From: Byrne, Evan
To: Ebner, Joanne
Subject: FW: Yarralumla Primary School [SEC=UNCLASSIFIED]
Date: Tuesday, 14 May 2019 9:17:54 AM
Attachments: image002.png
image003.png
image004.png
image005.jpg

Jo,

FYI – See below responses from Robson Environmental.

Evan Byrne
Project Officer
ACT Property Group / Property Upgrades
Chief Minister, Treasury and Economic Development Directorate **| ACT Government**
M: 0411 183 771
E: evan.byrne@act.gov.au
255 Canberra Avenue, Fyshwick, ACT 2609

"If you have any feedback for the ACT Property Group, please email actpgfeedback@act.gov.au"

From: [redacted]
Sent: Monday, 13 May 2019 1:32 PM
To: Byrne, Evan <Evan.Byrne@act.gov.au>
Cc: [redacted]
Subject: RE: Yarralumla Primary School [SEC=UNCLASSIFIED]

Hi Evan,

Yes it is acceptable for the painters to carry out minor preparation as long as they are following the remediation specification strictly and have their PPE at all times.

Following remediation, a visual inspection should be conducted along with 3M lead check or surface lead swab. The surface lead swab will then be sent off for laboratory testing.
Depending on the results, we can determine whether the lab paint surfaces have been removed to satisfactory level or there could be further remediation needed.
Robson environmental will be able to conduct the visual inspection, taking the surface lead swab/3M lead check and update the risk register and lead paint register.

There will be no soil removal or clearance sampling required if the remediation specification is followed strictly. However in cases where the flaking lead paint has already fallen off to adjacent ground surfaces, then step 7 of the remediation specification should be followed.

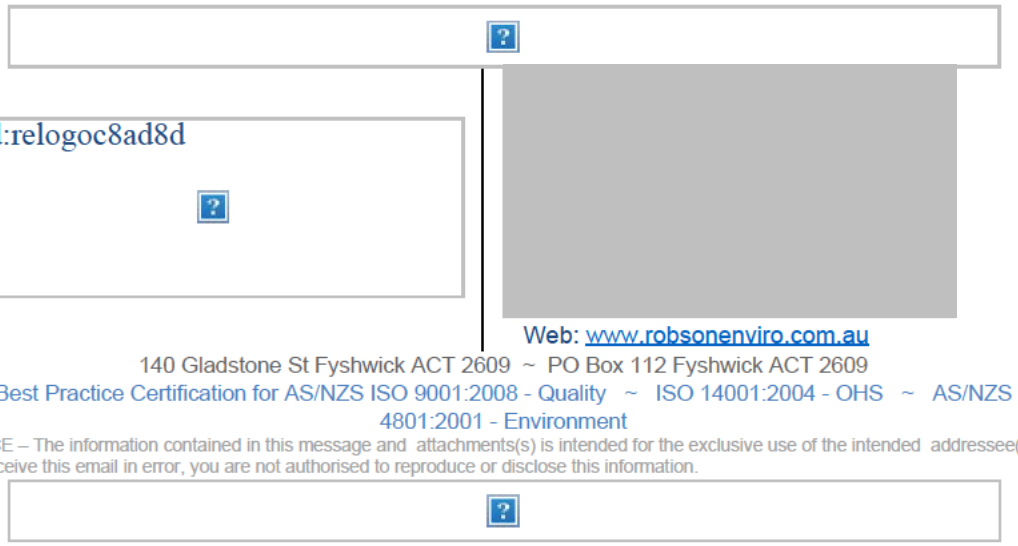
I hope that we have answered your questions.

If you will like to discuss it further please don't hesitate to contact us.

Thanks.

Kind regards,

[redacted]



From: Byrne, Evan [mailto:Evan.Byrne@act.gov.au]
Sent: Thursday, 9 May 2019 2:15 PM
To: [redacted]
Cc:
Subject: RE: Yarralumla Primary School [SEC=UNCLASSIFIED]

Thanks [redacted]

I am just putting together the scope of works for the contractors and I just had a few more questions.

It mentions that you recommend using B Class asbestos removalists to carry out the remediation, which is fine, but would it be acceptable for the removalist to remove approximately 95-100% of the flaking paint and for the painters to carry out minor preparation (using the remediation spec) then undercoating a few days later? I ask this because the asbestos contractors have advised that they are not confident enough in doing a quality paint job.

Following remediation, what are the requirements in the way of a clearance or inspection and how do we go about updating the risk register and lead paint register?

Could you also confirm if & when soil removal and/or clearance sampling would be required?

