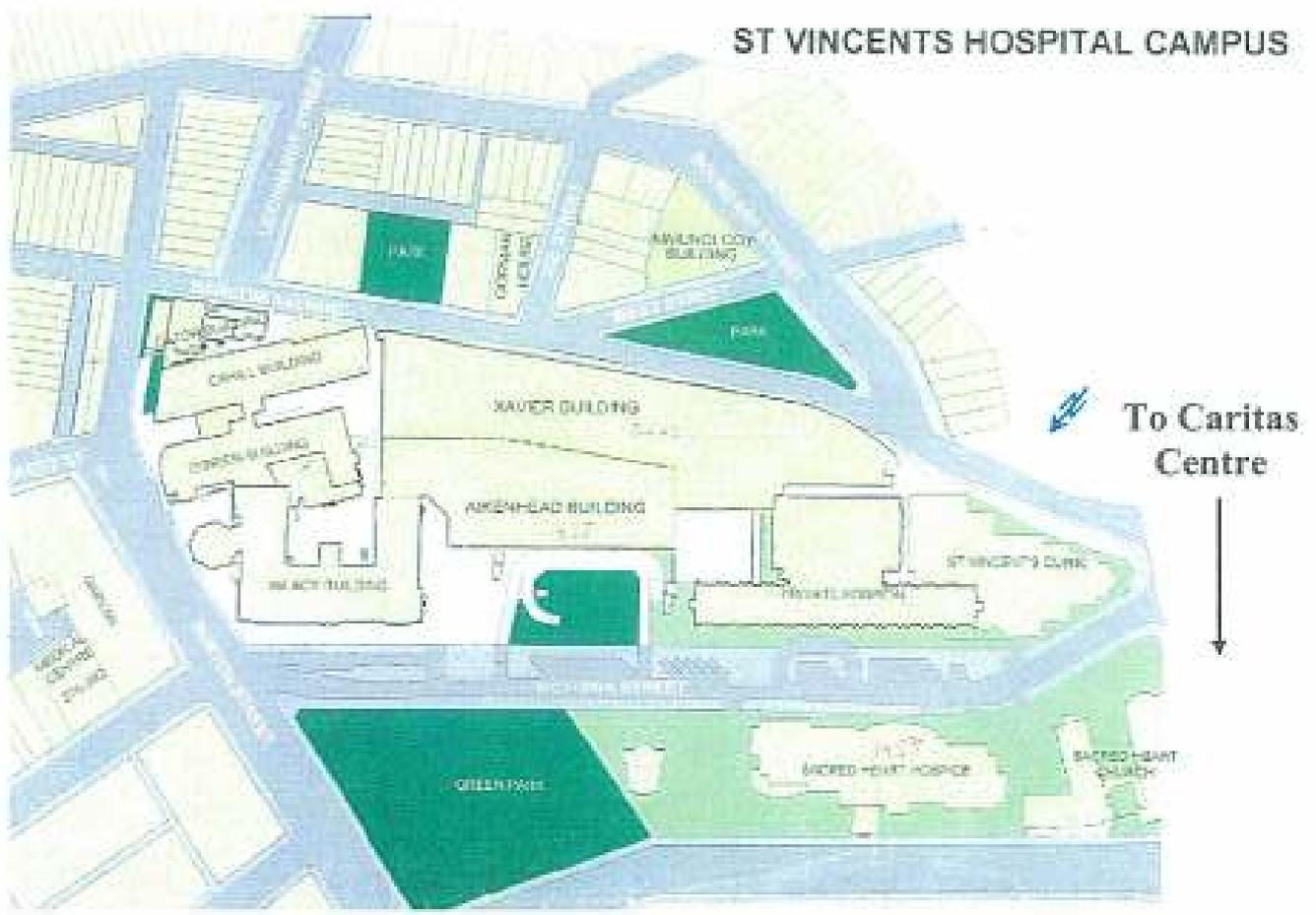
21 ASBESTOS MATERIALS MANAGEMENT PLAN: MEDICAL STUDENTS RESIDENCE

LOCATION	ASBESTOS MATERIAL	LAST KNOWN CONDITION	RECOMMENDATION NO.	ACTION TAKEN AND DATE	SITE MANAGER NAME AND SIGNATURE
BUILDING INTERIOR – PLANT ROOM AND LAUNDRY					
Pipes connecting to boiler	Asbestos lagging	Damaged in areas	3		
BUILDING EXTERIOR					
Back dividing wall in garden	Asbestos cement sheeting	Damaged in areas	3		

