Hazardous Material Register and Management Plans 2012

JACS Owned buildings

A1 – Red

A2 – Green

A3 – Purple

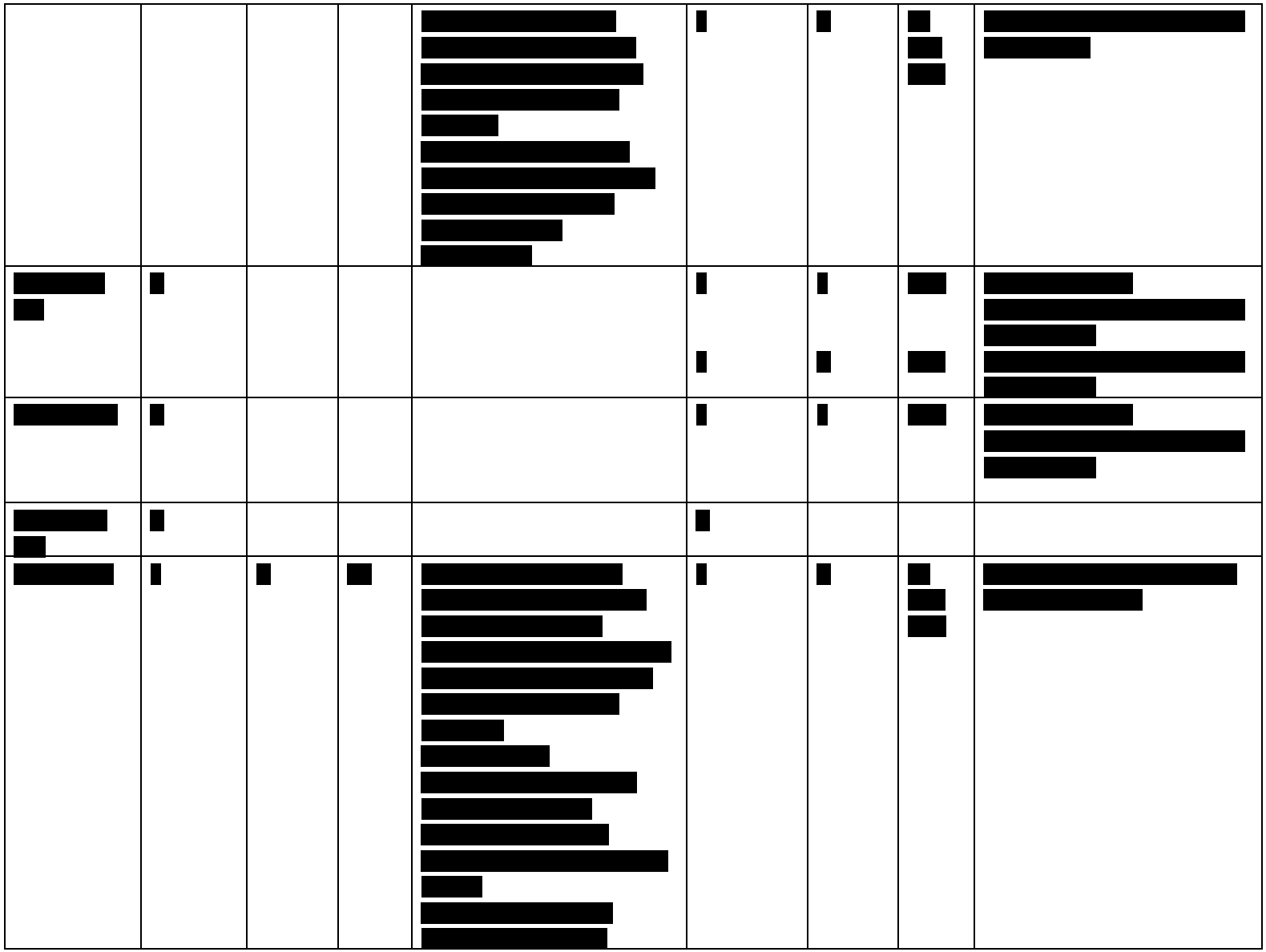
A4 – blue

** No report yet

Building	Asbestos	Friable	Type	Action	Hazardous material	Friable	Type	Action
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

[redacted]	[redacted]				[redacted]	[redacted]		[redacted]
[redacted]	[redacted]			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted],

								A4 – No remedial action.



[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Periodic Detention Centre	Presume CR	Y		**PDC2** **A4 Internal – Mains Switch may contain 'zelemite'**	Y	Y	SMF	**PDC1** Insulation loose batts ceiling void / roof space.

				board or flash pads. Label confirm status prior to maintenance, re-inspect at intervals.				A4 – No Remedial action, label and re-inspect.
	Presume CR	Y		**A4 Internal – no access to safe, safe may contain seal to door. Label confirm status prior to disturbance, re-inspect at intervals.**	Y	Y	SMF	**PDC2** Insulation loose batts ceiling void / roof space, wall void. Insulation pipe work and Insulation to Generator A4 – No Remedial action, label and re-inspect
	Y	N	CH AM CR	**PDC3** **A4 External – Cement sheeting, first floor, soffits top gable ends and above windows, maybe present under-cloaking to roofing. Vertical caulking to wall adjacent to entrance. Label and re-inspect at intervals.**	Y Y Y	Y	SMF Pb SMF	**PDC3** Insulation loose batts, ceiling void over reception. A4 - No Remedial action, label and re-inspect **A3 – Internal – paint system (pale blue) layered paint system to doors in courtyard. Encapsulate flaking paint**. **Workshop** Insulation loose batts. A4 - No remedial action label & Re-inspect.
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Asbestos

A1 Rated Buildings - Restrict access and Remove

[redacted]

A2 Rated Buildings – Remove or enclose, encapsulate/seal and Label, Re-inspect at intervals.

[redacted]

A3 Rated Buildings – Remove during refurbishment or maintenance. Label, Re-inspect at intervals.

[redacted]

A4 Rated Buildings – No Remedial Action, Label and Re-inspect

[redacted]

Periodic Detention Centre

[redacted]

Property Name	Site Address	Sample No	Result	Photo ID	Description	Location	Friable	Asbestos type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likilhood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Quantity	Comments	Labelling and recommendations	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	CA7745	NAD	-	Cement Sheet	PDC1 External: Cement under-cloaking to eaves	-	0	0	-	-	-	-	-	-	0	-	-			
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 11924-4	NAD	-	Cement Sheet	PDC1 External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542_1 August 2005		
Periodic Detention Centre	Mugga Lane, Symonston, ACT	V.O	Presume CR	1	No access to Mains Switch Board	PDC2 Internal: Mains Switch, may contain 'zelemite' board or flash pads.	Y	3	1	0	0	0	0	1	1	6	A4	1 unit		Label. Confirm status prior to maintenance. Re-inspect at designated intervals.	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	V.O	Presume CR	2	No access to Safe	PDC2 Internal: Safe, may contain seal to door	Y	3	1	0	0	0	0	1	1	6	A4	1 unit		Label. Confirm status prior to maintenance. Re-inspect at designated intervals.	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 11924-7	NAD	-	Cement Sheet	PDC2 External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542_1 August 2005		
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 1581-12	CH, AM, CR	3, 4	Asbestos cement sheet	PDC3 External: First Floor, soffits to Gable ends and above windows. Note: under-cloaking to roofing tiles may be present also.	N	3	1	0	0	0	0	1	1	6	A4	36 lin m	Ref Robsons Report 2542_12 September 2005	Labelled. Re-inspect at designated intervals.	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 2542-12-1	CH	5	Bitumen Product	PDC3 External: Vertical caulking to wall adjacent main entrance.	N	1	1	0	0	1	0	1	1	6	A4	3 x 3 lin m	Ref Robsons Report 2542_12 September 2005	Label and re-inspect at designated intervals.	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	CA7758	NAD	-	Cement Sheet	PDC3 External: To Girls Dormitory	-	0	0	-	-	-	-	-	-	0	-	-			
Periodic Detention Centre	Mugga Lane, Symonston, ACT	CA7760	NAD	-	Cement Sheet	PDC3 External: Soffits and Fascias to Cells 1-15	-	0	0	-	-	-	-	-	-	0	-	-	Note – no access to cement soffits above caged area to Girls dormitories / courtyard.		
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 11924-6	NAD	-	Cement Sheet	Workshop External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542_1 August 2005		

Property Name	Site Address	Sample No	Result	Photo ID	Description	Location	Friable	Asbestos type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Quantity	Comments	Labelling and recommendations
Periodic Detention Centre	Mugga Lane, Symonston, ACT	CA7745	NAD	-	Cement Sheet	PDC1 External: Cement under-cloaking to eaves	-	0	0	-	-	-	-	-	-	0	-	-		
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 11924-4	NAD	-	Cement Sheet	PDC1 External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542 .1 August 2005	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	V.O	Presume CR	1	No access to Mains Switch Board	PDC2 Internal: Mains Switch, may contain 'zelemite' board or flash pads.	Y	3	1	0	0	0	0	1	1	6	A4	1 unit		Label. Confirm status prior to maintenance. Re-inspect at designated intervals. **Labelled 7/5/13**
Periodic Detention Centre	Mugga Lane, Symonston, ACT	V.O	Presume CR	2	No access to Safe	PDC2 Internal: Safe, may contain seal to door	Y	3	1	0	0	0	0	1	1	6	A4	1 unit		Label. Confirm status prior to maintenance. Re-inspect at designated intervals. **Labelled 7/5/13**
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 11924-7	NAD	-	Cement Sheet	PDC2 External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542 .1 August 2005	
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 1581-12	CH, AM, CR	3, 4	Asbestos cement sheet	PDC3 External: First Floor, soffits to Gable ends and above windows. Note: under-cloaking to roofing tiles may be present also.	N	3	1	0	0	0	0	1	1	6	A4	36 lin m	Ref Robsons Report 2542_12 September 2005	Labelled. Re-inspect at designated intervals. **Labelled 7/5/13**
Periodic Detention Centre	Mugga Lane, Symonston, ACT	Ref 2542-12-1	CH	5	Bitumen Product	PDC3 External: Vertical caulking to wall adjacent main entrance.	N	1	1	0	0	1	0	1	1	6	A4	3 x 3 lin m	Ref Robsons Report 2542_12 September 2005	Label and re-inspect at designated intervals.**Labelled 7/5/13**
Periodic Detention Centre	Mugga Lane, Symonston, ACT	CA7758	NAD	-	Cement Sheet	PDC3 External: To Girls Dormitory	-	0	0	-	-	-	-	-	-	0	-	-		
Periodic Detention Centre	Mugga Lane, Symonston, ACT	CA7760	NAD	-	Cement Sheet	PDC3 External: Soffits and Fascias to Cells 1-15	-	0	0	-	-	-	-	-	-	0	-	-	Note – no access to cement soffits above caged area to Girls dormitories / courtyard.	

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NATA
WORLD RECOGNISED ACCREDITATION

HAZARDOUS MATERIALS REGISTER AND MANAGEMENT PLAN PERIODIC DETENTION CENTRE MUGGA LANE SYMONSTON ACT

Prepared for: Justice and Community Safety Directorate
Project Ref: ENAURHOD06141AA
Report Date: 22 January 2013

Fieldwork by:	Written/Submitted by:	Reviewed/Approved by:
[redacted]		
[redacted] OHS Senior Project Manager (NSW/ACT)	[redacted] OHS Senior Project Manager (NSW/ACT)	[redacted] OHS Team Leader (NSW/ACT)

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coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

22 January 2013
Project Ref: ENAURHOD06141AA

Justice and Community Safety Directorate
Level 1, 10 Rudd St
Canberra ACT 2601

Attention: Justice and Community Safety Directorate
Adrienne McRae

Dear Adrienne

RE: Report - Hazardous Materials Register and Management Plan for Periodic Detention Centre, Mugga Lane, Symonston, ACT

Coffey Environments Australia Pty Ltd is pleased to present its report following an Hazardous materials survey and Management Plan of Periodic Detention Centre Mugga Lane, Symonston, ACT hereafter referred to as 'the site'.

Please note that all activities and services provided by Coffey Environments Australia Pty Ltd are subject to the Methodologies and Statement of Limitations contained within this report.

Please do not hesitate to contact the undersigned should you wish to discuss any aspect of the report.

For and on behalf of Coffey Environments Australia Pty Ltd

[redacted]

[redacted]
OHS Senior Project Manager
(NSW/ACT)

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LIST OF ATTACHMENTS

Appendices

EXECUTIVE SUMMARY

Coffey Environments Australia Pty Ltd conducted an Hazardous Materials survey of Periodic Detention Centre located at Mugga Lane, Symonston, ACT on 5 October 2012. The survey was undertaken to facilitate the identification and location of Hazardous Materials to accessible areas to enable management of Asbestos Containing Materials (ACM) and other Hazardous Materials at the site.

From the site survey and laboratory analysis results a register of Hazardous Materials and an Asbestos Management Plan (AMP) has been produced in accordance with the requirements of the Work Health and Safety Regulation 2011. This contract was completed by Coffey Environments on the basis of a defined program of work and terms and conditions agreed with the Client. We confirm that in preparing this report we have exercised all reasonable skill and care bearing in mind the project objectives, the agreed scope of works and prevailing site conditions.

Asbestos Containing Materials

No high Priority Asbestos Containing Materials (ACM) were identified at the time of the survey. Full details of the material assessments can be located within the register.

In accordance with current legislation [Work Health and Safety Regulation 2011] requirements, an Asbestos Management Plan (AMP) has been compiled with this survey. This AMP is to be maintained and made available with this report register at the work place for the use of Property managers, employers, workers, people intending to conduct business at the site and to Health and Safety representatives.

1 PURPOSE OF DOCUMENT

1.1 Document Retention

This document (i.e. Register of Hazardous Materials and Asbestos Management Plan) is to be held at the workplace and in the Premise's Property File. This register and AMP is to be available for use by the following:

- Authorised Work Cover Inspectors;
- Property owners;
- Employers and workers;
- People intending to conduct business at the premises; and
- Health and Safety Representatives.

Any contractor or service person required to undertake works at the premises must examine the Register of Hazardous Materials and determine whether their work activity will involve handling, replacing or potentially disturbing the materials as noted in the register. If ACM is identified at the site then the Asbestos Management Plan (AMP) must also be referred to.

Should a contractor or service person handle, replace or carry out works that may disturb an item in the Hazardous Material Register, there must be compliance with all workplace regulations and procedures covering the handling of such materials.

If the person conducting a business or undertaking (PCBU) with management or control of a workplace relinquishes management or control of the workplace, the person must ensure that the Hazardous Materials Register Report is given to the person/s that will be assuming management or control of the workplace.

1.2 Re-inspection and Review Requirements

In accordance to Work Health and Safety Regulation 2011, if there is ACM or suspected ACM identified at the time of the survey, then a site specific AMP has to be compiled to outline the management practices for the ACM at the site. Re-inspections of the ACM should be as specified within the AMP.

The Asbestos Materials Register must be maintained and updated if the following circumstances:

- If the AMP is under review;
- If further ACM is identified at the premises;
- If ACM is removed or encapsulated; and or
- If the condition of the ACM changes i.e. by being damaged physically or by weathering.

2 INTRODUCTION

Coffey Environments Australia Pty Ltd was commissioned by Justice and Community Safety Directorate to conduct an Hazardous Materials survey ('The Survey') of Symonston Periodic Detention Centre located at Mugga Lane, Symonston, ACT on 5 October 2012.

[redacted] of Coffey Environments carried out the inspection and Justice and Community Safety Directorate provided information regarding the site and its history. Other information was obtained from vendor manuals, standards, guidelines, regulations and other material available in the public domain.

The assessment was conducted on the basis of the condition of the materials at the time of inspection and the future anticipated activities at the site.

The scope of this investigation did not allow intrusive sampling techniques to be undertaken and therefore this report may only be used as a partial reference document for the purposes of demolition. Additionally the quantities provided in the Register (Section 4.2 – Asbestos Materials Register) in relation the Asbestos materials assessed are *estimates only* and therefore shall *not* be used as the basis for calling upon Tenders to cost for removal/remediation of the situation/s.

No inspection can be guaranteed to locate all Asbestos materials in a specific location and therefore this assessment cannot be regarded as absolute. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

2.1 Background

The site has not been previously assessed by Coffey Environments.

The purpose of the survey was to comply with current regulations and to identify hazards within the building to enable Asbestos materials to be managed.

2.2 Scope

The scope of work required Coffey Environments to:

- Mobilise a consultant to and from the site.
- Liaise with personnel and collect data on the history, use and function of the site.
- Conduct a standard sampling hazardous materials survey of the site, to locate asbestos containing materials (ACM's), lead paint systems, ozone depleting substances (ODS's), polychlorinated Biphenyls in light capacitors (PCB's) and damaged, high risk synthetic mineral fibre (SMF) in accessible areas.
- Collect samples of suspect asbestos and lead paint material (where accessible) and submit samples for laboratory analysis. Note: Only 'typical' suspected occurrences are to be collected and sampled (e.g. one in every same fire door / gasket will be analysed. ODS's, PCB's and damaged, high risk SMF identified on a visual basis only.
- Document the details of materials identified including photographs of any samples taken
- Record, collate and report the findings.
- Deliver one bound and one electronic report to the client.

The AMP to incorporate the following information:

- Asbestos Register to include;
  - Details of asbestos containing materials identified;
  - Assessment of risk associated with ACM, and
  - Control measures to mitigate these risks.
- Recommendations for the placement of labels and/or warning signs where not already affixed;
- Mechanisms for communication of the Asbestos Register;
- Information on the safe work procedures in relation to asbestos products at the premises;
- Management decisions relating to asbestos products at the premises;
- Arrangements for dealing with accidents, incidents or emergencies involving asbestos products;
- Timetable for managing risks including priorities and dates for reviewing risk assessments;
- Air monitoring arrangements at the premises;
- Responsibilities of site/management personnel; and
- Training requirements/arrangements for workers or contractors.

3 METHODOLOGY

Hazardous material surveys are undertaken considering a risk management approach, in accordance with best practice and recent State Government Legislation. An Occupational Health and Safety and Environmental risk assessment was conducted based on the condition of building materials identified during the survey and prioritised through Action Classifications, listed below.

The assessment involved the investigation for the presence of asbestos (ACM), Synthetic Mineral Fibre (SMF) (in friable and exposed condition), lead based paint systems (Pb), Polychlorinated Biphenyls (PCB) and Ozone Depleting Substances (ODS – (CFC, HCFC, HFC)). Information was collected from the owners/occupiers/tenants of the site on relevant issues pertaining to the site. Based on all the available data and the status of the site at the time of inspection, where items suspected of containing hazardous materials were identified, visual and/or analytical characterisation (where required) was performed and reported in this Hazardous Materials Register

Only 'typical' suspected asbestos material occurrences are inspected and sampled in accessible areas. Sampling is undertaken on a representative basis, for example, the inspection of one fire door of the same type within the same building is undertaken (i.e. not every 'matching' fire door is examined), unless specifically instructed. Furthermore, only one of each type of fluorescent light fitting is inspected and the details of the capacitor identified within is checked against the 1997 ANZECC register for the Identification of PCB-Containing Capacitors. Sample collection was performed in a non-destructive and non-invasive manner.

Standard sampling hazardous material surveys are restricted to areas that are reasonably accessible during the survey, with respect to the following:

a) Without contravention of relevant statutory requirements or codes of practice;

b) Without demolition or damage to finishes and structure; and

c) Excluding plant and equipment that was 'in service' and operational.

Where the Surveyor encounters access restrictions during the survey, these situations are documented and reported (Section 4.1 - Building Description and Access Details).

No assessment can be regarded as absolute. Future demolition or refurbishment of structures may reveal materials concealed during the assessment, therefore not accessible at the time of the Survey.

As detailed above, an assessment of the resultant risks has been prioritised through the use of Action Classifications (Section 5 - Glossary).

3.1 Asbestos Fibre Identification

Samples taken from suspected asbestos containing materials are representative of the material sampled, individually identified, transported, analysed and reported in accordance with the National Occupational Health and Safety Commission (NOHSC) Guidelines, relevant Statutory Regulations, Codes of Practice and Coffey Environments NATA endorsed Work Instructions. Laboratories undertaking analysis are appropriately NATA certified for the analysis conducted.