Evan Byrne
Project Officer
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255 Canberra Avenue, Fyshwick, ACT 2609

"If you have any feedback for the ACT Property Group, please email actpgfeedback@act.gov.au"

From: [redacted]
Sent: Tuesday, 7 May 2019 2:04 PM
To: Byrne, Evan <Evan.Byrne@act.gov.au>
Cc: [redacted]
Subject: FW: Yarralumla Primary School [SEC=UNCLASSIFIED]

Hi Evan,

Not a problem we are happy to answer any of your questions.

Yes it will be safe to say that the windows & doors around the site that have different colour will have lead paint underneath. In our report we note the very outer surface paint colour as that is the most obvious.

According to the AS/NZS 4361.2 it states that if '*one or more tests from a building or portion of a building indicate that lead is present, the paint should be treated as lead paint.*

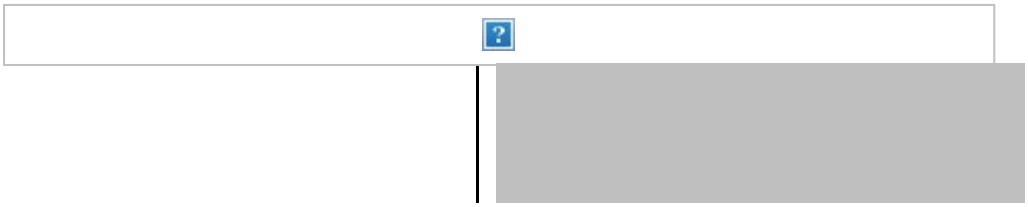
Please see attached standard lead paint remediation specification.

If you have any questions please feel free to contact me.

Thanks.

Kind regards,

[redacted]



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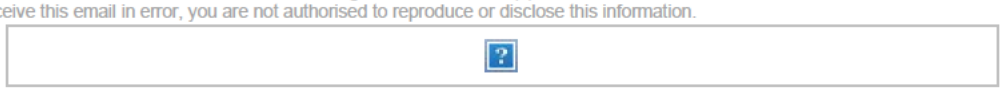
Best Practice Certification for AS/NZS ISO 9001:2008 - Quality ~ ISO 14001:2004 - OHS ~ AS/NZS 4801:2001 - Environment



From: Byrne, Evan [mailto:Evan.Byrne@act.gov.au]
Sent: Tuesday, 7 May 2019 1:01 PM
To: [redacted]
Subject: Yarralumla Primary School [SEC=UNCLASSIFIED]

[redacted]

Thanks for your time yesterday to answer our questions.

I went out to Yarralumla Primary School this morning to go over the report, would it be safe to say that the windows & doors around the site that are a different colour have lead paint underneath eg. Gambarri windows facing the carpark were a carcoal colour?

Also, could you please send through the standard lead paint remediation specification?

Evan Byrne
Project Officer
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Chief Minister, Treasury and Economic Development Directorate | **ACT Government**
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"If you have any feedback for the ACT Property Group, please email actpgfeedback@act.gov.au"

Asbestos Survey & Management Plan

Yarralumla Primary and Preschool
Block 12 Section 82
24 Loftus Street
Yarralumla
ACT 2600

April 2019

This report includes information from the report dated May 2005

This report MUST NOT be used as a removal specification

Client: ACT Property Group (Schools)

255 Canberra Avenue, Fyshwick, ACT, 2609

NATA
WORLD RECOGNISED ACCREDITATION

No. 3181

Accredited for compliance with ISO/IEC 17020

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PO Box 112 Fyshwick ACT 2609 ~ 140 Gladstone Street Fyshwick ACT 2609

CERTIFICATE OF APPROVAL FOR ISSUE OF DOCUMENTS

Document No: T-01035
Title: Reinspection
Asbestos Survey & Management Plan
Yarralumla Primary and Preschool
Block 12 Section 82
24 Loftus Street
Yarralumla
ACT 2600

Revision Status: 1
Date of Issue: 21/05/2019

Client: ACT Property Group (Schools)

Copy No: One

	Assessor	Position	Signature
Surveyed by:			
Approved by:			
Released by:			

RELEASE STATUS:

Confidential

DISTRIBUTION

Organisation	Attention	Copy No.	Actioned
ACT Property Group (Schools)	ACT Response Centre	1	21/05/2019

Robson Environmental Pty Ltd		2	21/05/2019

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1 EXECUTIVE SUMMARY

1.1 Purpose

This re-inspection of the Asbestos Survey & Management Plan (ASMP) for Yarralumla Primary and Preschool, Block 12 Section 82 , 24 Loftus Street, Yarralumla was commissioned by ACT Property Group (Schools) in order to ensure the occupants receive the highest standards of occupational health and safety in relation to in situ asbestos. The implementation of this Management Plan will assist the client in protecting the occupational health and safety of the occupants and address the regulatory requirements of a person with Management or Control of the Workplace (PMCW) in relation to asbestos in the premises.