22 ASBESTOS MATERIALS MANAGEMENT PLAN: SACRED HEART HOSPICE

No asbestos containing materials were identified in the Sacred Heart Hospice as outlined (refer to SHQHSS Asbestos Audit – Sacred Heart Hospice – 1st May, 1989).

APPENDIX I
SITE PLAN



**Main Campus Site Plan from New Environment
Report No. 4892/01/AMP dated 6 November 2003**

APPENDIX II
GENERAL INFORMATION

ASBESTOS - GENERAL INFORMATION

1 Asbestos: Description, Properties and Uses

Asbestos is the generic term given to a group of naturally occurring fibrous minerals, based on hydrated silicates, that are found in various rock formations. Differing ratios of oxygen, hydrogen, sodium, iron, magnesium and calcium elements account for several different types of asbestos minerals, the most common varieties being Amosite (brown asbestos), Chrysotile (white asbestos), Crocidolite (blue asbestos), Anthophyllite, Actinolite and Tremolite.

The immense popularity of asbestos as a building material is attributed to its near unique properties of fire resistance, high abrasion resistance and superb acoustical characteristics coupled with its relatively low cost. Prior to 1973, asbestos was the material of choice for fire proofing, thermal insulation, sound insulation and abrasion resistance. It was used as a spray-on insulation of ceilings and steel girders; as a thermal insulation of boilers, pipes, ducts, air conditioning units, etc; as an abrasion resistant filler in floor tiles, vinyl sheet floor coverings, roofing and siding shingles; as a flexible, though resistant joining compound and filler of textured paints and gaskets; as the bulking material with the best wear characteristics for automobile brake shoes and in countless domestic appliances such as toasters, grills, dishwashers, refrigerators, ovens, clothes dryers, electric blankets, hair dryers, etc.

2 Asbestos: Health Effects

Many asbestos bearing materials or products are of no significant health risk whatsoever when used in the normal course of events. A health risk exists when asbestos fibres are released into the air and when that air is inhaled into the lungs. Even then, it appears that most people exposed to relatively small amounts of asbestos do not develop any related health problems. There is however no "safe" level of asbestos exposure since the risk is dependent on numerous factors including the attributes of the particular individual, time since exposure, exposure duration and concentration, asbestos type and environmental factors such as exposure to cigarette smoke and other airborne pollutants.

There are three main diseases associated with airborne asbestos fibres:

Asbestosis - A fibrosis (or scarring) of the lung associated with relatively massive exposure to asbestos.

Lung Cancer - Indistinguishable from that caused by smoking and a common cause of death. The risk of lung cancer is much higher when there is exposure to both cigarette smoking and to airborne asbestos.

Mesothelioma - A cancer of the chest and abdominal lining, it is specific to asbestos exposure.

A feature of these diseases that symptoms take a long time to appear, generally 5 to 40 years. Once symptoms are evident the disease progresses rapidly.

There is some evidence that Chrysotile asbestos is less carcinogenic than Amosite, and that Amosite is less carcinogenic than Crocidolite in causing mesothelioma, but the evidence is less clear for lung cancer.

3 Measurement of Airborne Asbestos Fibres

The *NSW Occupational Health and Safety Regulation 2001* and National Occupational Health and Safety Commission (NOHSC) *Asbestos Codes of Practice & Guidance Note* set the maximum allowable time weighted average for all forms of asbestos at 0.1 fibre/mL of air.

Air monitoring is used to determine airborne fibre levels. New Environment is NATA certified for Asbestos Fibre Counting and Volume Measurement to carry out such monitoring.