The presence of asbestos in a bulk sample is determined by Polarised Light Microscopy (PLM) with dispersion staining techniques.

4 RESULTS

4.1 Building Description and Access Details

Assessment Date:	5 October 2012
Address:	Mugga Lane, Symonston, ACT

DESCRIPTION

The Periodic Detention Centre located at Mugga Lane, Symonston, ACT consists of three separate buildings (PDC1, PDC2, PDC3) and a Workshop. Dog kennels are present behind PDC3.

PDC1 is a single level building of brick and concrete construction with cement eaves and a tiled roof. Internally has been refurbished throughout with gyprock ceilings, new floor coverings and MDF / Fibreboard in cell areas. The building is approximately 600m^2 in size and built circa 1975. The building at the time of the survey was not occupied.

PDC2 is a single level building of brick and concrete construction with cement eaves and a tiled roof. Internally has been refurbished throughout with gyprock / fibre free cement walls and ceilings, new floor coverings and wooden panelling in cell areas. The building is approximately 500m^2 in size and built circa 1991. The building at the time of the survey was not occupied.

PDC3 is a double level building of brick and concrete construction with cement eaves and a tiled roof. Internally has been refurbished throughout with gyprock ceilings, new floor coverings and fibre free cement in cell areas (Ground Floor was fully refurbished). The building is approximately 800m^2 in size and built circa 1962. The building at the time of the survey was not occupied.

The Workshop is a single level building of brick and concrete construction with cement eaves and a tiled roof. The Flammables Store is a green corrugated metal shed.

NO ACCESS AREAS

The following areas were not accessible at the time of the survey:

Roofs – height restriction;

Stores in Main Courtyard; and

Cell Areas – fixed fittings.

LIMITED ACCESS AREAS

The following areas had limited access at the time of the survey:

Ceiling voids – access restrictions.

This Register is to be read in conjunction with the whole report. Additional information is attached (Appendix D)

4.2 Hazardous Materials Register

For Action Classification, Material Descriptors and Register Terminology Coding please refer to Section 5-GLOSSARY

Assessment by:	[redacted]	**Date of inspection:**	5 October 2012
Site Contact:	JACSD	**Site Location:**	Mugga Lane, Symonston, ACT

REGISTER OF ASBESTOS CONTAINING MATERIALS

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
PDC1																	
No Asbestos Detected (NAD)																	
CA7745	NAD	-	Cement Sheet	External: Cement under-cloaking to eaves	-	0	0	-	-	-	-	-	-	0	-	-	
Ref 11924-4	NAD	-	Cement Sheet	External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542_1 August 2005
PDC2																	
Asbestos containing Materials																	
V.O	Presume CR	1	No access to Mains Switch Board	Internal: Mains Switch, may contain ‘zelemite’ board or flash pads.	Y	3	1	0	0	0	0	1	1	6	A 4	1 unit	

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
Label/sign locations and recommendations			Label. Confirm status prior to maintenance. Re-inspect at designated intervals.														
V.O	Presume CR	2	No access to Safe	Internal: Safe, may contain seal to door	Y	3	1	0	0	0	0	1	1	6	A 4	1 unit	
Label/sign locations and recommendations			Label. Confirm status prior to disturbance. Re-inspect at designated intervals.														
No Asbestos Detected (NAD)																	
Ref 11924-7	NAD	-	Cement Sheet	External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542_1 August 2005
PDC3																	
Asbestos containing Materials																	
Ref 1581-12	CH, AM, CR	3, 4	Asbestos cement sheet	External: First Floor, soffits to Gable ends and above windows. Note: under-cloaking to roofing tiles may be present also.	N	3	1	0	0	0	0	1	1	6	A 4	36 lin m	Ref Robsons Report 2542_12 September 2005
Label/sign locations and recommendations			Labelled. Re-inspect at designated intervals.														

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
Ref 2542-12-1	CH	5	Bitumen Product	External: Vertical caulking to wall adjacent main entrance.	N	1	1	0	0	1	0	1	1	6	A 4	3 x 3 lin m	Ref Robsons Report 2542_12 September 2005
Label/sign locations and recommendations			Label and re-inspect at designated intervals.														
No Asbestos Detected (NAD)																	
CA7758	NAD	-	Cement Sheet	External: To Girls Dormitory	-	0	0	-	-	-	-	-	-	0	-	-	
CA7760	NAD	-	Cement Sheet	External: Soffits and Fascias to Cells 1-15	-	0	0	-	-	-	-	-	-	0	-	-	Note – no access to cement soffits above caged area to Girls dormitories / courtyard.
Workshop & Flammables Store																	
No Asbestos Detected (NAD)																	
Ref 11924-6	NAD	-	Cement Sheet	External: Cement eaves	-	0	0	-	-	-	-	-	-	0	-	-	Ref Robsons Report 2542_1 August 2005

Assessment by:	[redacted]	**Date of inspection:**	5 October 2012
Site Contact:	JACSD	**Site Location:**	Mugga Lane, Symonston, ACT

REGISTER OF OTHER HAZARDOUS MATERIALS

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Extent of Damage	Surface Treatment	Occupant Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
PDC1													
Other Hazardous Materials Register													
SMF	V.O	Suspect positive	6	Insulation loose batts	Internal: Ceiling void / roof space	Y	G	Y	L	L	A4	~400 m^2	Present throughout.
SMF	V.O	Suspect positive	-	Insulation to Steibel HWU	Internal: Kitchen, to Steibel HWU	N	G	Y	L	L	A4	1 unit	
SMF	V.O	Suspect positive	-	Insulation to Dux Proflo HWU	External: Caged area, to Dux Proflo HWU	N	G	Y	L	L	A4	1 unit	
Pb	CA7746	Negative (0.001%)	-	Paint system (pale blue)	External: To concrete frontage	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7747	Negative (0.001%)	-	Paint system (yellow / orange)	External: To walls and eaves	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7748	Negative (0.014%)	-	Paint system (brown)	Internal: To doors and frames	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7749	Negative (0.002%)	-	Paint system (white)	External: To brick frontage & windows	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Extent of Damage	Surface Treatment	Occupant Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
ODS	V.O	Positive	7	Refrigerant (R22)	External: Rear caged area, Daikin Multi Air conditioner system	NA	G	Y	L	L	A4	1 unit	
ODS	V.O	Suspect positive	-	Refrigerant (R12)	Internal: Kitchen, Wurlitzer Drinks Cooler	NA	G	Y	L	L	A4	1 unit	Tag not visible, suspect R12 based on age appearance
ODS	V.O	Suspect positive	-	Refrigerant (R12)	Internal: Kitchen, Westinghouse Freestyle fridges	NA	G	Y	L	L	A4	2 units	Tag not visible, suspect R12 based on age appearance
ODS	V.O	Suspect positive	-	Refrigerant (R22)	External: Caged area, Daikin air conditioner units	NA	G	Y	L	L	A4	2 units	Tag not visible, suspect R22 based on age appearance
PDC2													
SMF	V.O	Suspect positive	8	Insulation loose batts	Internal: Ceiling void / roof space	Y	G	Y	L	L	A4	~400 m^2	Present throughout.
SMF	V.O	Suspect positive	-	Insulation loose batts	Internal: Wall void	Y	G	Y	L	L	A4	~400 m^2	Presume throughout.
SMF	V.O	Suspect positive	-	Insulation to Zip Hydroboil HWU	Internal: Kitchen, to Zip Hydroboil	N	G	Y	L	L	A4	1 unit	
SMF	V.O	Suspect positive	9	Insulation to Rheem HWUs	External: Caged area, Rheem HWUs	N	G	Y	L	L	A4	2 units	
SMF	V.O	Suspect positive	9	Insulation to pipe work	External: Caged area, to pipe work from Rheem HWUs	Y	G	Y	L	L	A4	-	Presume extends into building voids throughout.
SMF	V.O	Suspect positive	-	Insulation to Generator	External: To caged emergency generator	Y	G	Y	L	L	A4	1 unit	No access to confirm.
Pb	CA7749	Negative (0.002%)	-	Paint system (cream)	Internal: To brick wall in corridor	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Extent of Damage	Surface Treatment	Occupant Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
Pb	CA7750	Negative (0.004%)	-	Paint system (yellow)	External: To walkways / roads	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7751	Negative (0.001%)	-	Paint system (white)	External: To railings and guttering	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
ODS	V.O	Suspect positive	-	Refrigerant (R12)	Internal: Kitchen, Westinghouse fridge	NA	G	Y	L	L	A4	1 unit	Tag not visible, suspect R12 based on age appearance
ODS	V.O	Suspect positive	10	Refrigerant (R22)	External: Caged area, Temperzone air conditioner units	NA	G	Y	L	L	A4	2 units	Tag not visible, suspect R22 based on age appearance
ODS	V.O	Negative	-	Refrigerant (R410a)	External: Caged area, Acton air conditioner unit	NA	-	-	-	-	-	1 unit	Non ODS
PDC3													
SMF	V.O	Suspect positive	12	Insulation loose batts	Internal: Ceiling void over Reception	Y	G	Y	L	L	A4	-	Presume throughout.
SMF	V.O	Suspect positive	-	Insulation to Zip Miniboil HWU	Internal: Kitchen, to Zip Miniboil	N	G	Y	L	L	A4	1 unit	
SMF	V.O	Suspect positive	-	Insulation to Birko HWU	Internal: Girls Communal Kitchen, to Birko HWU	N	G	Y	L	L	A4	1 unit	
Pb	CA7753	Negative (0.33%)	-	Paint system (green)	External: To guttering, down pipes & walls	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7754	Negative (0.001%)	-	Paint system (red / brown)	External: To cladding to entrance	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Extent of Damage	Surface Treatment	Occupant Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
Pb	CA7755	Negative (0.009%)	-	Paint system (cream)	Internal: To Courtyard walls cells 1-6	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7756	Negative (0.25%)	-	Paint system (grey)	Internal: To cage over Girls courtyard	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7757	Negative (0.001%)	-	Paint system (cream)	Internal: To metal security doors in Booking In area	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7759	Positive (4.8%)	13	Paint system (pale blue)	Internal: Layered paint system to doors in Courtyard	NA	Av	Y	L	M	A3	~6 m^2	Encapsulate flaking paint
Pb	CA7761	Negative (0.002%)	-	Paint system (blue)	Internal: To Cell doors and windows	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Pb	CA7762	Negative (0.001%)	-	Paint system (grey)	Internal: To Cell internals	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
ODS	V.O	Suspect positive	-	Refrigerant (R12)	Internal: Girls Kitchen, Wurlitzer Drinks Cooler	NA	G	Y	L	L	A4	1 unit	Tag not visible, suspect R12 based on age appearance
ODS	V.O	Suspect positive	15	Refrigerant (R22)	External: Roof, Daikin AC units	NA	G	Y	L	L	A4	4 units	Tag not visible, suspect R22 based on age appearance
ODS	V.O	Suspect positive	14	Refrigerant (R22)	Internal: Courtyard, Daikin AC unit	NA	G	Y	L	L	A4	1 unit	Tag not visible, suspect R22 based on age appearance
ODS	V.O	Positive	16	Refrigerant (R22)	External: Grounds, Daikin AC unit	NA	G	Y	L	L	A4	1 unit	

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Extent of Damage	Surface Treatment	Occupant Activity	Risk Score	Action	Quantity (m, m^2, m^3)	Comments
ODS	V.O	Negative	-	Refrigerant (R410a)	External: Grounds, Power Inverters	NA	-	-	-	-	-	2 units	
ODS	V.O	Negative	-	Refrigerant (R134a)	Internal: Westinghouse fridges	NA	-	-	-	-	-	2 units	
ODS	V.O	Negative	-	Refrigerant	External: First Floor bedroom Toshiba Inverter ACs	NA	-	-	-	-	-	-	
Workshop													
SMF	V.O	Suspect positive	11	Insulation loose batts	Internal: To Tool Store	Y	G	Y	L	L	A4	~6 m^2	Present throughout.
Pb	CA7752	Negative (0.045%)	-	Paint system (cream)	Internal: To redundant cell doors	NA	-	-	-	-	-	-	Less than Australian standard for lead containing paint of 1.0%
Flammables Store													
No suspected SMF, Pb paint, PCB or ODS containing materials identified in accessible areas at the time of the survey													

5 GLOSSARY

Coffey Environments adopt the following material and location assessment algorithms in order to assess the risks associated with individual asbestos containing materials located;

ASBESTOS REGISTER SECTION

Friable

Variable	Score	Description
Friable	Y	Asbestos cement debris, or material which when dry may become crumbled, pulverised or reduced to powder by hand pressure.
	N	Bonded i.e. non-friable material

Materials Assessment

Variables	Scores	Examples of Score Descriptions
Asbestos Type	0	No asbestos
	1	Chrysotile only
	2	Amphibole asbestos (excluding crocidolite)
	3	Crocidolite
Product Type	0	No asbestos detected
	1	Bonded asbestos in good condition
	2	Friable asbestos in good condition or cement in poor condition
	3	Friable asbestos in poor condition
Extent of Damage	0	No visible damage
	1	Minor scratches or mark, broken edges
	2	Significant breakage, many small areas of damage to friable material
	3	High damage, visible debris
Surface Treatment	0	Bonded Asbestos including encapsulated asbestos cement
	1	Enclosed laggings, sprays and boards or bare cement
	2	Bare board or encapsulated lagging/spray or cement debris
	3	Unsealed lagging/spray

Location Assessment

Variables	Scores	Examples of Score Descriptions
Occupant Activity	0	Rare disturbance, e.g. little used store room
	1	Low disturbance, e.g. Office type activity
	2	Periodic disturbance, e.g. industrial or vehicular activity which may contact ACMs
	3	High levels of disturbance e.g. fire door with AIB sheet in constant use
Likelihood of Disturbance	0	Usually inaccessible or unlikely to be disturbed
	1	Minimal likelihood for disturbance
	2	Likely disturbance
	3	Frequent disturbance
Human Exposure Potential	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
Maintenance Activity	0	Minor disturbance (e.g. possibility of contact when gaining access)
	1	Low Disturbance (e.g. changing light bulbs in AIB ceiling).
	2	Medium disturbance (e.g. lifting one or two ceiling tiles to access a valve)
	3	High level of disturbance (e.g. moving a number of AIB ceiling tiles to replace a valve or for re-cabling)

Risk Score

The **asbestos containing material** risk score is a quantitative assessment determined by the sum of the scores based on the Materials and Location Assessments; i.e. Risk score = Material Score + Location Score (out of as possible 24).

Should no asbestos be detected then the register will indicate a risk score of 0.

Variable	Scores	Examples of Score Descriptions
Risk Score	0 - 6	Very Low Risk - Action Score A4
	7 - 12	Low Risk – Action Score A3
	13 - 18	Medium Risk – Action Score A2
	19 - 24	High Risk – Action Score A1

OTHER HAZARDOUS MATERIALS REGISTER SECTION

Coffey Environments adopt the following material and location assessment algorithms in order to assess the risks associated with individual **hazardous materials other than asbestos** located;

Friable

Variable	Score	Description
Friable	Y	Unsealed SMF
	N	Sealed SMF
	NA	Applicable to ODS, PCB, Lead in paint

Material Assessment

Variable	Score	Examples of Score Descriptions
Extent of Damage	G	Good condition
	Av	Average condition
	P	Poor condition
Surface Treatment	Y	Sealed
	P	Part sealed
	N	Not sealed

Location Assessment

Variable	Score	Examples of Score Descriptions
Occupant Activity	H	High traffic area
	M	Medium traffic area
	L	Low traffic area

Risk Score

The **hazardous materials other than asbestos** risk score is a qualitative assessment determined by the combination of Material and Location Assessments. Depending on the material one or all of these criteria may be used in assessing the recommended Action.

Variable	Score	Examples of Score Descriptions
Risk Score	L	Low exposure risk
	M	Medium exposure risk
	H	High exposure risk

ACTIONS FOR ASBESTOS MATERIALS

Following the assessment for both asbestos containing materials an action score is assigned. For asbestos containing materials this will be assigned according to the risk score associated with the material.

Action

A1	**Action 1**	**Restrict access and remove**
		As a guide, the material conforms to one, or more, of the following: Friable or poorly bonded to substrate, located in accessible areas Severely water damaged, or unstable Further damage or deterioration likely Friable asbestos material located in air conditioning ducting Asbestos debris and stored asbestos in reasonably accessible areas Post removal of A1 item, update Asbestos Materials Register and Asbestos Management Plan
A2	**Action 2**	**Remove or enclose, encapsulate / seal and Label – Re-inspect according to Asbestos Management Plan**
		As a guide, the material conforms to one, or more, of the following: Damaged material In reasonably accessible area Friable material or poorly bonded to substrate, with bonding achievable Possibility of disturbance through contact Possibility of deterioration caused by weathering Post encapsulation of A2 item, update Asbestos Materials Register and Asbestos Management Plan
A3	**Action 3**	**Remove during refurbishment or maintenance and Label – Re-inspect according to Asbestos Management Plan**
		As a guide, the material conforms to one, or more, of the following: Asbestos debris or stored material in rarely accessed areas Further disturbance or damage unlikely other than during maintenance or service Readily visible for further assessment Asbestos CAF Gaskets Asbestos friction materials and brake linings
A4	**Action 4**	**No remedial action, Label – Re-inspect according to Asbestos Management Plan**
		As a guide, the material conforms to one, or more, of the following: Firmly bonded to substrate and readily visible for inspection Inaccessible and fully contained Stable and damage unlikely

Acronyms

ACM	Asbestos containing material
NOHSC	National Occupational Health and Safety Commission
AMP	Asbestos Management Plan
V.O	Visual Observation
NATA	National Association of Testing Authorities, Australia
PLM	Polarised Light Microscopy
SEM	Scanning Electron Microscopy
EDAX	Energy Dispersive X-ray Analysis
CH	Chrysotile Asbestos
CR	Crocidolite Asbestos
AM	Amosite Asbestos
NAD	No Asbestos Detected

Definitions

Accredited Laboratory – means a testing laboratory accredited by NATA (National Association of Testing Authorities, Australia).

Air Monitoring – means atmospheric sampling for airborne contaminants including asbestos and SMF fibres or lead dust to assist in assessing human exposure and the effectiveness of control measures. This includes exposure monitoring, clearance monitoring (asbestos) and control monitoring.

Appropriately Qualified Person – means the person possesses the qualifications and experience necessary to find hazardous materials in a building.

Approved Respirator - A respirator which complies with AS/NZS 1716 - Respiratory Protective Devices.

Approved Vacuum Cleaner - Vacuum cleaning equipment that passes all extracted air through a High Efficiency Particulates Air (HEPA) filter before the air is discharged into the atmosphere and conforms to the relevant requirements of the AS 3544 - Industrial Vacuum Cleaners for Particulates.

Asbestos – fibrous form of those mineral silicates that belong to the serpentine or amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos) and tremolite.

Asbestos Containing Material (ACM) – means any material, object, product or debris containing asbestos.

Asbestos Removalist – means a person whose business or undertaking includes asbestos removal work or a self employed person whose work includes asbestos removal work.

Asbestos Removal Control Plan – A site specific document to be prepared by the removal contractor based on the information in the National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005 (under review to be replaced by the National Code of Practice *How to Safely Remove Asbestos (Safe Work Australia 2011))*.

Asbestos Work - means work undertaken in connection with a construction work process in which exposure to asbestos may occur and includes any work process involving the use, application, removal, mixing or other handling of asbestos or asbestos-containing material.

Asbestos Removal Work – means work undertaken to remove friable or bonded asbestos containing material.

Asbestos Work Area – means the immediate area in which work on ACM is taking place. The boundaries off the work area must be determined by a risk assessment.

Bonded asbestos material - means any material (other than friable asbestos material) that contains asbestos.

Bonded asbestos removal work - means work in which bonded asbestos material is removed, repaired or disturbed.

Clearance Inspection – means a mandatory visual inspection carried out by a competent person to verify that an asbestos work area has been rendered free of visible asbestos contamination and is safe to be returned to normal use after work involving the disturbance of ACM has taken place. A clearance inspection must include a visual inspection, and may also include clearance air monitoring and/or settled dust sampling.

Clearance Monitoring – means air monitoring using static or positional samples to measure the level of airborne asbestos fibres in an area following work on ACM. An area is cleared when the level of airborne asbestos fibres is measured as being below 0.01 fibres/ml.