1.2 Scope

Robson Environmental Pty Ltd was contracted to conduct a non-destructive asbestos survey of the premises. The original survey commenced on May 2005. The reinspection of the Asbestos Containing Material (ACM) was conducted by a Robson's licensed Asbestos Assessor on 23 April 2019 and incorporated findings from previous survey report(s).

The aim of the survey was to assess the extent, location and condition of ACM in the premises. Changes to the extent and/or condition of ACM since the last survey are noted in this re-inspection.

Materials in similar locations which were visually consistent with those which have been identified as being an ACM are to be considered as being identical.

1.3 Method

The survey involved a visual inspection and subsequent sampling and analysis of collected samples by Robson's National Association of Testing Authorities (NATA) accredited laboratory using polarised light microscopy. Samples were a representative selection of materials suspected of containing asbestos. Materials were not sampled from all areas due to the uniformity of the materials used.

All site surveying, sampling, laboratory analysis and reporting is in accordance with Robson Environmental's NATA, ISO9001, AS4801 and ISO14001 accreditations.

The information contained in this document will assist the PMCW to fulfil their obligations under the latest editions of the following codes, regulations/Acts:

- *How to Manage and Control Asbestos in the Workplace Code of Practice*
- *How to Safely Remove Asbestos Code of Practice*
- *Work Health and Safety Act 2011*
- *Work Health and Safety Regulations 2011*

1.4 Key Findings

Asbestos Findings

Table 1A: ACM, locations and required actions

After School Care			
ACM	**Tracker Location No**	**Location**	**Action to be Taken**
Sheet (Presumed Non-Friable)	N/A	Electrical switchboards - backing boards (throughout building)	Further investigation required
Sheet (Non-Friable)	001	Exterior - high level eave soffits	Label and maintain Inspect every 5 years

Gambarri Centre			
ACM	**Tracker Location No**	**Location**	**Action to be Taken**
Sheet (Presumed Non-Friable)	N/A	Electrical switchboards - backing boards (throughout building)	Further investigation required
Sheet (Non-Friable)	001	Exterior - eave soffits	Seal Label and maintain Inspect every 5 years
Sheet (Non-Friable)	001	Exterior rear verandah - soffits	Label and maintain Inspect every 5 years
Sheet (Non-Friable)	002	Ground floor Staff Office - ceiling	Label and maintain Inspect every 5 years
Sheet (Non-Friable)	003	Ground floor toilets adjacent Staff Office - walls	Label and maintain Inspect every 5 years
Sheet (Non-Friable)	003	Ground floor toilets adjacent Staff Office - ceiling	Label and maintain Inspect every 5 years
Pipe lagging (fibrous) (Friable)	004	Corridor wall cavity to main entrance - to hot water pipes in wall cavity and subfloor (throughout building)	Restrict access
Bituminous pad to underside of sink (Non-Friable)	006	Ground floor store room - to underside of sink	Label and maintain Inspect every 5 years
Sheet (Non-Friable)	015	Ground floor Electrical Switchboard Room - walls	Repair Seal Label and maintain Inspect every 5 years
Sheet (Non-Friable)	017	Ground floor Music Room - ceiling to sink alcove	Label and maintain Inspect every 5 years

Gambarri Centre			
ACM	**Tracker Location No**	**Location**	**Action to be Taken**
Sheet (Non-Friable)	024	Ground floor staff toilet - ceiling	Label and maintain Inspect every 5 years
Cable wrap (Presumed Non-Friable)	024	Staff toilet - oyster light fittings (throughout building)	Further investigation required

Primary			
ACM	**Tracker Location No**	**Location**	**Action to be Taken**
Pipe lagging (fibrous) (Presumed Friable)	N/A	Wet areas - to hot water pipes embedded in masonry walls (throughout building)	Further investigation required
Sheet (Presumed Non-Friable)	N/A	Electrical switchboards - backing boards (throughout building)	Further investigation required
Cement flue pipe (Non-Friable)	001	Exterior - to roof	Label and maintain Inspect every 5 years
Sheet (Non-Friable)	043	Ground floor Boiler Room - ceiling around flue	Label and maintain Inspect every 5 years