The NOHSC *Code of Practice for the Safe Removal of Asbestos 2nd Edition* [NOHSC:2002(2005)] states that 'Air monitoring should be performed whenever ACM (asbestos containing materials) are being removed, to ensure the control measures are effective.'

The onus to provide a safe environment rests with persons responsible for the premises (ie the controller(s) of the site). To meet these obligations it is recommended that Heggies Australia be engaged by the site controller, or their representative, and not an asbestos removal contractor as there could be a conflict of interest in the latter arrangement.

4 Asbestos Survey

Asbestos surveys are undertaken to identify any asbestos materials/hazards and assess the risk associated with the material/hazard.

Surveys are conducted through visual inspection by experienced personnel. During the inspection material samples are taken as appropriate for analysis.

Limitations

Due to the nature of the task all asbestos surveys are limited. Since asbestos can occur in so many forms and in so many locations, and as there is no instrument to detect asbestos, it is never possible to guarantee all asbestos has been identified. Access is usually restricted, and there may be asbestos hidden behind walls or other structures. Building plans are of great assistance to consultants undertaking surveys.

5 Asbestos Register

An asbestos register is a record of all asbestos containing products identified in a building and their condition. Under the NOHSC Codes of Practice and *NSW Occupational Health and Safety Regulation 2001* (Chapter 4, Clause 44) any place of work must have an Asbestos Register. A Heggies Australia Asbestos Survey Report constitutes an asbestos register.

Registers must be maintained and changes in the condition or extent of any asbestos present should be recorded. Registers also have a "use-by" date since the condition of asbestos materials, legislation, guidelines and standards change.

6 Management Plan

An asbestos management plan is required where asbestos materials have been identified and are to remain on site. The plan would normally be a component in the overall Hazard Management Plan for the site.

Control Options

Asbestos judged to constitute a health risk should be enclosed, encapsulated, or removed by an approved asbestos contractor.

Enclosure

This involves the installation of a permanent, solid, non-porous, impervious barrier between the asbestos material and the surrounding environment. Examples include building boxes around steam pipes, etc. A suspended ceiling is not permanent and since occasional access is necessary above a suspended ceiling, enclosure is negated. Furthermore, many suspended ceilings act as return air plenums so enclosure is impossible.

Encapsulation

Encapsulation involves coating the material with a sealant. Good encapsulants penetrate through the asbestos material to the substrate. The encapsulating sealant then hardens and binds all the asbestos fibres into a solid matrix. This is usually a short to medium term option.

Removal

Removal is not without hazards to the occupants of the building. If not strictly controlled, the removal process can result in increased fibre counts in other areas. Technical competence, experience and integrity are of prime importance in evaluating asbestos removal plans.

We advise clients to work within the usual practised time frames of the experienced asbestos removal companies under strict supervision by a qualified person. Pressing for quicker turnaround times may result in low quality workmanship and unnecessary asbestos risk. Building owners may be in part responsible for risks created by the removal Contractor due to carelessness or negligence.

An independent consultant such as Heggies Australia, experienced in the supervision of asbestos removal, should be retained to act on the client's behalf.

7 Clearance Inspection

Clearance air monitoring, a visual clearance inspection and report should be completed by a suitably qualified and experienced consultant, such as Heggies Australia, at the completion of asbestos removal works.

ASBESTOS CEMENT SHEETING

A large number of building products used in the building and construction industry have been made with asbestos and cement. Products include:

- Flat or corrugated, compressed sheeting.
- Pipes for water, drainage, flues.
- Roof shingles.
- Building boards eg. Villaboard, Hardiflex, Wundaboard, Flexiboard.
- Cable trays for electrical wiring.
- Numerous preformed items such as cisterns, protective housings, etc.

Provided these products are maintained in good order, they present no health risk, however, precautions must be observed during demolition, refurbishment etc.

Licensing Requirements

Asbestos-containing products are classified as **bonded or friable**. **Asbestos cement (AC)** is classified as **bonded asbestos** however once it is significantly broken, crushed or otherwise damaged WorkCover may consider it to be **friable asbestos**. The rules governing friable asbestos are far more stringent.

Anyone wishing to carry out over 200m² bonded asbestos removal work must apply to WorkCover and must be registered as a bonded asbestos removal contractor.