Construction Work - include all work performed in or in connection with the installation, erection, repair, cleaning, painting, renewal, renovation, dismantling, maintenance, ornamentation or demolition of buildings, ships, structures, pipes, plant, machinery, parts, artefacts, appliances, or tools or parts thereof.

Control Actions - In the process of implementing hazardous building materials management, it is fundamental that any identified situations have control actions determined to prevent personnel from being placed at risk.

Control Monitoring – means air monitoring using static or positional to measure the level of airborne asbestos fibres in an area during work on ACM or airborne lead dust in an area of lead paint removal. Control monitoring is designed to assist in assessing the effectiveness of control measures. Its results are not representative of actual occupational exposures and should not be used for that purpose.

Exposure Standard (TWA) - represent the National Occupational Health and Safety Commission (NOHSC) maximum exposure level by inhalation of airborne concentration of atmospheric lead over an eight-hour day, for a five-day working week, over an entire working life and expressed as 8-hour TWA

(Time weighed average). The TWA do not represent 'no-effect' levels which guarantee protection to every worker.

Friable Asbestos Containing Material – means asbestos containing material that, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.

Hazard – means any matter, thing, process, or practice that may cause death, injury, illness or disease.

HEPA - High Efficiency Particulate Air. A filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micron in diameter or larger.

Membrane Filter Method - is the technique outlined in the NOHSC *Guidance Note on the Membrane Filter Method for Estimating Method Airborne Asbestos Fibres 2nd Edition* [NOHSC:3003 (2005)].

National Association of Testing Authorities, Australia (NATA) – the organisation that approves the method of sampling for airborne asbestos fibres, bulk sample analysis of asbestos-containing materials and hazardous materials inspections.

NOHSC - National Occupational Health and Safety Commission.

PPE/RPE - Personal / Respiratory Protective Equipment.

PM – Project Manager of the asbestos removal job. If a Principal Contractor has been appointed the Project Manager of the Principal Contractor, if no PM appointed then the owner is the Project Manager.

Person in charge of area - The person in charge of the building or area affected by the asbestos removal.

Restricted Area - A location requiring an Access/Work Permit because unprotected activity to undertake the intended purpose may expose a person to hazardous respirable (airborne) asbestos fibre. For example: Drilling a switch board containing asbestos; entry to a ceiling space containing asbestos or lead dust; entry to a riser shaft containing asbestos; access onto a fragile asbestos cement roof; a cupboard containing asbestos pipe lagging.

Risk – means the likelihood of a hazard causing harm to a person.

Safe Work Australia - An independent statutory agency responsible to improve occupational health and safety and workers' compensation arrangements across Australia.

6 RECOMMENDATIONS AND REMOVAL OF ASBESTOS CONTAINING MATERIALS

6.1 Asbestos Materials Identified

The recommendations, conclusions or stability of asbestos materials contained in this report shall not abrogate a person of their responsibility to work in accordance with Statutory Requirements, Codes of Practice, Guidelines, Material Safety Data Sheets, Work Instructions or reasonable work practices.

In accordance with current legislation [Work Health and Safety Regulation 2011] requirements, an Asbestos Management Plan (AMP) has been compiled with the findings of this survey. The AMP is to be maintained and made available with this Hazardous Materials Register Report at the work place for the use of property owners, employers, workers, people intending to conduct business at the site and to Health and Safety representatives. Legislation requires that any Asbestos identified in the workplace, be clearly indicated. Labels are required to state the presence of Asbestos and the number and position be determined by a competent person. Signs must comply with AS 1319 Safety Signs for the Environment.

6.1.1 Friable & Bonded Asbestos

No Friable ACM was identified to accessible areas at the time of the survey.

Bonded ACM was identified to accessible areas at the time of the survey.

6.2 General

A detailed site specific Asbestos Removal Control Plan is to be developed by the asbestos removalist prior to commencing the ACM removal work and a copy must be given to the person who commissioned the work and be readily accessible on-site to PCBU, workers, their health and safety representatives and any occupants. Any ACM removal work shall be performed by a reputable, licensed asbestos materials removalist, in accordance with the National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005 (under review to be replaced by the National Code of Practice *How to Safely Remove Asbestos (Safe Work Australia 2011))*. Where applicable the regulator will be notified in writing five days prior to the commencement of the works.

6.3 Asbestos

Asbestos containing materials (ACM) are referred to as either friable or bonded.

Friable asbestos is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friable asbestos includes materials such as sprayed and thermal insulation, pipe lagging, millboard and gaskets, and can release fibres with only minimal disturbance.

Bonded asbestos products are ones in which the asbestos fibres are bound within the matrix of the material. Bonded asbestos is difficult to damage or cause the release of fibres by hand and includes materials such as asbestos cement sheeting (fibre cement or fibro), vinyl floor tiles and ‘zelemite’ electrical switchboards. However, bonded asbestos containing materials that have been subjected to weathering, physical damage, water damage, fire or other conditions may contain exposed fibres which could be released upon disturbance.

Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance. As such removal and replacement would be the preferred option if such materials were found in accessible areas or air conditioning systems on the property.

Alternatively removal and replacement may not be the preferred option for bonded ACM in a good and stable condition as the risk associated with removal could be high (as in the case of only partial demolition of structures on site).

6.3.1 Licence requirements for asbestos removal work

It is a requirement that a Class B licensed contractor is engaged to remove any amount of bonded ACM greater than $10m^2$ and a Class A licensed contractor is engaged to remove any quantity of friable ACM or bonded ACM greater than $10m^2$. However, it is recommended that an appropriately licensed contractor is utilised to remove all ACM's.

6.3.2 Air monitoring requirements for asbestos removal work

Asbestos air monitoring is *mandatory for all friable removals* and should be undertaken by an independent Class A Licensed Asbestos Assessor. Air monitoring is also to be considered when more than $10m^2$ of bonded ACM is removed to ensure control methods are adequate and also where the removal is being undertaken in or next to a public location.

6.3.3 Asbestos Permit to Work

If it is determined, after consultation with the asbestos register, that ACM is present in the vicinity of planned works, an Asbestos Permit to Work (PTW) will be required.

The Asbestos PTW is designed to ensure appropriate work practices are employed in the vicinity of ACM. The Asbestos PTW will document what ACM is to be removed, encapsulated or otherwise protected prior to the contracted maintenance or building works proceeding. The Asbestos PTW will also indicate other requirements such as the need for personal protective equipment (PPE), barricading and airborne fibre monitoring.

An Asbestos PTW will only be issued to competent, licensed (class A or B) asbestos removalists. When the work is completed, the permit will be signed and returned to the permit officer who will cancel it after ensuring that a clearance certificate is provided. The Building Manager will retain copies of all Asbestos PTW removal plans, JSEAs and work method statements with the site asbestos register.

Refer to APPENDIX B for an example of an Asbestos Permit to Work Form.

6.3.4 Control measures

The selection of the most appropriate control measure is determined from risk assessments and detailed knowledge of the workplace and activities. The following general principles may be therefore applied:

- If the ACM is friable, in a poor/unstable condition and accessible with risk to health from exposure, immediate access restrictions should be applied and removal is required as soon as practicable using a licensed removalist;

- If the ACM are friable but are in a stable condition (e.g. rope seals) and are accessible, serious consideration should be given to their removal. If removal is not immediately practicable, short-term control measures, such as sealing, enclosure or similar and labelling may be able to be used until removal is possible;
- If the ACM are not friable and are in a good, stable condition (e.g. cement panel) minimising disturbance, ongoing maintenance and periodic inspection would be appropriate controls. All damaged edges should be appropriately sealed and the installation labelled;
- All known or suspected ACM remaining on site should be appropriately labelled, where possible, and regularly inspected to ensure they are not deteriorating resulting in a potential risk to health;
- Prior to any demolition, partial demolition, renovation or refurbishment, asbestos containing materials likely to be disturbed by those works should be removed in accordance with the National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005 (under review to be replaced by the National Code of Practice *How to Safely Remove Asbestos (Safe Work Australia 2011))*.

If any unknown ACM's are discovered during any works on the property or there is a change in the condition of the known ACM situations all work should be stopped immediately and the building/project manager notified. A Licensed Asbestos Assessor should be engaged to assess the potential risk from the materials, undertake asbestos air monitoring to determine the potential for further contamination from the materials and advise of the appropriate control measures.

It is the responsibility of the contractor undertaking any works on ACM to ensure:

- Workers who may be exposed to ACM are sufficiently protected to avoid personal injury or harm and to prevent asbestos fibre becoming airborne which may potentially contaminate other areas or affect others;
- Ensure there is project supervision by responsible persons to ensure employee exposure assessments, air monitoring, hygiene facilities, work barriers etc are in place;
- Undertake project specific risk assessment of potential employee exposure to asbestos fibres and work methods to reduce the potential exposure to asbestos;
- Provide appropriate PPE and RPE such as P2 respirator (minimum), disposable coveralls, gloves and booties;
- Obtain appropriate license to undertake the removal/ remedial works;
- Maintain documentation including building permits, safety plans, work processes and environmental controls;
- Utilise appropriately trained employees;
- Undertake all work activities to protect the health of employees, tenants and members of the general public;
- Inform the PCBU, workers, the person who commissioned the work, and any occupants in the vicinity of the workplace of any potential hazards associated with the work activities;
- Written evidence of employee training and information;
- Provision of adequate ventilation (where applicable); and

- Transport and handle all ACM as contaminated waste and dispose at a licensed contaminated waste disposal facility.

Storage and Disposal of Asbestos

All asbestos waste shall be double bagged, using 200 ¯m (0.2 mm) thick polyethylene bags. Asbestos waste shall be bagged once at the workface and a second time away from the workface but prior to leaving the removal area enclosure. It is recommended that a maximum bag size of 1200 mm (length) x 900 mm (width) be used. Bags should be filled to no more than 50 per cent capacity, and contents should be wet before sealing. Consistent with good manual handling practice, bags should not exceed 16 kg in weight. The bags must be decontaminated before they are placed in waste bins. Each bag shall be labelled in accordance with Globally Harmonised System of Classification and Labelling of Chemicals (GHS) requirements on its outermost surface, with the following warning statement:

DANGER

ASBESTOS WASTE

DO NOT INHALE DUST

MAY CAUSE LUNG CANCER

Alternatively, other approved containers may be used. If waste bags are not suitable then the ACM is to be sealed in double lined heavy duty plastic sheeting before they are placed into the skip or for non-friable ACM they may be placed directly into the waste bin that has been double lined with heavy duty plastic sheeting (200 ¯m minimum thickness) but it must be kept damp to minimise the release of airborne asbestos fibres. To comply with GHS requirements the top and side of each bin or container should be labelled with the words ‘Danger: Asbestos do not break seal’.

6.3.5 Project Supervision

Prior to the removal of any high risk ACM a Class A Licensed Asbestos Assessor with experience in asbestos materials removal works, shall be engaged, at the cost of the project, to work independently of the asbestos removal contractor. The assessor will be responsible for ensuring the asbestos materials removal contractor achieves a satisfactory level of workmanship, and complies fully with statutory requirements and the requirements of the technical specification.

Commensurate with the above requirements, the specific duties of the supervising assessor may include:

- Inspection of the integrity of the containment prior to commencement of asbestos removal works;
- Inspection of the asbestos materials removalist's equipment, including but not limited to decontamination and negative air units, water filtration systems, vacuum equipment, personal protective equipment (PPE);
- Assessment of the asbestos removalist's work methods, use and maintenance of PPE/RPE and decontamination procedures;
- Clearance visual inspection of the work area after the removal of ACM to ensure the ACM has been removed to a satisfactory standard; and
- Organising air monitoring and developing the air monitoring requirements for the particular ACM removal.

The Project Manager is to notify the Site Manager, Workers, Health and Safety Representatives, Contractors, Building Occupants and others providing details of the date, time and location of the removal works before they start as well as ensuring the Asbestos Removal Control Plan is adequate for the works to be undertaken.

7 RECOMMENDATIONS AND REMOVAL OF HAZARDOUS MATERIALS

7.1.1 Synthetic Mineral Fibre

Un-bonded or bonded SMF that has severely deteriorated has the potential of becoming airborne. Health effects that may occur with exposure to certain SMF materials include; irritation of the skin, eyes and upper respiratory tract. As such removal and replacement would be the preferred option if such materials were found in accessible areas or air conditioning systems.

The selection of the most appropriate control measure should be determined from risk assessments and detailed knowledge of the workplace and activities. The following general principles may be applied:

If the SMF is un-bonded or deteriorated, in a poor/unstable condition and accessible with risk to health from exposure, immediate access restrictions should be applied and removal is required as soon as practicable.

If the SMF is un-bonded or deteriorated, in a poor/unstable condition but in inaccessible areas (i.e. Ceiling space), removal is preferred. However, if removal is not immediately practicable, short-term control measures (i.e. restrict access, or provide personal protective equipment to personnel required to access the area etc) may be employed until removal can be facilitated.

If the SMF is bonded and in a poor/unstable condition; minimising disturbance and removal or encapsulation may be appropriate controls.

For bonded SMF in a good and stable condition, ongoing maintenance and periodic inspection to ensure they are not deteriorating would be appropriate controls.

Prior to any demolition, partial demolition, renovation or refurbishment, synthetic mineral fibre materials likely to be disturbed by those works should be removed in accordance with the NOHSC Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006 (1990)].

Further assessment of risk through airborne fibre monitoring can assist with decisions on the most appropriate, and urgency of, control measures.

7.1.2 Ozone Depleting Substances (Refrigerants)

CFCs and HCFCs -Air-conditioning systems were identified as containing refrigerants.

When CFC or HCFC refrigerants are in use, the following points should be considered:

1. What type of refrigerants are being used,
2. The loss rate of refrigerant,
3. What is the remaining economic life of the equipment?

Control strategies for CFC and HCFC refrigerants include:

CFC and HCFC based equipment should be made leak free (note that domestic refrigerators are leak free) where feasible;

CFC and HCFC based equipment should be converted/retrofitted or replaced with equipment using ozone benign refrigerants where feasible; and

A licensed contractor who will recycle and reuse the refrigerant should decommission CFC and HCFC based equipment that is being disposed of.

7.1.3 Lead Paint

The selection of the most appropriate control measure should be determined from risk assessments and detailed knowledge of the workplace and activities. The following general principles may be applied:

Regardless of condition, immediate access restrictions should be applied and removal undertaken if the lead-based paint is located in areas that are likely to be chewed or licked by children, knocked or are subject to friction.

If the lead-based paint is flaking or chalking, or in a poor/unstable condition (and not located in areas as described above), repainting is required as soon as practicable. However, the surface will need to be prepared by a light wet sanding with wet-and-dry sandpaper to help the paint stick to the surface. Take care not to generate lead dust or contaminate the areas with water from the wet-sanding process.

Lead-based paint in good condition (and not located in areas as described above), should be left in place, unless major renovation and comprehensive removal is planned.

Painting over lead-based paint is a temporary solution limited by the life of the paint. Alternatives to painting or the removal of lead-based paint include encapsulating the paint with other materials.

7.1.4 Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are a group of organic compounds with variable chlorine substitution on a biphenyl backbone. The chemical properties of these products, namely a very high dielectric constant, low chemical reactivity and an extremely long life make these substances ideal for some industrial applications. These substances are very hydrophobic and are preferentially taken up into and stored in fat deposits for life. Once in the body they can cause a range of long term health problems including cancer. PCBs have been used widely in the electrical industry but would be encountered in our working environment in older buildings in the form of small capacitors fitted to fluorescent lights and electric motors in ceiling fans and occasionally within electrical cabinets.

As such the PCBs are within a “closed system”, that is, entirely contained within a small sealed metal box and would pose no risk whatsoever unless the material is released from the capacitor as a result of leakage or rupture. PCBs appear as a colourless to straw/yellow oily substance. If they have been overheated the colour may darken to brown. Any substance of such an appearance occurring under fluorescent lights should be treated with caution and investigated. Non leaking capacitors in good order can be left in place. Regular inspection should be made to check for oil leaks under fluorescent lights and leaking capacitors should be replaced by a tradesman.

8 RESPONSIBILITIES

This AMP is designed to be integrated into the existing JACSD maintenance and operations programs. It is critical to the AMP that all people involved in the management and functioning of the site are adequately informed and trained in the purpose and use of the AMP.

The key personnel responsible for the implementation and maintenance of the AMP include:

- Person conducting a business or undertaking (PCBU) with management or control of a workplace,
- Engineering/Facilities/Maintenance/Asset Managers (referred to in the table below as FM).

Others required to comply with directives of the AMP include:

- Contractors and trades staff,
- Staff, their Health and Safety Representatives and visitors.

Responsible Person/s	Action
PCBU with management or control of a workplace / FM	Commission reviews of asbestos registers and the Asbestos Management Plan, including updates in legislative requirements as necessary. Include all ACM in the review if changes to conditions occur.
PCBU with management or control of a workplace / FM	Ensuring the content within the AMP is reviewed and updated following any changes in the workplace or work practices.
PCBU with management or control of a workplace / FM	Populating the action program within the AMP and coordinating the actions required.
PCBU with management or control of a workplace / FM	Commission the inspection and identification (including labelling and re-inspections) of asbestos materials and other hazardous building materials at required frequencies.
PCBU with management or control of a workplace / FM	Ensure procedures are in place for the control of contractors or personnel who may come into contact with ACM during the course of their work.
Site Manager	Ensure on-site adherence to procedures in place for the control of contractors or personnel who may come into contact with ACM's during the course of their work.

Responsible Person/s	Action
Site Manager	Ensure that the Register is made available to contractors or workers requiring such information as part of their work.
PCBU with management or control of a workplace / FM	Ensure resources and support are made available to the site controllers/tenants to initiate and progress AMP issues.
PCBU with management or control of a workplace / FM	Liaising with site controllers/tenants and providing immediate response to emergency situations involving asbestos.
PCBU with management or control of a workplace / FM	Ensuring communication and training strategies are in place as necessary for contractors and relevant personnel.
PCBU with management or control of a workplace / FM	Liaise with other responsible personnel on relevant matters relating to asbestos materials management and ensure that all concerns about asbestos are dealt with in a timely and satisfactory manner.
PCBU with management or control of a workplace / FM	Ensure that the necessary asbestos materials work methods, control measures and safety standards meet the required standard.
PCBU with management or control of a workplace / FM	Ensure that licensed contractors are engaged (as per National Regulations) for 'friable' asbestos work and competent contractors are engaged for the maintenance or removal of other asbestos products. Ensuring the contractor has obtained necessary approvals from the regulatory authorities prior to such work.
Site Manager	Provide an immediate response to emergency situations or incidents involving asbestos.
PCBU with management or control of a workplace / FM	Consulting with all relevant stakeholders regarding proposed and existing asbestos materials control measures or unplanned disturbance to those materials.
PCBU with management or control of a workplace / FM	Ensuring that employees/site controllers/tenants and other stakeholders at the Subject Site have been suitably informed and consulted with regarding asbestos materials, risks, safety precautions and adopted control measures.

Responsible Person/s	Action
PCBU with management or control of a workplace / FM	Maintain the Register, air-monitoring records, identification analyses records, records of asbestos control and removal, and ensure the AMR are updated following any site inspections and/or remedial works.
PCBU with management or control of a workplace / FM	Ensure a current copy of the Register and all required site documentation are maintained in a current and readily accessible condition for viewing by stakeholders.
Site Manager	Ensure that a risk assessment is conducted for any operation that is possible to disturb asbestos building materials.
Site Manager	Arrange or undertake site inductions for staff and contractors, and provide advice, training and consultation (internally or externally) to personnel regarding asbestos materials issues, if required.
Site Manager	Audit asbestos management procedures and assist with reviews of the AMP.
Site Manager	Providing all necessary information and instruction to contractors attending and working on site in relation to asbestos materials hazards, control measures and required work procedures.
Site Manager	Ensure all incidents involving the actual or potential exposure of persons to asbestos are immediately reported and investigated and that recommendations are closed out.
Contractor	Consult with the Subject Site Supervisor/tenant on entering the Subject Site. Look after their own safety and health, and the safety and health of other employees and contractors. Ensure that they carry out their work in compliance with relevant legislation and the organisation's safe work methods and demonstrate an acceptable level of safety performance. Ensure that the right person is employed for each job, taking into account the type of work to be performed, the licences, training, certificates and qualifications required. Immediately report any incident, injury, or hazards and any incidents of non-compliance with the AMP that has or may have occurred. Not to impact on any asbestos material without complying with the AMP. To bring to the attention of the Site Supervisor any suspect material. Refer to AMP for guidance to identify, manage, and remove asbestos and other hazardous building materials. Submit Risk Assessments and Health, Safety and Environment Plans when

Responsible Person/s	Action
	performing asbestos materials removal work. Undergo Contractor Induction. Develop a site specific asbestos removal control plan prior to performing the removal work.
All Workers, their health and safety representatives, tenants and visitors	Ensuring they are familiar with the AMP as necessary. Supporting facilitated activities relating to ACM management. Comply with the AMP. Not to impact on any asbestos materials. Report asbestos related hazards. Protect themselves and others in the Subject Site.