Refer to Section 1.4 - Table 1B for presumed ACM and Section 2.2 for exclusions

Table 1B: Presumed ACM, concealed locations and required actions

Type	ACM	Locations	Action to be taken
The materials listed below while not identified on site, should be presumed to be present until a destructive survey confirms otherwise			
Presumed ACM	Insulation/pipe lagging	Inaccessible ducts, risers and ceiling and wall space cavities	Destructive survey under controlled conditions prior to any refurbishment which is likely to disturb possible ACM in these areas. Until these areas are surveyed they should be presumed to contain asbestos. No access to unauthorised personnel should be given. Non friable asbestos when damaged may be re-classified as friable.
	Asbestos millboard lining	Interior of air conditioning ductwork adjacent to heater elements	
	Asbestos insulation and gaskets/joints	Within mechanical equipment concealed by outer metal cladding, structure or housing	
	Asbestos vinyl floor tiles, covering, cushioning underlay and adhesive, paper underlay	Found beneath carpets and vinyl flooring	
	Asbestos sheeting	Backing material to ceramic tiles (roofs, floors and walls) and packers to building construction joints, such as gable end verge undercloaking	
	Asbestos cement sheet formwork and electrical cable duct / water pipe	Subterranean areas	

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.

Recommendations

- The pipe lagging insulation previously sampled to the hot water pipe located within the wall cavity of the Gambarri Centre was found to contain chrysotile asbestos. It is recommended that the access hatch to the wall cavity be kept securely fastened and labelled. Pipe lagging should be considered present to similar hot water pipes concealed in wall cavities and subfloor areas throughout the building unless intrusive testing proves otherwise. Prior to any refurbishment works which requires disturbing building materials, removing plumbing fittings or accessing currently inaccessible areas a destructive survey must be undertaken under controlled conditions by a Class A Asbestos Removalist or a licensed Asbestos Assessor to determine whether any ACM is present.

- The non-friable ACM sheet walls to the Electrical Switchboard Room in the Gambarri Centre were found to be in poor condition. It is required that the damaged wall sheets be repaired and sealed by a licensed Asbestos Removalist. Consideration should be given to the removal of the damaged sheets in order to prevent further deterioration of the ACM occurring.

- A partial removal of the ACM ceiling located around the boiler flues in the Boiler Room of the Primary School main building was undertaken on 14 February 2016. The asbestos removal only included damaged ACM sheeting around the flue of the right-hand side boiler. Asbestos ceiling sheets remain in situ within the Boiler Room around the flue of the left-hand side boiler and these may remain provided they are maintained in good condition.

- The non-friable ACM sheet external eave soffits to the After School Care and Gambarri Centre were found to be in fair condition and may remain in situ provided they are maintained and left undisturbed. It is recommended that the surfaces be sealed with paint to encapsulate any exposed surfaces.

- The wire insulation installed to the ceiling oyster lights located within the Gabarri Centre are presumed to contain asbestos. Further testing of the wire insulation by a licensed Asbestos Assessor, after the lights have been electrically isolated, is required prior to any works that may disturb the material.

- Given the age of the Primary School main building and its solid masonry construction it should be presumed that all hot water pipes embedded in masonry walls are lagged with friable asbestos. Accordingly taps and other plumbing fittings should not be removed, and areas of wall that may contain hot water pipes should not be disturbed. Prior to works which may disturb this material the water and access to the area should be isolated and a licensed Asbestos Assessor engaged to conduct an intrusive investigation to determine whether the hot water pipes are lagged with asbestos.

- The electrical switchboards located throughout the buildings on the Yarralumla Primary School site were electrically live and were not sampled. All electrical switchboard backing sheets should be presumed to contain asbestos. Prior to any works being undertaken that may disturb them, further investigation of the switchboards must be undertaken after they have been electrically isolated to determine whether asbestos is present within the boards.

- All remaining ACM was found in good condition and may remain in situ provided it is not disturbed.

- ACM must not be drilled, cut, sanded, damaged or abraded and a good paint finish maintained. Asbestos work on non friable ACM may be undertaken by a licensed Class A

or B Asbestos Removalist. Any works on, or in the vicinity of friable ACM must only be undertaken by a licensed Class A Asbestos Removalist.