Anyone wishing to carry out friable asbestos removal must obtain a friable asbestos removal licence from WorkCover, a friable asbestos removal permit must be obtained for all friable asbestos jobs.

Removal Procedures

The following procedures are recommended for demolition work involving bonded asbestos cement flat or corrugated sheet, in order to reduce any possible health risk to workers and to building occupants where applicable, from the asbestos in the asbestos cement sheet.

All asbestos removal and/or decontamination should be undertaken by a competent person under statutory requirements as specified in the Code of Practice, WorkCover guidelines and the *NSW Occupational Health and Safety Regulation 2001*. A licenced, experienced asbestos removal contractor is required to remove friable asbestos.

1. Prior to commencement of asbestos removal works, suitable warning signs must be erected. All windows and doors in the occupied areas of these buildings should be closed.
2. All asbestos removal operatives to wear half-face particulate filter (cartridge) respirators and approved disposable coveralls.
3. The bolts fixing the asbestos cement sheets to the main frame must be cut out and removed. Abrasive cutting or sanding discs shall not be used on asbestos cement products. Only approved power tools may be used.
4. The asbestos cement sheets should be wetted or polycoated. High water pressures should not be used.

5. All asbestos cement sheets should be removed with minimal breakage and be lowered to ground level, not dropped.
6. All asbestos cement dust and residues should be cleaned from the site and from the roof space where applicable, using an approved vacuum cleaner.
7. All asbestos containing waste must be removed from the site as soon as possible. The bins should be plastic lined, covered and taped secure prior to removal.
8. The asbestos waste shall be disposed of in accordance with the existing regulations.
9. Prior to engagement in the work, all asbestos operatives must be trained in safe working practices. These training aspects include:
 - Health hazards of asbestos.
 - Safe working procedures.
 - Wearing and maintenance of protective clothing and equipment.

ASBESTOS CONTAINING FIRE DOORS

The cores of older fire doors frequently contain asbestos materials. Such doors may remain in place provided certain precautions are taken. These include:

- Labeling the doors with appropriate warning signs that advise of the asbestos risk.
- Not drilling or otherwise disturbing the doors so as to release airborne asbestos fibres.
- Recording the location, extent and condition of the doors in the site Asbestos Register and addressing them in the site Asbestos Management Plan. A copy of the Asbestos Register and Management Plan should be held by the Building Manager who is to ensure that no work is carried out on the doors without their prior knowledge and the implementation of adequate health and safety precautions.
- Regular inspection and reporting of the condition of the doors.

If the fire doors are damaged then access to the area is to appropriately restricted and advice sought from a suitably qualified and experienced consultant such as Heggies Australia.

Any asbestos removal and/or remediation/decontamination work should be undertaken by a licensed Asbestos Removal Contractor.

ASBESTOS REFERENCES:

- *Occupational Health and Safety Act 2000 (NSW)*
- *NSW Occupational Health and Safety Regulation 2001*
- *Code of Practice for the Safe Removal of Asbestos 2nd Edition*
[National Occupational Health and Safety Commission: 2002 (2005)]
- *Code of Practice for the Management and Control of Asbestos in Workplaces*
[National Occupational Health and Safety Commission: 2018 (2005)]
- *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition* [National Occupational Health and Safety Commission: 3003 (2005)]
- AS/NZS 1716: 2003 - *Respiratory Protective Devices*
- AS/NZS 1715: 1994 - *Selection, Use and Maintenance of Respiratory Protective Devices*
- *National Code of Practice for the Control of Workplace Hazardous Substances*
[National Occupational Health and Safety Commission: 2007 (1994)]
- AS 2601: 2001 - *The Demolition of Structures*
- Protection of the Environment Operations Act 1997
- Waste Avoidance and Resource Recovery Act 2001
- The special conditions applicable to the Transport of Asbestos Waste (Categories 1 and 2) as laid down by the Waste Recycling and Processing Service
- Current WorkCover Asbestos Removal Contractor's Licence and current regulations
- Any other relevant Standards or Codes published by the responsible Authorities or the Standards Association of Australia