8.1.1 Risk Action

Should materials of unknown composition, or materials suspected of containing asbestos be encountered on site and are not documented in the existing asbestos register, such materials should be treated as if they are ACM until sampled and NATA accredited laboratory analysis confirms otherwise. In the event that additional ACM are identified, a risk assessment shall then be conducted by an appropriately qualified and competent person. For example, in the event that demolition or refurbishment works are to be carried out in areas previously not inspected for the presence of ACM - such as inaccessible wall cavities or beneath floors, an inspection and risk assessment should be performed by a competent person prior to the commencement of the planned demolition/refurbishment works.

The risk assessment of the ACM is to be reviewed when:

- The AMP is reviewed;
- Further asbestos or ACM is identified at the Workplace;
- There is evidence that control methods are not effective;
- A significant change is proposed for the workplace or for work practices or procedures relevant to the risk assessment such as major refurbishment or demolition;
- There is a change in the condition of the ACM;
- The asbestos material has been removed from or disturbed, enclosed or sealed.

The frequency of the inspections will also take into consideration whether the ACM:

- Has a high propensity to release airborne asbestos fibres;
- Is in poor condition;
- Is likely to be damaged or further deteriorate;

- Likely to be disturbed due to work practices in the Workplace;
- Is in an area where workers are exposed to the material.

In any case a risk assessment review for asbestos is to be conducted at least once every five years to ensure it is kept up-to-date. This is to be organised by PCBU with management or control of a workplace and must be performed by a Competent Person.

9 MANAGING IN-SITU HAZARDOUS BUILDING MATERIALS

9.1 General

The management of in-situ ACM is important to ensure ACM are not disturbed or deteriorate to such an extent that staff and tenants, external contractors or visitors are unnecessarily exposed to airborne asbestos fibres.

The requirements of the contractor site induction will aid in the management of in situ ACM. Asbestos materials works issues should also be incorporated into building works contracts, designed to ensure any asbestos materials on, or in the Subject Site are dealt with in the appropriate manner.

9.2 Re-inspections

Re-inspections of ACM remaining on site are to be conducted by a Competent Person only. Such re-inspections will comprise a visual assessment of the condition of the materials to determine whether the material remains in a satisfactory condition, or if deterioration has occurred since the previous inspection. Such re-inspections will determine if any remedial action, such as encapsulation, isolation or removal of the ACM, is required. A re-inspection is to be conducted at least once every five years to ensure it the Register kept up-to-date.

Normally, re-sampling of materials would not be required during re-inspections. If, however, previously unidentified or undocumented ACM, or materials suspected of containing asbestos, are encountered during the re-inspection process, sampling and analysis will need to be performed. The Register will be updated and re-issued at the completion of the re-inspection work.

9.3 Record Keeping

The PCBU with management or control of a workplace shall maintain detailed records of all activities and work permits relating to asbestos works which have been undertaken on the Subject Site. The records kept should include:

- Copies of all asbestos materials survey reports, including updates and amendments;
- Site induction records pertaining to the informing of contractors about the presence of asbestos materials on site, and that such contractors have been appropriately trained in safe work procedures and practices;
- Records pertaining to the informing of JACSD employees about the presence of ACM on site, and that such employees have been appropriately trained in safe work procedures and practices;
- Records of any asbestos materials removal works performed on site;
- Clearance certificates indicating areas are safe to reoccupy after asbestos materials removal works;
- Air monitoring test results for airborne asbestos fibres;
- Previous versions of the asbestos materials register (if present);
- All asbestos related records and documents are to be retained for 70 years after the: removal of the ACM; after the building has been demolished.

9.4 Labelling and Signage

A labelling system should be implemented by the PCBU with management or control of a workplace throughout The Subject Site to clearly identify and provide warning of the presence of ACM at the workplace:

- Labels are to be placed on items of ACM identified or presumed and any ACM enclosed or inaccessible;
- The positions and number of labels required should be determined by a Competent Person. The location of labels should be consistent with the locations in the Register; and
- Warning labels are to be in a location that will alert persons not to disturb the material without the correct training.

If it is not practicable to label the asbestos directly a prominent warning sign must be posted in its immediate vicinity. All warning signs must comply with AS 1319 *Safety Signs for the Occupational Environment* and the National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Management and Control of Asbestos in Workplaces*, 2018 – 2005 (under review to be replaced by the National Code of Practice *How to Manage and Control Asbestos in the Workplace (Safe Work Australia 2011))*. Examples of standard warning labels and signs for asbestos are illustrated below:

Signs should be placed at all main entrances to the work areas where asbestos is present.

10 SAFE WORK PRACTICES

10.1 General

Prior to any works such as demolition, major refurbishment, decommissioning, renovation or maintenance, the PCBU with management or control of a workplace must

- Review the Asbestos Register;
- Provide a copy of the Asbestos Register to the person carrying out the work; and
- Ensure Asbestos that is likely or liable to be disturbed is identified and, so far as is reasonably practicable removed.

The PCBU with management or control of a workplace must, if the Register is deemed inadequate having regard to the proposed demolition or refurbishment, ensure that the Register is revised. This should be addressed by having an 'Intrusive Sampling' Pre-demolition / Major Refurbishment Asbestos Survey of the specified areas or buildings undertaken by a licenced Asbestos Assessor.

All ACM identified within the updated Register that may be impacted upon by the proposed works must be removed under controlled conditions prior to the commencement of the works by an appropriately licensed asbestos removal contractor. Work involving the removal of asbestos is to be conducted as per the guidelines in the National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005 (under review to be replaced by the National Code of Practice *How to Safely Remove Asbestos (Safe Work Australia 2011))*.

If unknown materials, or undocumented materials suspected of containing ACM are encountered during building works, such materials are to be treated as if they contain asbestos and any work that would impact on that material must immediately cease, pending sampling by a competent person and analysis by a NATA accredited laboratory. This will allow JACSD to determine what, if any, control methods may be required.

Any external contractor contracted by JACSD to perform works on or in the Subject Site where ACM may be present, should, prior to commencing work, undergo a site induction. Such an induction is designed to alert the contractor to the possible presence of ACM, and the various issues associated with working with asbestos materials. The asbestos register and AMP for the building should be consulted in the presence of the contractor during the site induction to determine if any asbestos materials are at risk of being disturbed as a result of the proposed works. If this is suspected to be the case, the contractor engaged is to ensure that an appropriately licensed asbestos removalist performs the asbestos removal work.

10.2 Maintenance Procedures

Asbestos

Minor maintenance tasks that may involve ACM at the Subject Site are to be addressed under controlled conditions to prevent and minimise the risk of airborne asbestos fibres to the maintenance staff themselves and any other person.

For undertaking minor asbestos maintenance, the National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005 (under review to be replaced by the National Code of Practice *How to Safely Remove Asbestos (Safe*

Work Australia 2011)) has procedures for certain maintenance tasks and they must be followed as per the Code of Practice. These maintenance tasks may include but are not limited to:

- The Drilling of Asbestos Containing Materials;
- Sealing, Painting, Coating of Asbestos Cement Products;
- Cleaning Leaf Litter from Gutters of Asbestos Cement Roofs;
- Replacing Cabling in Asbestos Cement Conduits or Boxes;
- Working on Electrical Mounting Boards (Switchboards) Containing Asbestos; and
- Inspection of Asbestos Friction Materials.

Personal Protective Equipment (PPE)

The personal protective equipment requirements for work involving ACM at the Subject Site are to be based on the risk assessment.

The National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005 (under review to be replaced by the National Code of Practice *How to Safely Remove Asbestos (Safe Work Australia 2011))* should be consulted to determine the PPE needs as well as AS/NZS 1715-1994 Selection, Use and Maintenance of Respiratory Protective Devices and AS/NZS 1716-2003 Respiratory Protective Devices.

Disposable PPE and RPE filters used during the asbestos removal works should be treated as asbestos waste and disposed of in approved asbestos waste bags after completion of the works.

11 OCCUPATIONAL EXPOSURE STANDARDS

Asbestos Air Monitoring

It is the aim of JACSD to keep personal exposure to ACM as low as reasonably achievable. Where occupational exposure to asbestos materials is likely to occur, exposure is not to exceed half the occupational exposure standards for each hazardous building materials type or category as published by the National Occupational Health and Safety Commission (Safe Work Australia).

Occupational exposure for asbestos is measured using the Membrane Filter Method, by collecting a sample of air from the breathing zone of a person, over a minimum of four hours duration.

The current National Exposure Standards TWA for asbestos are:

- Chrysotile (white) asbestos - 0.1 fibres/ml
- Amosite (brown) asbestos - 0.1 fibres/ml
- Crocidolite (blue) asbestos - 0.1 fibres/ml
- Other forms of asbestos or a mixture of asbestos types - 0.1 fibres/ml

Throughout the duration of the removal work works air test results should return results below 0.01 fibres/ml. The following table shows the actions to be taken should the fibre levels exceed the action level of 0.01 fibres/ml.

Action level (fibres/ml)	Control / Action
< 0.01	Continue with control measures
≥ 0.01 ≤ 0.02	Review control measures, investigate cause and implement controls to minimise further release
≥ 0.02	Stop removal work, and where applicable notify the regulator. Investigate cause including enclosure & equipment where present and clean immediate area. Do not recommence work until air test results return readings of < 0.01 fibres/ml

Air monitoring is mandatory during all friable asbestos removal (e.g. Insulation, Millboard).

It is recommended by Coffey Environments that air monitoring take place during all removal of >10m^2 bonded ACM (e.g. Cement Sheeting, Vinyl Floor Tiles), maintenance, refurbishment, or removal works involving known or suspect ACM in or next to a public location and following any removal works in an enclosed area (ie: Boiler Room). Following the inadvertent disturbance of ACM, reassurance asbestos air monitoring should also take place prior to any persons reoccupying the area without PPE&RPE.

12 EMERGENCY PROCEDURES

An emergency situation is most likely to entail such a scenario where hazardous materials present on site have been inadvertently disturbed through actions of JACSD employees, site users, maintenance personnel, contractors, visitors, or damaged by severe weather conditions (eg. hail or fire damage to a corrugated asbestos cement roof). Where such damage has occurred, JACSD , Health and Safety Representative shall be notified immediately.

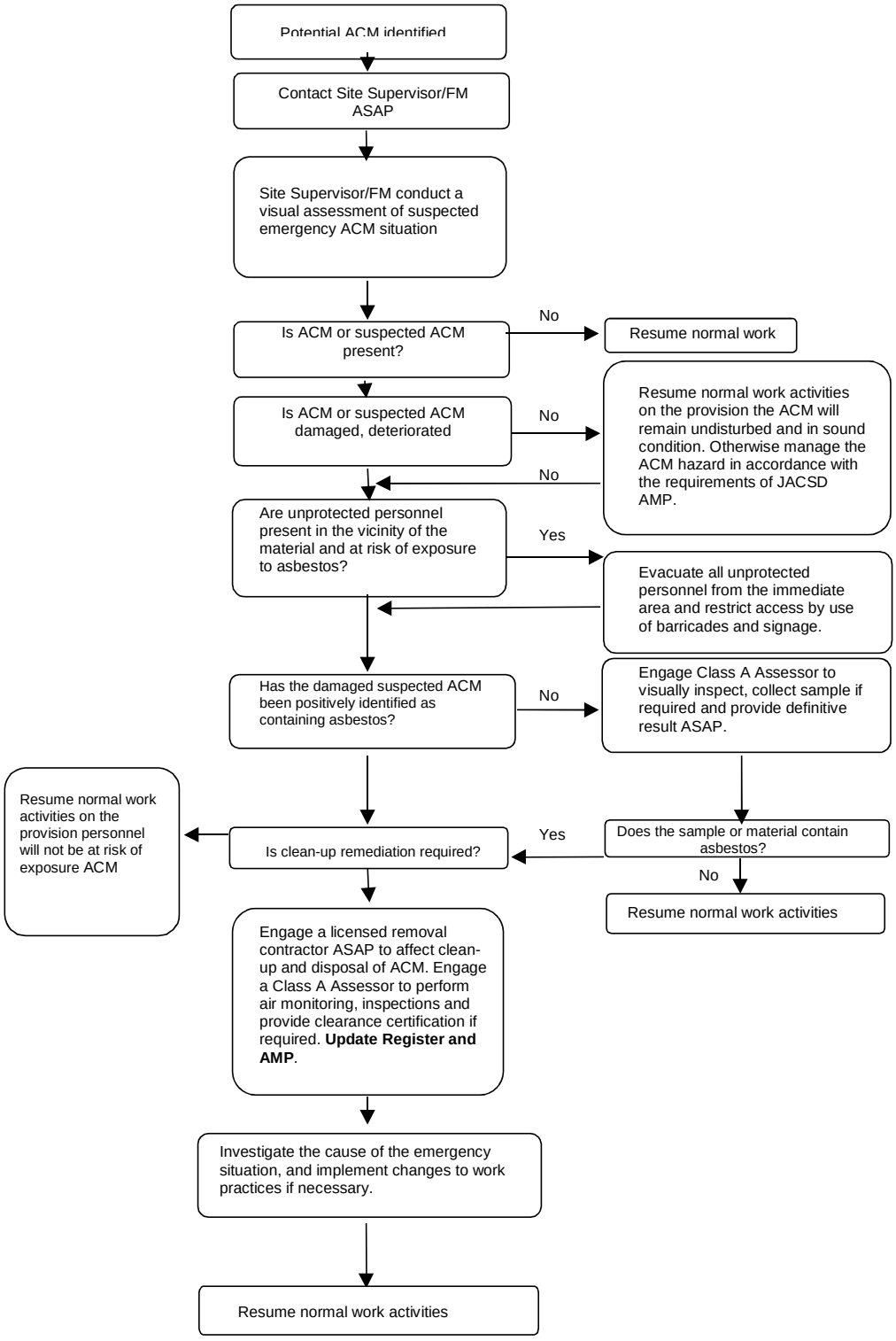
During any removal of any ACM an emergency within the building may necessitate the need to evacuate the building. The risks associated with any asbestos removal work should be assessed and include contingencies in the case of an emergency. Workers should be trained in the event of an emergency. Decontamination procedures can be temporarily waived in the event of an emergency and this is to be based on risk. The event likely to present in an emergency may include but not be limited to:

- Fire Evacuation;
- Chemical spill and contamination; and
- Gas leak/contaminated atmosphere hazardous to health.

In the case of the above situations requiring an emergency, Site supervisor, JACSD and the Health and Safety Representative(s) should be notified immediately and the area evacuated.

Other Emergency Response Procedures shall be initiated for non evacuation events and implemented in accordance with the flow chart diagram in Figure 1.

Figure 1: ACM Emergency Response Flow Chart



13 TRAINING AND AWARENESS

A PCBU must ensure that information, training and instruction provided to a worker is suitable and adequate, having regard to:

- The nature of the work carried out by the worker;
- The nature of the risks associated with the work; and
- The control measures implemented.

JACSD personnel, contractors and others who manage or may come into contact with ACM at the Subject Site either directly or indirectly should be provided with asbestos awareness training. Such training may include the following topics:

- Purpose of the training;
- The health risks associated with Asbestos;
- Information on the presence of ACM, including the types of asbestos, uses and typical locations/likely occurrences where ACM may be encountered;
- The PCBU and the worker's roles and responsibilities under the Asbestos Management Plan;
- Where the Register is located, how to access it and understand the information contained within it;
- The timetable of asbestos materials removal at The Subject Site;
- Process and safe work procedures to be followed to prevent exposure including accidental release;
- The correct use of PPE & RPE, implementation of controls measures and safe work methods to minimise the risks from ACM, limit the exposure to workers and limit the spread of asbestos fibres outside any asbestos work area;
- The relevant National Exposure Standards and control levels for asbestos; and
- The purpose of any exposure monitoring or health surveillance that may occur.

Records of Training must be kept whilst the worker is carrying out the work and for five years after the worker cease the work and be made available for inspection by the regulator.

14 REMOVAL WORKS RECORD

DATE	LOCATION	WORK/TASK	COMPANY	NAME (PRINTED) & SIGNATURE

15 REVIEW AND RE-INSPECTION HISTORY

Rev No	Date	Section	Description	Checked

DATE OF INSPECTION	INSPECTING COMPANY	NAME OF INSPECTOR

16 STATEMENT OF LIMITATIONS

Coffey Environments has conducted work concerning the environmental status of the property which is the subject of this report, and has prepared this report on the basis of that assessment.

The work was conducted, and the report has been prepared, in response to specific instructions from the client to whom this report is addressed, within the time and budgetary requirements of the client, and in reliance on certain data and information made available to Coffey Environments. The analyses, evaluations, opinions and conclusions presented in this report are based on those instructions, requirements, data or information, and they could change if such instructions etc. are in fact inaccurate or incomplete.

Investigations have been based on inspections conducted in accordance with relevant guidelines and standards, and normal industry practice, having regard to the client instructions, and interpretations of conditions are based on the data from those inspections and, where relevant and conducted, testing. To the best of our knowledge, they represent a reasonable interpretation of the condition of the site as able to be inspected. However there can be no guarantee that conditions at specific points not able to be inspected do not vary from the interpreted conditions based on the available observations/data.

In order to determine actual environmental conditions at specific intermediate points away from those observed/tested to date, those specific points would need to be inspected/tested.

It is also noted that sub-surface conditions can change with time, and the report is based on data that was gathered at the time of the report. Coffey Environments will not update the report and has not taken into account events occurring after the time its assessment was conducted.

This inspection and report may not include the following areas:

- Beneath building;
- Roof of building; and
- Removal of fittings e.g. kitchen or bathroom cupboards

Internal building materials should be assumed to contain asbestos until otherwise assessed by a competent person and proved to be otherwise.

Subsurface drains and pipes may be constructed of asbestos cement but this could not be assessed. Any subsurface pipes, particularly those constructed of fibro-cement or concrete, should be assumed to contain asbestos until otherwise assessed.

This report has been provided by Coffey Environments for the sole use of the client and only for the purpose for which it was prepared. Any representation contained in the report is made only for the client.

Asbestos Compliance Survey

Assessments that are effectively Compliance Surveys are non-destructive and as such are not intended for use or referral for the purpose of demolition, refurbishment, renovations or structural alterations. In the event of future demolition, refurbishment, renovation, decommissioning or structural alterations further investigation, which may entail intrusive testing, shall be required.

No inspection can be guaranteed to locate all asbestos in a specific location. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

Coffey Environments assessors take samples at any situations known, or suspected, to contain Asbestos. Where the analysis determines that No Asbestos is Detected (NAD) the samples are listed in the report to provide information for future assessments.

Where no samples are taken the situation is considered “asbestos free”. This assessment is based on the knowledge and experience of Coffey Environments Assessors, or on research conducted by Coffey Environments.

Representative sampling is defined as one like sample per consistent material type, situation or item. In these instances only one test sample will be collected for analytical confirmation and the results expressed as consistent and typical of the building.

Due to the very low concentration of asbestos fibres and the non-homogenous matrix of vinyl floor tiles, false negative results may be obtained. Therefore the accuracy of all results cannot be guaranteed.

Notably, with some asbestos containing bulk material it can be very difficult, or impossible to detect the presence of asbestos using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or attributed to the fact that, very fine fibres have been distributed individually throughout the materials.

The analysis of many asbestos products used as a component of insulation materials, may be compromised in instances where the material has been heat affected, as heat may alter the morphology of the fibrous material.