- The Asbestos Register including any risk assessments should be reviewed within the time period recommended by the Asbestos Assessor in 4.2 Asbestos Register Table 3A or earlier where:
  - A risk assessment indicates the need for reassessment or
  - Any ACM has been disturbed or moved
- ACM should be labelled with approved asbestos warning labels or signs. Due to the stigma associated with asbestos and to avoid malicious damage to ACM, labelling can be kept to discrete areas. Where labelling cannot be undertaken, the PMCW must adopt strict administrative controls to ensure ACM is not subject to accidental damage.

Asbestos Removal

Removal of ACM must be undertaken by a licensed Asbestos Removalist in accordance with current legislation. The removal/remediation of friable ACM must be undertaken by a licensed Class A Asbestos Removalist. Removal or remediation of non friable asbestos may be undertaken by either an A or B Class Asbestos Removalist.

Prior to the commencement of any removal or remediation works associated with any amount of friable or non friable asbestos a building certifier must be engaged and building approval granted. An application must be submitted to WorkSafe ACT at least 5 days prior to removal works commencing. An asbestos removal contractor must supply an Asbestos Removal Control Plan (ARCP) and a Safe Work Method Statement (SWMS). An independent licensed Asbestos Assessor should be engaged to ensure that the ARCP addresses all safety issues relating to the planned asbestos works.

Air monitoring is mandatory during the removal or remediation of friable asbestos and should be considered during the removal or remediation of non friable asbestos. Air sampling is to be undertaken in accordance with the *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2nd* Edition and test certificates should be NATA endorsed.

An independent Asbestos Assessor must also be employed to undertake a Clearance Inspection of both friable and non friable asbestos removal or remediation works. A satisfactory clearance certificate for the remediated areas must ensure that no visible asbestos or presumed asbestos remains. Additionally no asbestos fibres should be detected by laboratory analysis if any validation samples are taken. All surfaces within the remediated area must be free of general dust and debris.

2 INTRODUCTION

This ASMP is designed to address the safe control of ACM identified by Robson Environmental Pty Ltd in the premises. It is also designed to address any future asbestos findings.

This ASMP contains sections covering the identification, evaluation and control of asbestos hazards which were identified during the survey of the premises by Robson Environmental Pty Ltd in date of survey and the subsequent material reinspections

2.1 Requirements for the Asbestos Survey & Management Plan

The PMCW must retain a copy of this ASMP and it must be distributed to tenants. Prior to any repair, maintenance or building works to the premises, all stakeholders must be provided with a copy of this ASMP.

Maintenance, trades and other personnel must be instructed not to remove or damage identified or suspected ACM. If ACM is identified in the area where work is to be undertaken the ACM must be removed prior to the work commencing.

Removal of ACM must be undertaken by an ACT licensed Asbestos Removalist in accordance with current legislation.

This ASMP includes the following:

- A register of all known ACM
- Extent, form, condition and risks associated with the ACM
- Labelling requirements for ACM
- Safe work methods, removal methods and training requirements
- Responsibilities of all persons involved in ACM management
- Procedures to address incidents or spillage involving ACM
- A timetable for managing risks, including priorities for removal or control of ACM according to risk and timetable for reviewing risk assessments
- A procedure for reviewing and updating the ASMP and register of ACM, including a timetable

This ASMP addresses the current requirements for asbestos management and therefore must be updated as required to reflect legislative changes. The asbestos register and associated risk assessment within this ASMP is designed to be reviewed by a licensed Asbestos Assessor at the intervals shown in 4.2 Asbestos Register Table 3A.

Where ACM has been disturbed, removed, enclosed, encapsulated, sealed or its condition has deteriorated, the existing asbestos risk assessment will no longer be valid and the ASMP will need to be reviewed by the licensed Asbestos Assessor to reflect these changes. Each review should critically assess all the asbestos management procedures and their effectiveness in:

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

Details of any mitigating factors must be recorded in the Asbestos Register (refer 4.2 Table 3A).

2.2 Exclusions

The survey was non-destructive in nature. Therefore, sampling was limited to materials which are accessible without causing damage to the structure, fixtures of fittings, or where sampling or inspection would be a safety risk to the assessor. **No determination can be made regarding the possibility of concealed or inaccessible ACM without gaining access to areas that are not readily accessible to allow for inspections.**

Unless specifically noted, the survey did not cover exterior ground surfaces, sub-surfaces (e.g. infill/soil) or items such as materials in laboratories or special purpose facilities.

When any building works are undertaken, care should be taken to determine the existence or otherwise of ACM. As a precaution, all materials that may, or are likely to contain asbestos should be assumed to contain asbestos and be treated appropriately until laboratory analysis confirms otherwise. If, during building works, ACM is located, those works should cease in the areas of concern and a licensed Asbestos Removalist contacted immediately to remove the material. A licensed Asbestos Assessor must issue a clearance certificate before works may recommence in the affected area.

Robson Environmental Pty Ltd recommends that prior to any works, our office be contacted. Our Asbestos Assessors can attend the site to observe the works process, advise as necessary, and in the event of asbestos being located, assist with assessing the extent of ACM. Further, Robson Environmental Pty Ltd provides all occupational hygiene services in relation to asbestos removal.

2.3 Limitations

Although all reasonable care and attention is taken in compiling this report, no guarantee as to its accuracy or completeness can be given. This may be a result of:

- normal construction practices of 'building in' some ACM (i.e. during previous renovations or additions)
- the random application of asbestos materials
- 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 material removal projects, the contractor(s) carrying out the work must fully acquaint themselves with the extent of the hazardous materials, particularly in those areas which may require full or partial demolition, in order to determine the exact extent and location of these materials.

Although extensive, this ASMP must not be used as a specification or method statement for any future asbestos removal project. In these circumstances, detailed plans and quantities would be required.

3 ASBESTOS SURVEY

3.1 Survey Details

The survey included all accessible building areas. Inaccessible areas and limitations are described in Sections 2.2 and Section 2.3 respectively. Robson Environmental Pty Ltd commenced the reinspection of the previously identified ACM on 23/04/2019.

3.2 Survey Methodology

The survey involved a visual inspection and subsequent sampling and analysis of materials in Robson Environmental's NATA accredited laboratory using polarised light microscopy. Samples were a representative selection of materials suspected of containing asbestos. Materials were not sampled from all areas due to the uniformity of the materials used.

3.3 Sample Analysis

Table 2: Mineralogical analysis of samples for asbestos using polarising light microscopy

After School Care				
Sample Reference	**Tracker Location No**	**Sample Location**	**Sample Type**	**Composition**
2123-28-7	001	Exterior covered walkway - soffits	Sheet	Removed
D2154	002	Main room - light brown flooring (throughout building)	Vinyl floor tile	No Asbestos Detected
P0340	001	Exterior - wall cladding	Sheet	No Asbestos Detected

Gambarri Centre				
Sample Reference	**Tracker Location No**	**Sample Location**	**Sample Type**	**Composition**
2123-28-8	001	Exterior - eave soffits	Sheet	Chrysotile, Amosite Asbestos Detected
3741-47-A10	001	Exterior - wall cladding	Sheet	No Asbestos Detected
3741-47-A4	002	Ground floor Staff Office - ceiling	Sheet	Chrysotile, Amosite Asbestos Detected
3741-47-A5	003	Ground floor toilets adjacent Staff Office - panel below sinks	Sheet	Removed
3741-47-A8	017	Ground floor Music Room - ceiling to sink alcove	Sheet	Chrysotile, Amosite Asbestos Detected
D2148	003	Ground floor toilets adjacent Staff Office - walls	Sheet	Chrysotile Asbestos Detected

Gambarri Centre				
Sample Reference	**Tracker Location No**	**Sample Location**	**Sample Type**	**Composition**
D2149	006	Ground floor store room - beige flooring	Vinyl floor tile	No Asbestos Detected
D2150	006	Ground floor store room - to underside of sink	Bituminous pad to underside of sink	Chrysotile Asbestos Detected
D2151	028	Ground floor kitchen - cream flooring	Vinyl floor tile	No Asbestos Detected
D2152	015	Ground floor Electrical Switchboard Room - ceiling	Sheet	No Asbestos Detected
D2153	021	Ground floor male toilets - walls	Sheet	No Asbestos Detected
D2155	018	Ground floor Preschool staff toilets - ceiling and walls	Sheet	No Asbestos Detected
D2156	008	Preschool store room - green/blue vinyl flooring (throughout building)	Vinyl floor tile	No Asbestos Detected
F1058	015	Ground floor Electrical Switchboard Room - walls	Sheet	Chrysotile, Amosite Asbestos Detected
O1318	004	Corridor wall cavity to main entrance - to hot water pipes in wall cavity and subfloor (throughout building)	Pipe lagging (fibrous)	Chrysotile Asbestos Detected
P0324	004	Ground floor Preschool toilets - walls	Sheet	No Asbestos Detected

Primary				
Sample Reference	**Tracker Location No**	**Sample Location**	**Sample Type**	**Composition**
2123-28-2	001	Exterior covered walkway - ceiling	Sheet	Removed
3741-47-A3	001	Exterior - to roof	Cement flue pipe	Chrysotile, Amosite, Crocidolite Asbestos Detected
D2138	002	Ground floor main entrance corridor - paper backing and	Vinyl floor covering	No Asbestos Detected