The Client must not rely on an inspection or report as indicating that a site or a building is “asbestos free”. All that the report can be relied upon to show is that no asbestos was found (or that only such asbestos was found as was reported to be found) in the course of the inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.

COFFEY ENVIRONMENTS AUSTRALIA PTY LTD

17 REFERENCES

Work Health and Safety Act 2011 and Regulations (Commonwealth, NSW, ACT, NT & QLD)

Occupational Health and Safety Act 2004 and Regulations 2003, 2007 (VIC),

Occupational Health and Safety and Welfare Act 1986 and Regulations 2010 (SA)

Workplace Health and Safety Act 1995 and Regulations 1998 (TAS)

Occupational Health and Safety Act 1984 and Regulations 1996 (WA)

Association of Fluorocarbon Consumers and Manufacturers, *The Australian Refrigeration and Air*

Australian Standard AS2601, *The Demolition of Structures*, Section 1.6.

Australian Standard AS1319, Safety signs for the occupational environment

National Institute for Occupational Safety and Health [NIOSH (U.S.A.)], *Manual of Analytical Methods, Elements by ICP, Method 7300*, 4th Edition, Issue 2 - 1994

National Occupational Health and Safety Commission (NOHSC), *Approved Criteria for Classifying Hazardous Substances*, 1008 – 2002

National Code of Practice *How to Manage and Control Asbestos in the Workplace (Safe Work Australia 2011)* National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Management and Control of Asbestos in Workplaces*, 2018 – 2005

National Code of Practice *How to Safely Remove Asbestos (Safe Work Australia 2011)* National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005

National Occupational Health and Safety Commission (NOHSC), Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition, 3003 - 2005

National Occupational Health and Safety Commission (NOHSC), *List of Designated Hazardous Substances*, 10005 - 1999

Control and Safe Use of Inorganic Lead at Work, 2015 – 1994

Health and Safety Laboratory UK – HSG 264 Asbestos The Survey Guide 2010

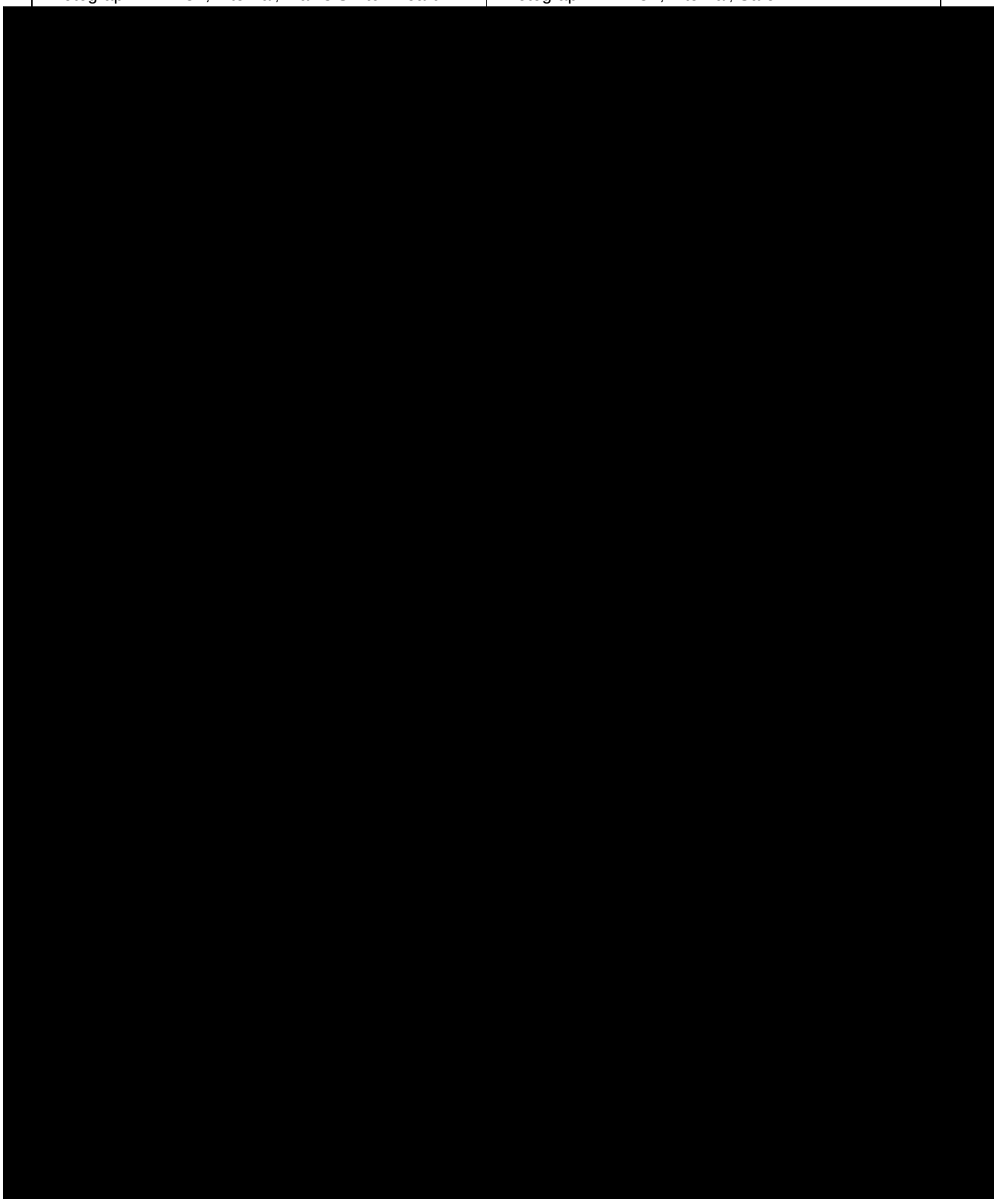
Health and Safety Laboratory UK - Methods for the Determination of Hazardous Substances (MDHS) 100 Surveying, sampling and assessment of asbestos-containing materials 2001

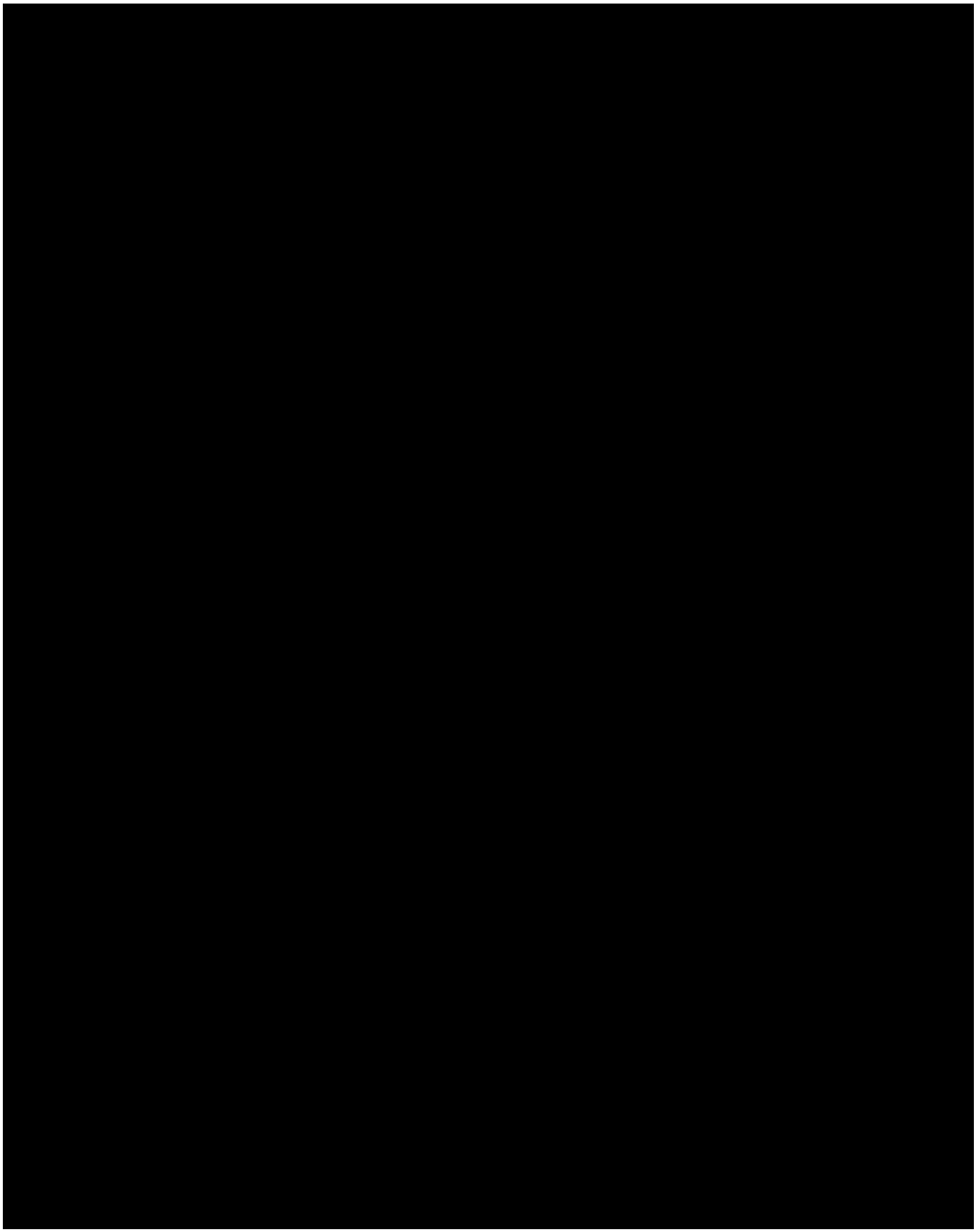
Health and Safety Laboratory UK - HSG 227 A Comprehensive Guide to Managing Asbestos in Premises 2002

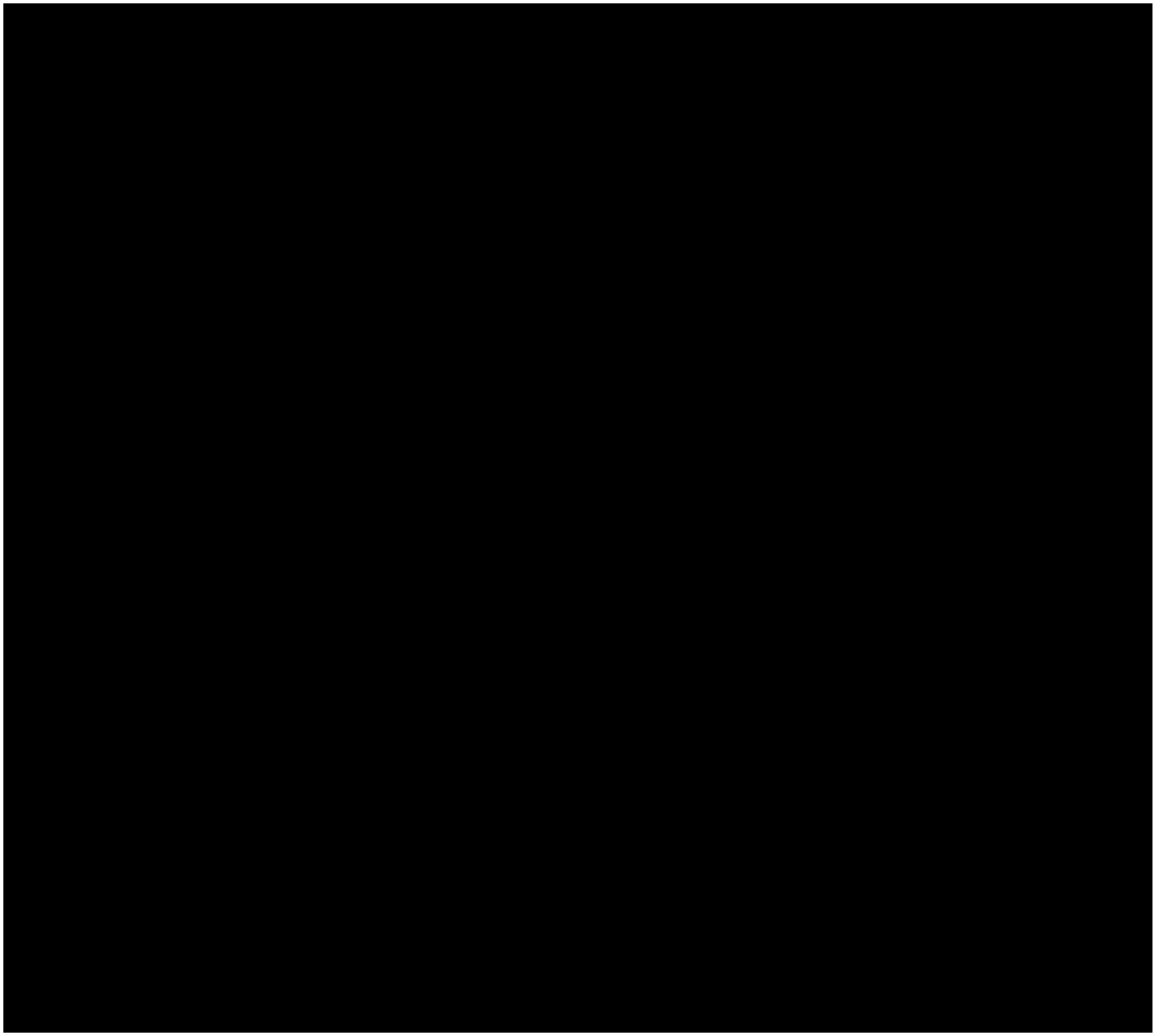
Appendix A
Photographs

Hazardous Materials Register and Management Plan
Periodic Detention Centre, Mugga Lane, Symonston, ACT

Photograph 1: PDC2, Internal, Mains Switch Board.	Photograph 2: PDC2, Internal, Safe.







Appendix B
Asbestos Permit to Work

Hazardous Materials Register and Management Plan
Periodic Detention Centre, Mugga Lane, Symonston, ACT

ASBESTOS PERMIT TO WORK

Building or maintenance work in areas known to contain asbestos materials is prohibited, unless a permit to work has been issued to the personnel involved. This permit to work is issued to the nominated recipient for the specific occasion stipulated below:

Work Permit No: .....

Date of issue: .....

This Permit is issued to: .....

This Permit is valid up to: .....

Asbestos Licence Number: (if applicable).....

Organisation/Company: .....

Contact Telephone Number: .....

Location & Duration of Works: .....

Description of Works: .....

.....

Asbestos-containing materials have been used in various locations throughout the building. Before approval is granted to proceed with work, confirm the following:

1. Has the existing Asbestos Register been examined jointly with building management ? YES - NO
2. Has the area where the intended works are to be performed been examined jointly with building Management? YES - NO
3. Are asbestos containing materials present in the work area? YES - NO
4. Will the works impact on or disturb the asbestos-containing materials? YES - NO
5. If YES to question 4 above, are the appropriate asbestos work procedures as outlined in the Asbestos Management Plan documented and understood? YES - NO
6. If YES to question 4 above, have you submitted a risk assessment for the task that you intend to undertake? YES - NO
7. Are tenants, staff or public at risk of exposure to airborne asbestos? YES - NO
8. Is it necessary to evacuate tenants, public or employees prior to work commencing? YES - NO

Asbestos materials are not to be disturbed without the approval of Building Management. All works are to be performed in accordance with the special requirements or work procedures outlined in the Asbestos Management Plan. If any unknown materials, or materials suspected of containing asbestos are encountered, work is to cease immediately and Building Management notified.

I have read and understood the requirements and procedures described in the Asbestos Management Plan and this permit to work:

I hereby authorize the Building Management to engage an asbestos removal contractor to clean any asbestos debris/hazards that was created due to my/our Company activity and the removal cost will be payable by:

_____ [Company]

_____ _____

Building Management Representative Company Representative

Appendix C
Legislative Requirements

Hazardous Materials Register and Management Plan
Periodic Detention Centre, Mugga Lane, Symonston, ACT

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

Introduction:

New (Harmonised) work health and safety laws commenced in the Commonwealth, New South Wales, Queensland, the Australian Capital Territory and the Northern Territory on 1 January 2012.

For links to these legislation and the most current information on the progress of legislative change for the other states, please access Safe Work Australia at:

http://www.safeworkaustralia.gov.au/Legislation/Pages/ModelWHSLegislation.aspx

1. Transitional Arrangements

Safe Work Australia has developed transitional principles that set out how arrangements under existing work health and safety legislation are intended to transition to the new harmonised system. There are transitional principles statements for both the WHS Act and Regulations. These are available from the Safe Work Australia site:

http://www.safeworkaustralia.gov.au/Legislation/transitional-arrangements/Pages/transitional-arrangements.aspx

Further, each state and territory work health and safety authority has also developed resources to assist their jurisdiction with the transition. If you have any questions regarding transitional arrangements in your jurisdiction please contact your regulator.

2. Further Useful Resources

Safe Work Australia publishes a range of guidance material to provide information on the model work health and safety laws and to assist compliance. This information can be accessed from:

http://www.safeworkaustralia.gov.au/Legislation/guidance-material/Pages/guidance-material.aspx

3. For More Information Contact:

Coffey Environments – Work Health and Safety Section:

Phone: 02 8083 1600 Email: WHS_Support@Coffey.com Web: www.coffey.com

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

STATE **Primary Asbestos Legislation**	**Asbestos Survey Requirements**	**Asbestos Resurvey Requirements**	**Reporting Requirements**	**Management and Labelling/Signage Requirements**	**Other Requirements**
COMMONWEALTH ***NEW SOUTH WALES*** ***QUEENSLAND*** ***NORTHERN TERRITORY*** Work Health and Safety Act 2011 (Cth, NSW, QLD) Work Health and Safety Regulations 2011 (Cth, NSW, QLD) Work Health and Safety (National Uniform Legislation) Act and Regulations 2011 (NT) Supported by: Code of Practice - How to Manage and Control Asbestos in the Workplace (2011) Code of Practice - How to Safely Remove Asbestos (2011)	*A person conducting a business or undertaking (PCBU) must, for work place buildings/ structures that are constructed prior to December 31, 2003;* *survey to identify and locate any Asbestos Containing Materials (ACM; and,* *compile and keep at the workplace a site specific Asbestos Register .* *If ACM is identified at the work place, an Asbestos Management Plan (AMP) is to be compiled for the management of the identified ACM.* *The Asbestos Register and the Asbestos Management Plan must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.*	*Re-inspections of identified ACM is determined on a case-by-case basis depending on the risk situation and should be informed by and conducted in accordance with the site specific Asbestos Management Plan.*	*The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey.* *The Asbestos Register must be maintained and also updated if:* *the AMP is under review,* *further ACM is identified and/or,* *ACM is removed, disturbed or encapsulated.* *The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place.* *The AMP must be maintained and updated:* *when the Asbestos Register is under review,* *if asbestos is removed, disturbed or encapsulated,* *if the AMP is no longer adequate for managing the ACM,* *if a Health and Safety Officer requests a review and/or at least* *once every 5 years.*	*Generally, health monitoring is not required excepting for workers involved in asbestos removal works.* *Training is required for persons involved in asbestos removal work or carrying out asbestos related works.* *All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item.* *Before refurbishment or demolition:* *ensure Asbestos Register is current* *undertake necessary inspections* *A licensed asbestos removalist is required unless: ACM < 10m2 and non-friable and then by a competent person*	*WHS Regulation 419 requires A person conducting a business or undertaking (PCBU) must not carry out, or direct or allow a worker to carry out, work involving asbestos; excepting as is applicable:* *managing risk;* *sampling, identification and analysis;* *maintenance* *removal/disposal* *other exemptions per s.419 (3)*