Primary				
Sample Reference	**Tracker Location No**	**Sample Location**	**Sample Type**	**Composition**
		black hessian backed flooring under carpet		
D2139	005	Ground floor male toilet to main entrance corridor - wall above urinal	Sheet	No Asbestos Detected
D2140	007	Ground floor indoor assembly area - red flooring under carpet	Vinyl floor covering	No Asbestos Detected
D2141	021	Ground floor male toilet airlock to Library - walls	Sheet	No Asbestos Detected
D2142	030	Ground floor Plant Room - beige vinyl flooring	Vinyl floor tile	No Asbestos Detected
D2143	027	Ground floor Admin - infill panel under window	Sheet	No Asbestos Detected
D2144	001	Exterior covered walkway - infill panel	Sheet	No Asbestos Detected
D2145	043	Ground floor Boiler Room - heating hot water valve flange	Gaskets (compressed)	No Asbestos Detected
D2146	043	Ground floor Boiler Room - flue flange joint	Gaskets (compressed)	No Asbestos Detected
D2147	048	Ground floor office - brown hessian backed vinyl flooring	Vinyl floor tile	No Asbestos Detected
P0152	030	Ground floor Plant Room - wall	Sheet	No Asbestos Detected
P0322	043	Ground floor Boiler Room - ceiling around flue	Sheet	Chrysotile Asbestos Detected

NATA accredited laboratory:

Robson Environmental Pty Ltd
Accreditation number: 3181

Legend

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

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

- Samples may not have been taken from all areas due to the uniformity of the materials used throughout the premises.
- On-site inspections and an examination of the asbestos register and accompanying plans within this report should be undertaken prior to the commencement of any asbestos removal programme.

Robson Environmental Pty Ltd has taken all care to ensure that this report includes the most accurate information available. Where it uses test results prepared by third parties, it relies on the accuracy of the test results in preparing this report. In providing this report, Robson Environmental Pty Ltd does not warrant the accuracy of such third party analytical results.

4 ASBESTOS RISK ASSESSMENT

4.1 Introduction

The purpose of the risk assessment is to enable informed decisions to be made concerning the control of ACM. The risk assessment should take into account the information in the Asbestos Register including:

- the type of ACM (friable or non friable)
- the condition and location of ACM
- whether the ACM is likely to be disturbed due to its condition and location
- the likelihood of exposure

Types of ACM

Non friable ACM	Non friable asbestos (previously known as bonded asbestos) is any material that contains asbestos firmly bound into a matrix. It may consist of cement or various resins/binders and cannot be reduced to a dust by hand pressure. As such it does not present an exposure hazard unless cut, abraded, sanded or otherwise disturbed. Therefore, the exposure risk from non friable ACM is negligible during normal building occupation. *Note: if non friable ACM is damaged or otherwise deteriorated, the risk assessment may be reviewed to reflect a higher potential for exposure to asbestos fibres. Severely damaged, non friable ACM may be assessed as being friable. A licensed Asbestos Assessor must perform the risk assessment.*
Friable ACM	Friable asbestos material can be crumbled or reduced to a dust by hand pressure when dry. It can represent a significant exposure hazard as a consequence of minor disturbance. Examples of friable asbestos are hot water pipe lagging, severely damaged asbestos cement sheet, limpet spray to structural beams and electrical duct heater millboard.

ACM CONDITION RATING

1	Severe	**Friable:** Readily accessible, deteriorated surface in extremely poor condition
2	Poor	**Friable:** Unstable material that is relatively accessible **Non friable:** Readily accessible, deteriorated surface
3	Normal	**Friable:** Stable asbestos that is relatively inaccessible **Non friable:** Accessible surfaces in fair condition
4	Good	**Non friable:** Well sealed stable surfaces in accessible locations

ACM RISK RATING

A	Very High	**Friable:** Exposure to airborne asbestos as a consequence of extremely minor disturbance
B	High	**Friable:** Exposure to airborne asbestos occurs as a consequence of minor disturbance **Non friable:** Exposure to airborne asbestos likely as a consequence of significant disturbance
C	Medium	**Friable:** Exposure to airborne asbestos unlikely during normal building use **Non friable:** Exposure to airborne asbestos highly unlikely during normal building use
D	Low	**Non friable:** No exposure to airborne asbestos during normal building use

4.2 Asbestos Register

The Asbestos Register details the type, location, risk rating and action required for all identified ACM. The register should be accessed to inform all decisions made concerning the control of ACM. Action taken to control ACM must be recorded in this register in order to comply with current legislation.