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

STATE **Primary Asbestos Legislation**	**Asbestos Survey Requirements**	**Asbestos Resurvey Requirements**	**Reporting Requirements**	**Management and Labelling/Signage Requirements**	**Other Requirements**
AUSTRALIAN CAPITAL TERRITORY Work Health and Safety Act 2011 (ACT) Work Health and Safety Regulations 2011 (ACT) *Dangerous Substances (General) Regulations 2004 – Chapter 3 Asbestos and Asbestos Products* *NOTE: Asbestos - which comprises Chapter 8 in the model legislation - is NOT included the the ACT Work Health and Safety Regulations. They will continue to be regulated under the Dangerous Substances Act 2004 and associated Regulations pending a review in 2012*	*Controller of work place responsibility.* *For work place buildings/ structures that are constructed prior to 2003. A survey is to be conducted to identify and locate any Asbestos Containing Materials (ACM), to compile a site specific Asbestos Register to be kept at the workplace.* *If ACM is identified at the work place, an Asbestos Management Plan (AMP) is to be compiled for the management of the identified ACM.* *The Asbestos Register and the AMP must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.*	*Re-inspections should be conducted in accordance with the site specific Asbestos Management Plan.*	*The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey.* *The Asbestos register must be maintained and updated if the AMP is under review, if further ACM is identified and/or if ACM is removed, disturbed or encapsulated.* *The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place.* *The AMP must be maintained and updated when the Asbestos Register is under review, if asbestos is removed, disturbed or encapsulated, if the AMP is no longer adequate for managing the ACM, if a Health and Safety Officer requests a review and/or at least once every 5 years.*	*All identified asbestos in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item.*	The *Dangerous Substances (General) Regulations 2004* *adopts NOHSC National Code of Practice for the Safe Removal of Asbestos (2nd Edition) NOHSC:2002 (2005)*

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

State/ Territory	*OLD ACT*	*NEW ACT*	*OLD REGULATION*	*NEW REGULATION*
CMWLTH	*Occupational Health and Safety Act 1991*	*Work Health and Safety Act 2011 (Cth)*	*Occupational Health and Safety (Safety Standards) Regulations 1994* *Occupational Health and Safety (Safety Arrangements) Regulations 1991*	*Work Health and Safety Regulations 2011 (Cth)*
ACT	*Work Safety Act 2008*	*Work Health and Safety Act 2011 (ACT)*	*Work Safety Regulation 2009*	*Work Health and Safety Regulation 2011 (ACT)* *Dangerous Substances Regulations 2004 continue until review in 2012*

Appendix D
Certificate(s) of Laboratory Analysis

Hazardous Materials Register and Management Plan
Periodic Detention Centre, Mugga Lane, Symonston, ACT

ANALYTICAL REPORT

WORLD RECOGNISED ACCREDITATION

CLIENT DETAILS

Contact	[redacted]
Client	Coffey Environments Pty Ltd
Address	Level 1, 3 Rider Boulevard Rhodes NSW 2138
Telephone	02 8083 1600
Facsimile	02 8083 1600
Email	[redacted]
Project	**ENAURHOD06141AA-JACSD-ACT**
Order Number	(Not specified)
Samples	31

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	SE114457 R0
Report Number	0000048212
Date Reported	09/01/2013 16:17:16
Date Received	21 Dec 2012

COMMENTS

Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Samples # 8,9,22,24: were ashed after initial stereo microscope examination, re-examined and trace analysis performed on samples where asbestos has not been detected.
No trace asbestos fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

[redacted]

[redacted]
Metals Chemist

[redacted]
Hygienist

SGS

ANALYTICAL REPORT

SE114457 R0

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w
SE114457.001	CA7737	Other	<1g Vermiculite	21 Dec 2012	No Asbestos Detected	
SE114457.008	CA7744	Other	<1g Cement sheet fragments	21 Dec 2012	No Asbestos Detected Organic Fibres Detected	
SE114457.009	CA7745	Other	<1g Cement sheet fragments	21 Dec 2012	No Asbestos Detected Organic Fibres Detected	
SE114457.022	CA7758	Other	<1g Cement sheet fragments	21 Dec 2012	No Asbestos Detected Organic Fibres Detected	
SE114457.024	CA7760	Other	<1g Cement sheet fragments	21 Dec 2012	No Asbestos Detected Organic Fibres Detected	
SE114457.027	CA7763	Other	<1g Cement sheet fragments	21 Dec 2012	Chrysotile Asbestos Detected	
SE114457.029	CA7765	Other	<1g Cement sheet fragments	21 Dec 2012	Chrysotile Asbestos Detected	

SGS

METHOD SUMMARY

SE114457 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	Not Accredited
Amphiboles	-	Amosite and/or Crocidolite			

This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Sampled by the client.

Where reported: 'Asbestos Detected': Asbestos detected by polarized light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarized light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here : http://www.sgs.com.au.pv.sgsv3/~/media/Local/Australia/Documents/Technical%20Documents/MP-AU-ENV-QU-022%20QA%20QC%20Plan.pdf

ANALYTICAL REPORT

WORLD RECOGNISED ACCREDITATION

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	Coffey Environments Pty Ltd	Laboratory	SGS Alexandria Environmental
Address	Level 1, 3 Rider Boulevard Rhodes NSW 2138	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	02 8083 1600	Telephone	+61 2 8594 0400
Facsimile	02 8083 1600	Facsimile	+61 2 8594 0499
Email	[redacted]	Email	au.environmental.sydney@sgs.com
Project	**ENAURHOD06141AA-JACSD-ACT**	SGS Reference	**SE114457 R0**
Order Number	(Not specified)	Report Number	0000048210
Samples	31	Date Reported	09 Jan 2013
		Date Received	21 Dec 2012

COMMENTS

Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

Samples # 8,9,22,24: were ashed after initial stereo microscope examination, re-examined and trace analysis performed on samples where asbestos has not been detected.
No trace asbestos fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

[redacted]

[redacted] Metals Chemist

[redacted] Hygienist

SGS

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.001 Material 21 Dec 2012 CA7737	SE114457.002 Paint 21 Dec 2012 CA7738	SE114457.003 Paint 21 Dec 2012 CA7739	SE114457.004 Paint 21 Dec 2012 CA7740
Metals in Paint by ICPOES Method: AN065/AN320							
Lead, Pb	%w/w	0.001		-	**0.082**	**0.012**	**0.004**
Fibre ID in bulk materials Method: AN602							
FibreID							
Asbestos Detected	No unit	-		No	-	-	-

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.005 Paint 21 Dec 2012 CA7741	SE114457.006 Paint 21 Dec 2012 CA7742	SE114457.007 Paint 21 Dec 2012 CA7743	SE114457.008 Material 21 Dec 2012 CA7744
Metals in Paint by ICPOES Method: AN065/AN320							
Lead, Pb	%w/w	0.001		<0.001	**0.038**	<0.001	-
Fibre ID in bulk materials Method: AN602							
FibreID							
Asbestos Detected	No unit	-		-	-	-	No

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.009 Material 21 Dec 2012 CA7745	SE114457.010 Paint 21 Dec 2012 CA7746	SE114457.011 Paint 21 Dec 2012 CA7747	SE114457.012 Paint 21 Dec 2012 CA7748
Metals in Paint by ICPOES Method: AN065/AN320							
Lead, Pb	%w/w	0.001		-	<0.001	<0.001	**0.014**
Fibre ID in bulk materials Method: AN602							
FibreID							
Asbestos Detected	No unit	-		No	-	-	-

SGS

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.013 Paint 21 Dec 2012 CA7749	SE114457.014 Paint 21 Dec 2012 CA7750	SE114457.015 Paint 21 Dec 2012 CA7751	SE114457.016 Paint 21 Dec 2012 CA7752
Metals in Paint by ICPOES Method: AN065/AN320							
Lead, Pb	%w/w	0.001		**0.002**	**0.004**	<0.001	**0.045**
Fibre ID in bulk materials Method: AN602							
FibreID							
Asbestos Detected	No unit	-		-	-	-	-

SGS

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name SE114457.017 Paint 21 Dec 2012 CA7753	SE114457.018 Paint 21 Dec 2012 CA7754	SE114457.019 Paint 21 Dec 2012 CA7755	SE114457.020 Paint 21 Dec 2012 CA7756
Metals in Paint by ICPOES Method: AN065/AN320						
Lead, Pb	%w/w	0.001	**0.33**	<0.001	**0.009**	**0.25**
Fibre ID in bulk materials Method: AN602						
FibreID						
Asbestos Detected	No unit	-	-	-	-	-

SGS

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.021 Paint 21 Dec 2012 CA7757	SE114457.022 Material 21 Dec 2012 CA7758	SE114457.023 Paint 21 Dec 2012 CA7759	SE114457.024 Material 21 Dec 2012 CA7760
Metals in Paint by ICPOES Method: AN065/AN320							
Lead, Pb	%w/w	0.001		<0.001	-	**4.8**	-
Fibre ID in bulk materials Method: AN602							
FibreID							
Asbestos Detected	No unit	-		-	No	-	No

SGS

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.025 Paint 21 Dec 2012 CA7761	SE114457.026 Paint 21 Dec 2012 CA7762	SE114457.027 Material 21 Dec 2012 CA7763	SE114457.028 Paint 21 Dec 2012 CA7764
Metals in Paint by ICPOES Method: AN065/AN320							
Lead, Pb	%w/w	0.001		**0.002**	<0.001	-	**0.36**
Fibre ID in bulk materials Method: AN602							
FibreID							
Asbestos Detected	No unit	-		-	-	Yes	-

SGS

ANALYTICAL REPORT

SE114457 R0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE114457.029 Material 21 Dec 2012 CA7765	SE114457.030 Paint 21 Dec 2012 CA7766	SE114457.031 Paint 21 Dec 2012 CA7767
Metals in Paint by ICPOES **Method: AN065/AN320**						
Lead, Pb	%w/w	0.001		-	**0.38**	**0.16**
Fibre ID in bulk materials **Method: AN602**						
FibreID						
Asbestos Detected	No unit	-		Yes	-	-

SGS

QC SUMMARY

SE114457 R0

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula: *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Metals in Paint by ICPOES **Method: ME-(AU)-[ENV]AN065/AN320**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Lead, Pb	LB032008	%w/w	0.001	<0.001	3 - 52%	NA

SE114457 R0

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN065/AN320	A portion of paint chips sample is digested with nitric acid to solubilise the metals into solution. Digest then analysed by ICP OES with result calculated back to the as received paint sample basis.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	This analysis is not covered by the scope of accreditation.
^	Performed by outside laboratory.
LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting
QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here:
http://www.sgs.com.au.pv.sgsv3/~/media/Local/Australia/Documents/Technical%20Documents/MP-AU-ENV-QU-022%20QA%20QC%20Plan.pdf

Appendix E
Asbestos Site Plan

Hazardous Materials Register and Management Plan
Periodic Detention Centre, Mugga Lane, Symonston, ACT

Periodic Detention Centre

Asbestos cement soffits -

Asbestos caulking -

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE

ROBSON LABORATORIES Pty Ltd

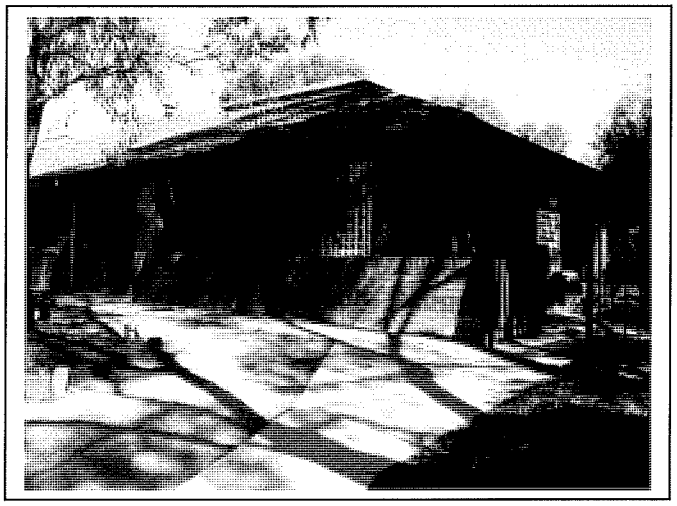
Occupational Hygiene
Health Safety
Environmental Consulting

PO Box 112 Fyshwick ACT 2609
9 Lyell St Fyshwick ACT 2609
Email: admin@robsonlabs.com.au
Phone: 02 6239 5656
Fax: 02 6239 5669
Mobile: [redacted]
ABN: 55 008 660 900

Asbestos Survey

Rehabilitation Program Unit Building
Mugga Way
Symonston ACT

September 2007



Client: Department of Justice and Community Safety
Level 2, 12 Moore Street
Canberra City ACT 2601

TABLE OF CONTENTS

1 EXECUTIVE SUMMARY

At the request of the Department of Justice and Community Safety, Robson Laboratories Pty Ltd visually inspected and sampled the Rehabilitation Program Unit building on 18 September 2007 to determine the extent and condition of any asbestos containing material.

1.1 Results

No asbestos material was located at the Rehabilitation Program Unit building.

2 INTRODUCTION & SCOPE

At the request of the Department of Justice and Community Safety, Robson Laboratories Pty Ltd visually inspected and sampled the Rehabilitation Program Unit building, on 18 September 2007 to determine the extent and condition of any asbestos containing material.

This survey, although extensive, must not be used as a specification or method statement for any future asbestos material removal project or demolition. In this instance detailed plans, quantities etc. would be required.

Implications and recommendations relating to the appropriate removal or control methods are made in accordance with the requirements of the Australian Safety and Compensation Council (ASCC), actpla & ACT WorkCover.

3 EXCLUSIONS

The survey was non–destructive in nature and sampling was therefore limited to accessible material. **Although very unlikely, no determination can be made regarding the possibility of concealed or inaccessible asbestos in the following areas without gaining access to allow for inspections:**

- **Electrical duct heater units –** asbestos millboard lining ducting adjacent heater elements
- **Walls and cavities –** asbestos insulation and sheeting
- **Hot water pipes chased into masonry walls –** asbestos lagging
- **Vinyl floor tiles & floor covering –** compressed wall or floor sheeting beneath carpets or tiles
- **Sub-ground floor slab –** asbestos cement sheet formwork and electrical cable/water pipe duct
- **Prior refurbishment –** built in areas

Care should be taken when demolishing or excavating in these areas to determine the existence or otherwise of asbestos. If asbestos is located all demolition or excavation work must cease and a licensed asbestos removalist contacted immediately to remove this material and a clearance certificate issued by a Class A asbestos assessor prior to work recommencing in the affected area.

Although all reasonable care and attention was taken in compiling this report no guarantee as to its accuracy or completeness can be given. This can be a result of the normal construction practice of 'building in' some of the works, from the random application of asbestos material or due to other physical or applied constraints on our investigation. Our report is limited by the physical constraints of the structure under investigation. Prior to any refurbishment or asbestos material removal projects, the contractor(s) carrying out the work must fully acquaint themselves with the extent of the hazardous material, particularly in those areas which may require full or partial demolition in order to determine the exact extent and location of such material.

4 CODE COMPLIANCE DETERMINATION

All recommendations and code compliance are determined with reference to: -

- *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)];
- ACT WorkCover; and
- actpla requirements & regulations.

5 ASBESTOS SURVEY RESULTS

SURVEY METHOD

The survey involved a visual inspection with limited sampling and analysis of material in a NATA (National Association of Testing Authorities) accredited laboratory using polarising light microscopy and/or X-ray diffraction. Samples were a representative selection of material suspected of containing asbestos. Sampling was not conducted in all areas due to the uniformity of the materials used throughout the building.

SAMPLE ANALYSIS

Table 1: mineralogical analysis of samples for asbestos using polarising light microscopy

Sample reference[1]	Sample location	Sample type	Composition
3767 - 1	Male toilet - partition	Sheet	No asbestos detected
3767 - 2	Eave sheeting	Sheet	No asbestos detected

1. Refer to Appendix for laboratory results.

Analysed by Amdel Ltd: NATA Accreditation Number 1526

RESULTS

No asbestos material was located at the Rehabilitation Program Unit building.

APPENDIX – Laboratory Results

ROBSON LABORATORIES Pty Ltd

Amdel Ltd
ABN 30 008 127 802

Gate 3, Osman Place Thebarton SA 5031
PO Box 338, Torrensville Plaza SA 5031
Phone: (08) 8416 5267 Facsimile: (08) 8234 0355

ASBESTOS IDENTIFICATION REPORT

CLIENT: Robson Laboratories Pty. Ltd.
ADDRESS: 9 Lyell St, Fyshwick ACT, 2609
JOB NO: 3767
CLIENT: Justice and Community Safety
JOB LOCATION: Symonston ACT
RESULTS:

DATE: 21 September 2007
REPORT NO: 7AA0115X
PAGE NO: 1 of 1

Sample	Sample size	Description	Asbestos detected*
3767-1	(a) 15x7x2	Pale grey fibrous sheeting, painted white	No
3767-2	(b) 20x10x2	Pale grey fibrous sheeting	No

APPROVED IDENTIFIER: [redacted] APPROVED SIGNATORY: [redacted]

The approximate dimensions (in mm) stated above refer to the size of (a) a single piece (b) largest of several particles (c) largest of many particles (d) volume in ml of unconsolidated particles (e) weight in grams of unconsolidated particles
* Detected by polarized light microscopy. ** No asbestos was detected by polarized light microscopy, but identification may not be possible due to adhering resins. Confirmation by another analytical technique is advised. ^Synthetic mineral fibre was detected by polarized light microscopy.
Note: Chrysotile is a fibrous silicate mineral commonly known as white asbestos, amosite is a fibrous silicate commonly known as brown or grey asbestos and crocidolite is a fibrous silicate commonly known as blue asbestos. SMF is commonly known as glass fibre.
The results contained in this report relate only to the sample(s) submitted for testing. Amdel Ltd accepts no responsibilities for the representivity of the sample(s) submitted.

SCOPE OF ACCREDITATION: Class 7.82.31: Qualitative identification of asbestos types in bulk samples by polarized light microscopy, *including dispersion staining.*

NATA

This document is issued in accordance with NATA's accreditation requirements
Accredited for compliance with ISO/IEC 17025.
NATA accreditation number: 1526
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ROBSON LABORATORIES Pty Ltd

Occupational Hygiene
Environmental Monitoring

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31 Pelsart St Red Hill ACT 2603
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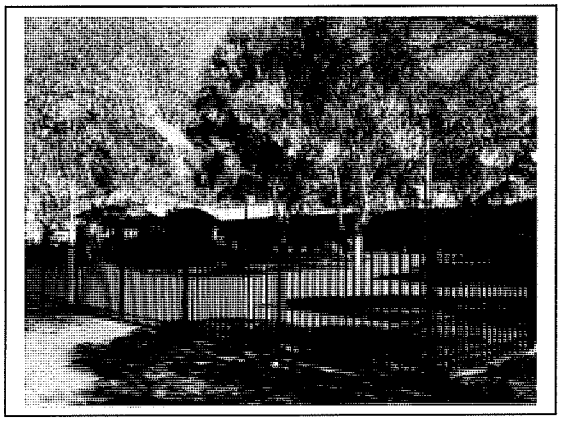
Phone: 02 6239 5656
Fax: 02 6239 56
Mobile: [redacted]
ABN: 55 008 660 900

Asbestos Management Plan for:

SYMONSTON TEMPORARY REMAND CENTRE

Mugga Lane
Symonston ACT

September 2005



Client: ACT Corrective Services
GPO Box 158
Canberra ACT 2601

1 PREFACE

The following Asbestos Management Plan (AMP) for the Symonston Temporary Remand Centre was commissioned by ACT Corrective Services in order to best assure the occupants the highest standards of occupational health and safety in relation to in-situ asbestos.

The AMP is designed to be updated and revised by an authorised person according to the status of asbestos materials. Where asbestos materials are removed or the level of risk changes, the AMP should be revised accordingly.

The AMP contains sections covering the identification, evaluation and control of asbestos hazards, which were identified in a survey of the premises by Robson Laboratories in August 2005.

The information contained within this document will assist Symonston Temporary Remand Centre management to fulfil their obligations under the ACT Occupational Health & Safety Act 1989 and the *National Code of Practise for the Safe Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)].

This AMP addresses all asbestos containing materials which were identified during the building survey.

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2 INTRODUCTION

The following asbestos management plan is designed to address the safe control of asbestos containing material (ACM) previously identified by Robson Laboratories, and any future findings. Refer also to the report 2542-12 Asb Sur from August 2005.

2.1 REQUIREMENTS FOR ASBESTOS MANAGEMENT PLAN

This asbestos management plan (AMP) must be held on site for ready access. Prior to any repair, maintenance or building works at the Symonston Temporary Remand Centre, all personnel undertaking the works must be provided with a copy of the AMP or Register (attached).

Maintenance, Trades and other personnel must be instructed not to remove or damage identified asbestos materials. If ACM is identified in the area where work is to be undertaken the ACM must be removed prior to the works.

Removal of ACM must only be undertaken by an ACT licensed asbestos removalist in accordance with the *Code of Practice for the Safe Removal of Asbestos 2nd Edition* [NOHSC: 2002(2005)].

This asbestos management plan includes the following:

- A register of all known ACM
- Responsibilities of all persons involved in ACM management
- Details of any maintenance work which may potentially impact ACM
- A timetable for action including priorities for removal or control of ACM according to risk, scheduled removal and audits
- Safe work methods, removal methods and training requirements
- A procedure for reviewing and updating the AMP and register of ACM, including a timetable

Although this AMP addresses current requirements for asbestos management, the plan must be updated as required to reflect ACT legislation into the future.

3 ASBESTOS REGISTER

3.1 IDENTIFICATION OF ASBESTOS

Asbestos was identified at the Symonston Temporary Remand Centre, Symonston ACT by Robson Laboratories Pty Ltd (occupational hygiene and environmental monitoring). The inspection was carried out by [redacted] in August 2005.

Table 3A: Register of asbestos materials. The register is to be updated as required.

Location	Description	Asbestos Containing Material	Removal Date	Removal Details
1st floor	Perimeter eave sheeting	Asbestos cement (A/C)		
Building exterior	Perimeter expansion joints	Caulking		

Identification of ACM was through visual inspection and Laboratory analysis by a testing laboratory accredited by the National Association of Testing Authorities (NATA). The results of analysis are as follows:

Table 3B: Materials sampled and analysed for asbestos

Sample No.	Location & Material	Composition
1581-12	Perimeter eave sheet	**Chrysotile, Amosite, & Crocidolite asbestos**
2542-12-1	Perimeter expansion joint caulking	**Chrysotile asbestos**

3.2 RISK ASSESSMENT

All of the ACM identified in the Symonston Temporary Remand Centre is stably bonded and as such does not present an exposure hazard unless it is cut, abraded, sanded or otherwise disturbed. Therefore the exposure risk from most materials is low during normal occupation and there is no requirement for immediate removal.

If this material is damaged or otherwise deteriorates, the risk assessment must be reviewed to reflect higher potential for exposure to asbestos fibres. The risk assessment should be performed by a competent person such as an occupational hygienist.

Areas which require attention are as follows:

Table 3C

Location Of ACM	ACM	Exposure Risk

Risk Assessment Amendments

Authorisation .....

Amendments to reduce the level of risk relating to ACM are as follows (print clearly):

Table 3D

Location Of ACM	ACM	Action Taken to Mitigate Risk	Date

3.3 ACCIDENTAL DAMAGE TO ACM

If ACM are damaged through accident or misuse, the following protocols should apply:

- Determine if the damage is likely to affect nearby occupants through the release of asbestos dust (this may require advice from a competent person). Generally, damage to exterior ACM will not present a significant exposure risk.
- Gently wet down the damaged section and cover with a heavy plastic sheet or equivalent to encapsulate the ACM. Close nearby windows if the ACM is to the exterior. Prior to the application of water ensure that there is no likelihood of electrocution.
- If the damage is significant – i.e. the material is shattered or abraded – the ACM should be replaced as soon as is practicable. Minor damage – i.e. small cracks or holes – may be repaired in the short term using a sealant.
- Register the event in the asbestos management plan.

3.4 CONTROL MEASURES

General Requirements

- Any ACM that is not scheduled for immediate removal, should be labelled and maintained in good condition;
- The details must be entered into an ACM register;
- Maintenance and other personnel must be made aware of the location of ACM. The Asbestos Register must be freely available;
- Unless they have a valid ACT asbestos removal licence, maintenance workers or occupants shall not remove or knowingly damage identified ACM; and
- Prior to any planned demolition, refurbishment or maintenance, its effect upon any in situ asbestos must be established by reference to this document, including amendments.

Recommended Control Measures for the Symonston Temporary Remand Centre

- All asbestos identified should be labelled as asbestos. Where labelling is not practical, strict administrative controls must be in place to ensure ACM is not subject to accidental damage or misuse;
- The asbestos should be maintained in good condition;
- Asbestos identified as representing an exposure risk (refer Table 3C) should be removed or otherwise controlled as necessary; and
- A periodic inspection of ACM should be carried out every 2 – 3 years to ensure they are not deteriorating or otherwise contributing to an unacceptable health risk.

4 REMOVAL OR MAINTENANCE WORK ON ACM – RECORDS

1. Work Performed

Name of Company	Contact Details	Date of Works + Job No.	Scope of Works

2. Asbestos control measures (air monitoring, decontamination etc.)

Work Performed	Air Monitoring	Clearance Certificate Issued	Other

3. Additional Information

5 PROVISION OF INFORMATION

5.1 MANAGEMENT RESPONSIBILITIES

- To ensure the ACM register and all relevant information pertaining to asbestos in the workplace is freely available upon request
- To provide occupants with up-to-date information relating to the condition and relative risk of ACM in the workplace
- To provide information on the control measures which are in place to contain ACM-related risk
- To provide information to staff and contractors on measures to be taken to ensure that they are not exposed to asbestos in the workplace, either through accident or negligence

5.2 MANAGEMENT ACTIONS

Authorisation: .....

Action taken to update staff regarding ACM in the workplace (include dates):

Additional information on asbestos can be obtained from:

- Robson Laboratories Pty Ltd
- USEPA asbestos web resources (http://www.epa.gov/asbestos/index.html)
- National Occupational Health and Safety Commission (http://www.nohsc.gov.au)
- NOHSC *National Code of Practise for the Safe Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)] (http://www.nohsc.gov.au/PDF/temp/ManagementCode.pdf)

6 MANAGEMENT OPTIONS

6.1 CONTROL OF ACM

The options for short to medium term management of ACM at the Symonston Temporary Remand Centre are outlined below.

1. DEFER ACTION

Appropriate when:	**Not appropriate when**
Negligible risk of exposure	Possibility of deterioration or damage
and	
Asbestos inaccessible and fully contained	Airborne asbestos dust exceeds recommended exposure standard
or	
Asbestos stable and not liable to damage	

Advantages	**Disadvantages**
No initial cost	Hazard remains
Cost of removal deferred	Need for continuing assessment
	Asbestos management programme required

2. ENCAPSULATE OR SEAL[1]

Appropriate when:	Not appropriate when:
Removal difficult or not feasible	Asbestos deteriorating
Firm bond to substrate	Application of sealant may cause damage to material
Damage unlikely	Water damage likely
Short life of structure	Large areas of damaged asbestos

Advantages	Disadvantages
Quick and economical for repairs to damaged areas	Hazard remains
May be an adequate technique to control release of asbestos dust	Cost for large areas may be near removal cost
	Asbestos management system required
	Eventual removal may be more difficult and costly

REMOVAL

Appropriate when:	Not appropriate when:
Surface friable or asbestos poorly bonded to substrate	Located on complex and inaccessible surfaces
Asbestos is severely water damaged or liable to further damage or deterioration	Removal extremely difficult and other techniques offer satisfactory alternative
Located in A/C duct	
Airborne asbestos exceeds recommended exposure standard	
Other control techniques inappropriate	

Advantages	Disadvantages
Hazard removed	Increases immediate risk of exposure especially to removal workers
No further action required	Creates major disturbance in building
	Often highest cost, most complex & time consuming method
	Removal may increase fire risk in building; substitute required
	Possible contamination of whole building if removal is done poorly

[1] Seal through application of paint, lacquer or PVA

6.2 MANAGEMENT DECISIONS

Authorisation .....

Option 1: Defer Action

Reason for Decision and Details

Date

Option 2: Encapsulate or Seal

Reason for Decision and Details

Date

Option 3: Remove ACM

Reason for Decision and Details

Date

7 TIMETABLE FOR ACTION

The timetable for action should be administered to ensure management have a clear plan for all works that may affect ACM in the workplace, including scheduled removal works, reviewing risk assessments and maintenance works which may impact ACM.

Authorisation.....

Table 2

Removal or Work on ACM	Date of Scheduled Works	Details
Review/Audit of Asbestos	**Date of Scheduled Review**	**Details**

8 RESPONSIBILITIES

This section outlines the responsibilities of all persons involved in the safe management of asbestos at the Symonston Temporary Remand Centre. These include the following:

- Ensuring maintenance personnel are made aware of the extent and location of ACM
- Maintaining the asbestos register and asbestos management plan
- Arranging removal works and repair work as required
- Keeping occupants informed of any changes to the status of ACM in the workplace

1. Building Manager

Name .....

Contact Details

Responsibilities

2. Occupational Health And Safety Representative

Name .....

Contact Details

Responsibilities

3. Facilities Management (if applicable)

Name .....

Contact Details

Responsibilities

4. Other

Name .....

Contact Details

Responsibilities

9 ASBESTOS REMOVAL WORKS

9.1 MANAGEMENT RESPONSIBILITIES

Where it has been determined that ACM are to be removed, management or the client must ensure that a risk assessment is performed prior to the removal works, and that the removalist takes this risk assessment into account. This risk assessment must include the possibility of uncovering previously concealed ACM, and ensuring concealed ACM is identified by a competent person such as an occupational hygienist.

The client should provide a detailed scope of works for the removalist, including potential hazards, details on areas which may contain asbestos and arrangements for clearance inspections and air monitoring.

9.2 REMOVALIST RESPONSIBILITIES

Prior to the commencement of removal works, the licensed removal contractor must undertake the following:

- Provide a site-specific asbestos removal control plan
- Ensure the removal is adequately supervised and carried out in a safe manner
- Ensure all persons carrying out the removal are competent and trained for the type of work being carried out
- Demonstrate that they have a health surveillance program in accordance with the requirements of the NOHSC *Model Regulations for the Control of Workplace Hazardous Substances* [NOHSC:7039 (1995)'

9.3 LICENSING REQUIREMENTS

The holder of an ACT Asbestos Licence is required to possess a full and complete understanding of the requirements of, amongst others:

- *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)];
- ACT WorkCover; and
- ACT BEPCON Requirements & Regulations.

and be able to demonstrate practical experience in the industry for at least three years. The ACT Government Planning and Land Management PALM NOTE 1 covers ACT BEPCONs' requirements for authorising certifiers and builders as well as the respective requirements of ACT WorkCover and ACT Waste for the removal and transport of asbestos materials.

ACT BEPCON licenses all removal companies operating in the ACT. Any interstate company undertaking works would be required to obtain an ACT licence. Time should be allowed for obtaining a license if interstate tenders are called.

ACT Planning & Land Authority (ACTPLA)

Ground floor
Mitchell Business Centre
160 Lysaght Street
Mitchell ACT 2911

T: 02 - 6207 1923
Internet: www.actpla.act.gov.au

Ground floor north
Dame Pattie Menzies House
16 Challis Street
Dickson ACT 2602

T: 02 - 6207 6309
Internet www.actpla.act.gov.au/bepcon

Removal of Asbestos-Cement Sheet

The ACTPLA *Asbestos removal and disposal*, document contains information and requirements for asbestos removal in the ACT. Builders holding a Class A, B or C licence are able to remove stable, unweathered asbestos cement sheet from a single domestic building. A holder of a Class D licence may remove unstable or weathered asbestos cement sheeting, and all sheeting in commercial premises.

Note: A builder with a Class A, B or C ACT builder's licence which specifically authorises work involving asbestos may also undertake asbestos removal works. However a Class D licence holder should be engaged to perform all asbestos removal at Symonston Temporary Remand Centre, as holders of this licence are experienced asbestos removalists.

ACT licensed removalists include the following:

- T.T. Asbestos Removals. Telephone 6241 8171. PO Box 304 Dickson ACT
- Bellchambers Asbestos Removal. Telephone 6299 7332. PO Box 5015

Other:

9.4 APPROVAL TO BEGIN ASBESTOS REMOVAL WORKS

i. All removal methods and procedures are required to be undertaken in accordance with [NOHSC: 2002(2005)].

ii. Building management in conjunction with an Occupational Hygienist where required will inform the asbestos removalist of the Scope of Works.

iii. The Occupational Hygienist will be required to provide a clearance certificate on satisfactory completion of the works.

9.5 WORK IN AREAS CONTAINING ASBESTOS – TRADES PERSONNEL

Prior to commencement of works the following undertakings, procedures and awareness must be observed:

i. **Work must not proceed under any circumstance without first contacting the Building Manager or Authorised Person.**

ii. Refer to this AMP [including Amendments] to determine if asbestos materials are likely to be encountered in the general work area. If no asbestos is located in the area of intended work the area may be entered by all relevant personnel on an unrestricted basis.

iii. Work in areas where asbestos will or is likely to be disturbed will only be given to persons authorized by ACT BEPCON and all access and works will be undertaken in accordance with the requirements of [NOHSC: 2002(2005)].

9.6 EMERGENCY WORK IN AREAS CONTAINING ASBESTOS.

i. If emergency access is required contact the **Building Manager** (refer contact details Section 8).

ii. If the Building Manager determines that asbestos is likely to be disturbed all works must be undertaken in accordance with the requirements of [NOHSC: 2002(2005)] i.e. a licensed asbestos removalist must be contacted to undertake any asbestos removal works.

iii. An Occupational Hygienist will be required to provide a clearance certificate on satisfactory completion of the works.

9.7 MONITORING ARRANGEMENTS

Control air monitoring should be performed whenever ACM are being removed from buildings, to ensure the control measures are effective.

All air monitoring must be performed by a competent person accredited by the National Association of Testing Authorities (NATA) (www.nata.asn.au) to perform air sampling for asbestos. Sampling should be performed in accordance with the NOHSC *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres* [NOHSC:3003 (2005)].

It is the asbestos removalist's responsibility to ensure that the maximum fibre levels throughout asbestos works does not equal or exceed the minimum practical detection limit of 0.01 fibres per millilitre of air (f/mL). The consequences of airborne fibre levels observed at or exceeding those specified below will result in the Occupational Hygienist instructing the contractor to take the appropriate 'Control /Action' as listed below (from [NOHSC:2002(2005)]:

Control Level (airborne asbestos fibres/mL)	**Control / Action**
< 0.01	Continue with control measures
≥ 0.01	Review control measures
≥ 0.02	Stop removal work and find the cause

9.8 CLEARANCE INSPECTIONS PRIOR TO RE-OCCUPATION

Following removal work, a clearance inspection should be undertaken prior to re-occupation of an asbestos work area. This shall be conducted by a competent person such as an occupational hygienist.

All barriers and warning signs should remain in place until the area has been cleared.

10 SAFE ASBESTOS REMOVAL PROCEDURES

The licensed asbestos removalist must provide a safe work method statement. However an overview of basic requirements for removal of asbestos cement products is as follows:

i. Obtain approval from the Building Manager to begin asbestos removal works.

ii. Inform the building occupants of intended asbestos removal works.

iii. Re-locate all occupants in immediate area and adjacent areas.

iv. Rope or barricade the area adjacent to the removal area and place appropriate signage at the perimeter of the area for the removal of bonded asbestos materials.

v. Set up removal area with appropriate materials (plastic, tape, etc.) and decontamination area to enable effective control of dust generated during removal of bonded asbestos.

vi. Ensure services such as electrical, fire detection, water, etc. are isolated.

vii. Using protective clothing and a half face particulate filter (cartridge) respirator conforming to AS/NZS 1716:1994 remove asbestos containing materials.

viii. Hand tools are preferred over power tools, and high-speed abrasive power tools must not ever be used. If low-speed power tools are used they should be fitted with local exhaust ventilation dust control. Asbestos cement sheeting should be wetted during removal.

ix. Removed contaminated materials are to be packed into disposal crates or wrapped in plastic sheeting.

x. Asbestos products may not be re-used.

xi. All surfaces within the removal area to be thoroughly vacuumed to remove any asbestos residue.

xii. All surfaces must be PVA sprayed to seal any microscopic asbestos fibres or wet-wiped (oil/solvent or water-soaked rag) to remove asbestos fibres.

xiii. Remove all asbestos containing material and all asbestos contaminated material from site for disposal in the approved manner.

xiv. Obtain a visual Clearance from an Occupational Hygienist.

Note: Air monitoring *may* be required during the removal of bonded ACM according to specific removal locations. This should be determined by a competent person or occupational hygienist.

11 UPDATING THE AMP

All asbestos remaining in situ should be inspected by a competent person on a 3 yearly basis to document any deterioration in the material which may result in a change to the hazard control requirements. The results of these reviews should be inserted into Section 4 of this AMP.

The asbestos management plan shall be reviewed and updated whenever the Asbestos Register is updated or as required by the authorised person/s as per Section 8.

The reviews should critically assess all asbestos management procedures and their effectiveness in:

- Preventing exposure to asbestos fibres
- Controlling access to asbestos
- Highlighting the need for action to maintain or remove ACM
- Maintaining the accuracy of the Register

ROBSON LABORATORIES Pty Ltd

Occupational Hygiene
Environmental Monitoring

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31 Pelsart St Red Hill ACT 2603
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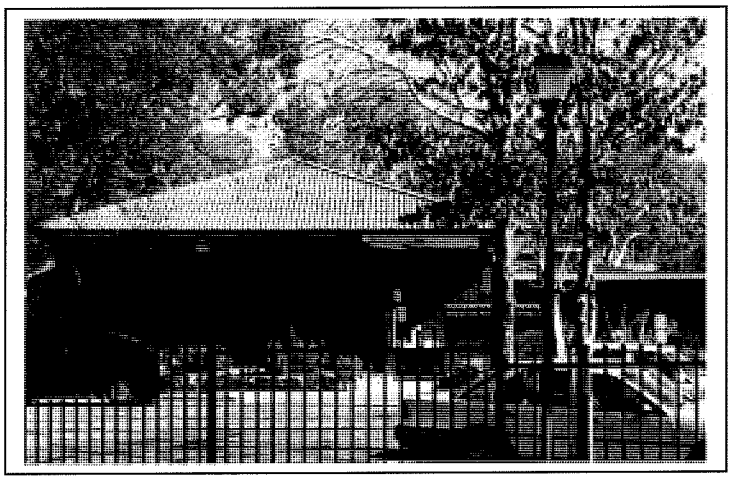
ABN: 55 008 660 900

Survey to Determine the Extent and Condition of Asbestos Materials at

Symonston Periodic Detention Centre
Mugga Lane
Symonston ACT

August 2005



Client: Department of Urban Services Facilities Management
255 Canberra Avenue
Fyshwick
ACT 2609

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APPENDICES

1 EXECUTIVE SUMMARY

At the request of Tony Hardy at Department of Urban Services Facilities Management, Robson Laboratories visually inspected the Symonston Periodic Detention Centre in April 2005 to determine the extent and condition of asbestos materials.

Although this survey made every attempt to assess accessible areas for asbestos, this was not a destructive survey and exclusions are made for inaccessible areas. The likelihood of hazardous materials in inaccessible areas, such as asbestos lagging to hot water pipes set into masonry walls, is documented in broad terms.

The results of the survey should be used as a basis for development of an Asbestos Management Plan for the Symonston Periodic Detention Centre. In the case of future building works the plan would enable the appropriate management of Asbestos Containing Materials in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].

This survey, although extensive, must not be used as a Specification or Method Statement for any future asbestos removal project. In this instance, detailed plans, quantities, etc. would be required.

Implications and recommendations relating to the appropriate removal or control methods are made in accordance with the requirements of Worksafe Australia, ACT BEPCON & ACT WorkCover.

1.1 Results

No asbestos materials were located at the Symonston Periodic Detention Centre, Symonston ACT.

Refer to exclusions page 6.

Plans were not available for security reasons.

2 INTRODUCTION & SCOPE

At the request of Tony Hardy of the Department of Urban Services Facilities Management, Robson Laboratories visually inspected the Symonston Periodic Detention Centre in April 2005 to determine the extent and condition of asbestos materials.

The results of the survey should be used as a basis for development of an Asbestos Management Plan for the Symonston Periodic Detention Centre. In the case of future building works the plan would enable the appropriate management of Asbestos Containing Materials in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].

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Implications and recommendations relating to the appropriate removal or control methods are made in accordance with the requirements of Worksafe Australia, ACT BEPCON & ACT WorkCover.

3 METHOD

The Symonston Periodic Detention Centre was inspected in April 2005. A visual assessment was made of the building and samples suspected of being asbestos positive were sent for NATA accredited laboratory analysis. It has been assumed that materials visually assessed as being asbestos positive in one location may reoccur in a similar location.

Although all reasonable care and attention was taken in compiling this report no guarantee as to its accuracy or completeness can be given. This can be a result of the normal construction practice of 'building in' some of the works, from the random application of asbestos materials or due to other physical or applied constraints on our investigation. Our report is limited by the physical constraints of the structure under investigation. Prior to any refurbishment or hazardous materials removal projects the contractor(s) carrying out the work must fully acquaint themselves with the extent of the hazardous material, particularly in those areas which may require full or partial demolition in order to determine the exact extent and location of such material.

3.1 Code Compliance Determination

All recommendations and Code Compliance are determined with reference to: -

- *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)];
- ACT WorkCover; and
- ACT BEPCON Requirements & Regulations.

and are referred to in this report as The Code.

3.2 Exclusions

The survey was non - destructive in nature and sampling was therefore limited to accessible materials. No determination can be made regarding the possibility of concealed or inaccessible asbestos in the following areas without gaining access to allow for inspections:

- **Walls and cavities –** asbestos insulation
- **Sub-ground floor slab –** asbestos cement sheet formwork and electrical cable/water pipe duct

Care should be taken when demolishing or excavating in these areas to determine the existence or otherwise of asbestos. If asbestos is located all demolition or excavation work must cease and a licensed asbestos removalist contacted immediately to remove this material and a Clearance Certificate issued by a Industrial Hygienist prior to completion of the demolition.

4 ANALYTICAL RESULTS

The building materials sampled and analysed for asbestos content are presented below in Table 2.

Table 2: Mineralogical Analysis – Asbestos

Sample No.	Location	Composition/ ** Assessment
2542 – 1 –1	Unit 1 wall	No asbestos detected
2542 – 1 – 2	Unit 7 wall	No asbestos detected
2542 – 1 – 3	Unit 8 ceiling	No asbestos detected
2542 – 1 – 4	Exterior eave	No asbestos detected
2542 – 1 – 5	Staff toilet ceiling	No asbestos detected
2542 – 1 – 6	Workshop eave	No asbestos detected
2542 – 1 – 7	Administration eave	No asbestos detected

**Visually assessed in the field

- It should be noted that the above samples were a representative selection of materials suspected of containing asbestos.

- Materials were not sampled from all areas due to the consistency of the materials used throughout the buildings.

Chrysotile	**=**	**white asbestos**
Amosite	**=**	**grey or brown asbestos**
Crocidolite	**=**	**blue asbestos**

5 DISCUSSION

No asbestos materials were located at the Symonston Periodic Detention Centre, Symonston ACT.

APPENDIX 1

Laboratory Results

EnviroProtect Pty Ltd
ABN 69 067 581 248
Occupational and Environmental Scientists
NATA ACC. 10732

CERTIFICATE OF ANALYSIS

EP JOB NO : EP 11 924

DATE : 18th April 2005

CLIENT : Robson Laboratories Pty Ltd

ADDRESS : PO Box 3477
Manuka ACT 2603

ATTENTION : [redacted]

SAMPLE LOCATION : Periodic Detention Centre

SAMPLED BY : [redacted]

National Association of Testing Authorities, Australia

NATA ENDORSED DOCUMENT
This document may not be reproduced except in full.

DATE RECEIVED: 13th April 2005

TEST METHOD: Qualitative identification of asbestos types in bulk samples by polarised light microscopy, including dispersion staining using EnviroProtect Inhouse Method EP/A

Lab. NO	Sample Description	Result
Robson Job No: 2542 – 1		
11 924 – 1	Sample 2542 – 1 – 1 Unit 1 Wall, Sheet	NO ASBESTOS DETECTED
11 924 – 2	Sample 2542 – 1 – 2 Unit 7 Wall, Sheet	NO ASBESTOS DETECTED
11 924 – 3	Sample 2542 – 1 – 3 Unit 8 Ceiling, Sheet	NO ASBESTOS DETECTED
11 924 – 4	Sample 2542 – 1 – 4 Exterior Eave, Sheet	NO ASBESTOS DETECTED
11 924 – 5	Sample 2542 – 1 – 5 Staff WC Ceiling, Sheet	NO ASBESTOS DETECTED
11 924 – 6	Sample 2542 – 1 – 6 Workshop Eave, Sheet	NO ASBESTOS DETECTED

Lab. NO	Sample Description	Result
11 924 – 7	Sample 2542 – 1 – 7 Administration Eave, Sheet	NO ASBESTOS DETECTED

Sample Analysed on an as received basis.
If no asbestos is detected in Vinyl tiles, Mastic's, Sealants, Epoxy resins, then confirmation by another independent Analytical technique is advised due to the nature of the sample.

[redacted]

.....
Approved Identifier
[redacted]
18th April 2005

[redacted]

.....
Approved Signatory
[redacted]
18th April 2005

ROBSON LABORATORIES Pty Ltd

Occupational Hygiene
Environmental Monitoring

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Survey to Determine the Extent and Condition of Asbestos Materials at

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Although this survey made every attempt to assess accessible areas for asbestos, this was not a destructive survey and exclusions are made for inaccessible areas. The likelihood of hazardous materials in inaccessible areas, such as asbestos lagging to hot water pipes set into masonry walls, is documented in broad terms.

The results of the survey should be used as a basis for development of an Asbestos Management Plan for the Symonston Temporary Remand Centre. In the case of future building works the plan would enable the appropriate management of Asbestos Containing Materials in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].

This survey, although extensive, must not be used as a Specification or Method Statement for any future asbestos removal project. In this instance detailed plans, quantities etc. would be required.

Implications and recommendations relating to the appropriate removal or control methods are made in accordance with the requirements of NOHSC, ACT BEPCON & ACT WorkCover.

1.1 Results

The survey revealed that bonded forms of asbestos were present. Refer to table 1, page 4.

Asbestos materials may remain in situ as long as they are well maintained. Provided these materials do not deteriorate, they would not be anticipated to release significant fibre under normal building usage.

Asbestos materials Symonston Temporary Remand Centre:

Table 1. Condition Assessment – Asbestos Materials

Asbestos Material	Material Location	Description	Condition	Maintenance	Removal – est. costs
Asbestos cement sheeting	1st floor perimeter eaves	Eave sheeting	4	D	Not assessed
Caulking	Perimeter expansion joints (vertical)	Expansion joint caulking	4	D	Not assessed
The inspection of all accessible areas identified the above asbestos materials.					

Table Notes:

** Visually assessed in the field.

Department of Urban Services Condition Rating and Maintenance Rating – Refer to Appendix 3 for the complete explanatory sheet.

Note: Estimated Asbestos Removal costs are only supplied where Condition Ratings are 1 or 2, or Maintenance Ratings are A or B.

Condition Rating

5	Excellent
4	Good
3	Normal
2	Poor
1	Run Down

Maintenance Rating

A	Critical
B	Essential
C	Important
D	Discretionary

2 INTRODUCTION & SCOPE

At the request of Tony Hardy of the Department of Urban Services Facilities Management, Robson Laboratories visually inspected and sampled the Symonston Temporary Remand Centre on 3 August 2005 to determine the extent and condition of asbestos materials. Reference was also made to previous survey and assessments undertaken by Robson Laboratories during May & June 2002.

The results of the survey should be used as a basis for development of an Asbestos Management Plan for the Symonston Temporary Remand Centre. In the case of future building works the plan would enable the appropriate management of Asbestos Containing Materials in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].

This survey, although extensive, must not be used as a Specification or Method Statement for any future asbestos removal project. In this instance detailed plans, quantities etc. would be required.

Implications and recommendations relating to the appropriate removal or control methods are made in accordance with the requirements of NOHSC, ACT BEPCON & ACT WorkCover.

3 METHOD

The Symonston Temporary Remand Centre was inspected on 3 August 2005. A visual assessment was made of the building and samples suspected of containing asbestos were sent for NATA accredited laboratory analysis. Reference was also made to previous survey and assessments undertaken by Robson Laboratories during May & June 2002.

Although all reasonable care and attention was taken in compiling this report no guarantee as to its accuracy or completeness can be given. This can be a result of the normal construction practice of 'building in' some of the works, from the random application of asbestos materials or due to other physical or applied constraints on our investigation. Our report is limited by the physical constraints of the structure under investigation. Prior to any refurbishment or hazardous materials removal projects the contractor(s) carrying out the work must fully acquaint themselves with the extent of the hazardous material, particularly in those areas which may require full or partial demolition in order to determine the exact extent and location of such material.

3.1 Code Compliance Determination

All recommendations and Code Compliance are determined with reference to: -

- *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005)];
- *ACT WorkCover; and*
- *ACT BEPCON Requirements & Regulations.*

and are referred to in this report as The Code

3.2 Inclusions

Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)]; (Refer Appendix 2).

3.3 Exclusions

No determination can be made regarding the possibility of concealed asbestos to the following areas without allowing access for inspection:

The survey was non - destructive in nature and sampling was therefore limited to accessible materials. No determination can be made regarding the possibility of concealed or inaccessible asbestos in the following areas without gaining access to allow for inspections:

- **Electrical duct heater units –** asbestos millboard lining ducting adjacent heater elements
- **Walls and cavities –** asbestos insulation
- **Vinyl floor tiles & floor covering –** beneath carpets
- **Sub-ground floor slab –** asbestos cement sheet formwork and electrical cable/water pipe duct

Care should be taken when demolishing or excavating in these areas to determine the existence or otherwise of asbestos. If asbestos is located all demolition or excavation work must cease and a licensed asbestos removalist contacted immediately to remove this material and a Clearance Certificate issued by an Occupational Hygienist prior to completion of the demolition.

4 ANALYTICAL RESULTS

The building material sampled for asbestos content analysis is presented below in Table 2. The Laboratory Result is presented in Appendix 4. Information held from previous asbestos assessments is provided at the bottom of page 8.

Table 2: Mineralogical Analysis – Asbestos

Sample No.	Location	Composition / Assessment **
2542 - 12 - 1	Perimeter expansion joint caulking	**Chrysotile asbestos**

- It should be noted that the above sample was a representative selection of materials suspected of containing asbestos.
- Materials were not sampled from all areas due to the consistency of the materials used throughout the buildings.
- On-site inspections should be undertaken prior to the commencement of any asbestos removal programme.

Chrysotile	=	**white asbestos**
Amosite	=	**grey or brown asbestos**
Crocidolite	=	**blue asbestos**

MATERIALS REMOVED - May/June 2002

- ground floor eaves soffit from detention rooms 1-5, North wing
- ground floor eaves soffit from shower room to detention room 4, South wing
- laundry ceiling sheet
- spandrel panel above window near rear stairwell, ground floor
- vinyl floor tiles room 1, ground floor (North wing)
- vinyl floor tiles ground floor central office areas

MATERIALS REMAINING IN SITU

Asbestos cement sheet - Double storey building eave soffit sheet

5 DISCUSSION

The asbestos materials identified on site have been categorised based on their type and their management is discussed in accordance with the *Code of Practice for the Management and Control of Asbestos in Workplaces* [NOHSC: 2018 (2005).

ELEMENT:

- **Asbestos cement eave sheeting (remaining following refurbishment works 2002)**
- **Asbestos caulking (identified August 2005)**

Asbestos Positive Findings:

Refer to Table 1 & Appendix 1 for specific locations.

Implications:

- All materials may stay in-situ provided they are maintained in good condition until removed during refurbishment by an ACT licensed asbestos removalist.

Recommendations:

- Maintenance and other personnel should be instructed not to remove or damage identified asbestos materials. An ACT licensed asbestos removalist must undertake removal or replacement of damaged sheeting.
- Where practicable without causing undue concern to personnel who occupy the premises during normal building usage, all asbestos material remaining in situ should be clearly labelled.
- Prior to any planned demolition, refurbishment or maintenance, its effect upon any in situ asbestos must be established by reference to this document, including amendments.
- If immediate removal of all asbestos is not planned, an Asbestos Management Plan is required (Refer *Asbestos Code of Practice* - Appendix 2).

Photographs of non-friable asbestos sheeting materials are presented on Page 10.

Photo 1: 1st floor eave sheeting – eastern end gable

Photo 2: 1st floor eave sheeting – southern side

APPENDICES

APPENDIX 1

Asbestos Material Location Summary Table

Lathlain Street Depot – Asbestos Locations			
Asbestos Material	**Location/details (refer plan)**	**Asbestos type(s) & Sample No.**	**Comments**
Cement sheeting	1st floor perimeter eaves	Previously assessed	Leave, label and maintain Remove by an ACT licensed asbestos removalist if proposed building works are likely to disturb asbestos containing materials
Caulking	Perimeter expansion joints (vertical)	Chrysotile asbestos As per sample 2542-12-1	
The inspection of all accessible areas identified the above asbestos materials			

Table Notes:

**visually assessed

APPENDIX 2

Inclusions

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

INCLUSIONS

Part 7. RESPONSIBILITIES

Persons with control of premises have a duty of care to:

- Develop and implement and maintain an asbestos management plan;
- Investigate the premises for the presence or possible presence of ACM (asbestos containing materials);
- Develop and maintain a register of the identified or presumed ACM, including details on their locations, accessibility, condition, risk assessments and control measures;
- Assess the condition of any ACM that are found and the associated asbestos risks;
- Develop measure to remove the ACM or otherwise to minimise the risks and prevent exposure to asbestos; and
- Ensure the control measures are implemented as soon as possible and are maintained as long as the ACM remain in the workplace.

Part 8. DEVELOPMENT OF AN ASEBSTOS MANAGEMENT PLAN (AMP)

The purpose of an AMP is to help persons with control of premises to comply with the asbestos prohibition and prevent exposure to airborne asbestos fibres while ACM remain in the workplace.

8.1 General Principles

The following general principles must be applied in developing an AMP;

- The ultimate goal is for all workplaces to be free of ACM. Accordingly, consideration should be given to the removal of ACM during renovation, refurbishment and/or maintenance, where practicable, in preference to other control measures such as enclosure, encapsulation or sealing.
- Reasonable steps must be taken to label all identified ACM. Where ACM are identified or presumed, the locations must be recorded in a register of ACM.
- A risk assessment must be conducted for all identified or presumed ACM.
- Control measures must be established to prevent exposure to airborne asbestos fibres and should take into account the results of risk assessments conducted for the identified or presumed ACM.
- If ACM are identified or presumed, there must be full consultation, involvement and information sharing during each step of the development of the AMP – i.e. during the identification, risk assessment and establishment of control measures.
- The identification of ACM and associated risk assessments should only be undertaken by competent persons.
- All workers and contractors on premises where ACM are present or presumed to be present, and all other persons 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.

APPENDIX 3

Department of Urban Services Condition and Maintenance Rating Explanatory Sheet

Example Assessment Form

DUS FACILITIES MANAGEMENT CONDITION ASSESSMENT

FACILITY NAME:	ANYWHERE HIGH SCHOOL
LOCATION :	Block 1234, Section 5678, Canberra, ACT
DATE OF INSPECTION:	October 2003
CONSTRUCTION DATE:	1975
GROSS FLOOR AREA :	12,000 SQ M

THE "CONDITION ASSESSMENT" OF THE FACILITY COMPRISES OF 5 STAGES

STAGE 1 DEFINE THE STANDARD REQUIRED TO SUPPORT THE OPERATION OF THE FACILITY
NOTE: REQUIRED BUILDING STANDARD IS CATEGORY 3 (NORMAL)

STANDARD RATING DEFINITIONS FOR THE ACTUAL FACILITY CONDITION

CONDITION RATING		PHYSICAL CONDITION	FUNCTIONALITY	COMPLIANCE
5	EXCELLENT	As new or highest quality achievable	All elements must function correctly at an increased level of use. Fully meets designed function	Complies with current Australian Standards for the age of the building. All legal requirements must be met.
4	GOOD	Minor signs of deterioration when viewed closely may be acceptable. No deterioration when viewed from normal distance. Some deterioration may be acceptable	Generally the building meets the existing function and all elements function as intended with low probability of failure	Complies with current Australian Standards for the age of the building. All legal requirements should be met
3	NORMAL	In this category physical appearance is not the major consideration and some minor signs of deterioration when viewed from normal distances are acceptable	All required elements should function as intended and the building achieves more than the minimum for which it was built. Minor failure, excluding those which bring a threat to safety of occupiers, may be acceptable	All requirements with respect to health, safety and compliance for the age of the building must be met
2	POOR	Significant external damage. Significant mechanical deterioration	Barely meets current function	Complies some with Australian Standards
1	RUN DOWN	Extreme external damage or decay. Extreme mechanical deterioration or decay	No longer meets designed function	Does not comply with Australian Standards

STAGE 2 ON-SITE CONDITION ASSESSMENT TO DETERMINE THE ACTUAL FACILITY CONDITION

ACTUAL AVERAGE FACILITY CONDITION RATING - REFER ABOVE

Building No.	Grounds No.	Hydraulics No.
Fire Protection No.	Electrical No.	Mechanical No.

STAGE 3 ON-SITE CONDITION ASSESSMENT TO DETERMINE THE ACTUAL MAINTENANCE RATING ON WORK ITEMS

MAINTENANCE RATINGS

A. CRITICAL	*Critical repair or replacement work necessary to remedy or avoid breakdown. This includes OH&S issues. The "Year 1" Column should identify the required funding to remedy during the first year of the programme*	*Year 1*
B. ESSENTIAL	*Essential work to ensure that the condition complies with the minimum service requirements. This may include Preventative Maintenance*	*Year 1-2*
C. IMPORTANT	*Important work to prevent a potential risk or deteriorating situation. This may include work that is cyclical in nature.*	*Year 3-4*
D. DISCRETIONARY	*Desirable work to preserve the long term performance and / or appearance*	*Year 4-5*

STAGE 4 DEVELOP A COMPREHENSIVE 5 YEAR MAINTENANCE PLAN FOR THE FACILITY INCLUDING REPAIRS AND MAINTENANCE INCLUDING COST STRUCTURE.
TOTAL ESTIMATED COST FOR 5 YEAR PLAN $1,745,300

5 YEAR MAINTENANCE PLAN

YEAR	1	2	3	4	5
COST	156,775	193,385	185,550	502,770	556,920

STAGE 5 ANALYSIS OF BUILDING PERFORMANCE COMPARED TO SIMILAR FACILITIES:
(A) COST PER SQ M FOR THIS FACILITY,
(B) AVERAGE COST PER SQ M ACROSS ALL SIMILAR FACILITIES,
(C) DIFFERENCE BETWEEN AVERAGE AND THIS FACILITY.

ANALYSIS OF BUILDING PERFORMANCE

COST	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
(A)	13.06	16.12	15.46	41.90	46.00
(B)					
(C)					

All given figures are at the date of the preparation of this condition assessment and exclude GST

Prepared by DUS Facilities Management for
Department of Education and Community Services March 2004
Printed at 10:34 on 22/03/2004

APPENDIX 4

Laboratory Results

EnviroProtect Pty Ltd
ABN 69 067 581 248
Occupational and Environmental Scientists
NATA ACC. 10732

CERTIFICATE OF ANALYSIS

EP JOB NO : EP 13 010

DATE : 3rd August 2005

CLIENT : Robson Laboratories Pty Ltd

ADDRESS : PO Box 3477
Manuka ACT 2603

ATTENTION : [redacted]

SAMPLE LOCATION : STRC

SAMPLED BY : [redacted]

National Association of Testing Authorities, Australia

NATA ENDORSED DOCUMENT
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DATE RECEIVED: 3rd August 2005

TEST METHOD: Qualitative identification of asbestos types in bulk samples by polarised light microscopy, including dispersion staining using EnviroProtect Inhouse Method EP/A

Lab. NO	Sample Description	Result
Robson Job No: 2542		
13 010 – 1	Sample No: 2542 - 1 Vertical Perimeter Expansion Joint, Caulking	CHRYSOTILE ASBESTOS DETECTED

Sample Analysed on an as received basis.
If no asbestos is detected in Vinyl tiles, Mastic's, Sealants, Epoxy resins, then confirmation by another independent Analytical technique is advised due to the nature of the sample.

[redacted]
.....
Approved Identifier
[redacted]
3rd August 2005

[redacted]
.....
Approved Signatory
[redacted]
3rd August 2005