Table 3A: Asbestos Register (to be updated as required)

After School Care									
Sample No.	**ACM Type**	**Tracker Location No.**	**Locations**	**Condition Rating**	**Risk Rating**	**Approx Quantity**	**Recommended Management Action**	**Action Undertaken**	**Assessor/ Date assessed**
RA 2123-28-8	Sheet (Non-Friable)	001	Exterior - high level eave soffits	3	C	50 m²	Label and maintain Inspect every 5 years		
VA04	Sheet (Presumed Non-Friable)	N/A	Electrical switchboards - backing boards (throughout building)	3	C	-	Further investigation required		

Gambarri Centre									
Sample No.	**ACM Type**	**Tracker Location No.**	**Locations**	**Condition Rating**	**Risk Rating**	**Approx Quantity**	**Recommended Management Action**	**Action Undertaken**	**Assessor/ Date assessed**
RA 2123-28-7	Sheet (Non-Friable)	001	Exterior rear verandah - soffits	3	C	20 m²	Label and maintain Inspect every 5 years		
2123-28-8	Sheet (Non-Friable)	001	Exterior - eave soffits	3	C	>100 m²	Seal Label and maintain Inspect every 5 years		
RA 3741-	Sheet	003	Ground floor toilets adjacent Staff Office -	3	C	20 m²	Label and maintain		

Gambarri Centre									
Sample No.	**ACM Type**	**Tracker Location No.**	**Locations**	**Condition Rating**	**Risk Rating**	**Approx Quantity**	**Recommended Management Action**	**Action Undertaken**	**Assessor/ Date assessed**
47-A4	(Non-Friable)		ceiling				Inspect every 5 years		
RA 3741-47-A4	Sheet (Non-Friable)	024	Ground floor staff toilet - ceiling	3	C	20 m²	Label and maintain Inspect every 5 years		
3741-47-A4	Sheet (Non-Friable)	002	Ground floor Staff Office - ceiling	3	C	20 m²	Label and maintain Inspect every 5 years		
3741-47-A8	Sheet (Non-Friable)	017	Ground floor Music Room - ceiling to sink alcove	3	C	1 m²	Label and maintain Inspect every 5 years		
D2148	Sheet (Non-Friable)	003	Ground floor toilets adjacent Staff Office - walls	3	C	20 m²	Label and maintain Inspect every 5 years		
D2150	Bituminous pad to underside of sink (Non-Friable)	006	Ground floor store room - to underside of sink	3	D	<0.1 m²	Label and maintain Inspect every 5 years		
F1058	Sheet (Non-Friable)	015	Ground floor Electrical Switchboard Room - walls	2	C	20 m²	Repair Seal Label and maintain Inspect every 5 years		
O1318	Pipe lagging (fibrous) (Friable)	004	Corridor wall cavity to main entrance - to hot water pipes in wall cavity and subfloor (throughout	3	C	-	Restrict access		

Gambarri Centre									
Sample No.	**ACM Type**	**Tracker Location No.**	**Locations**	**Condition Rating**	**Risk Rating**	**Approx Quantity**	**Recommended Management Action**	**Action Undertaken**	**Assessor/ Date assessed**
			building)						
VA02	Cable wrap (Presumed Non-Friable)	024	Staff toilet - oyster light fittings (throughout building)	3	C	-	Further investigation required		
VA05	Sheet (Presumed Non-Friable)	N/A	Electrical switchboards - backing boards (throughout building)	3	C	-	Further investigation required		

Primary									
Sample No.	**ACM Type**	**Tracker Location No.**	**Locations**	**Condition Rating**	**Risk Rating**	**Approx Quantity**	**Recommended Management Action**	**Action Undertaken**	**Assessor/ Date assessed**
3741-47-A3	Cement flue pipe (Non-Friable)	001	Exterior - to roof	3	C	1 no	Label and maintain Inspect every 5 years		
P0322	Sheet (Non-Friable)	043	Ground floor Boiler Room - ceiling around flue	3	C	-	Label and maintain Inspect every 5 years		
VA01	Pipe lagging (fibrous) (Presumed Friable)	N/A	Wet areas - to hot water pipes embedded in masonry walls (throughout building)	3	C	-	Further investigation required		
VA03	Sheet (Presumed	N/A	Electrical switchboards - backing boards	3	C	-	Further investigation required		

Primary									
Sample No.	**ACM Type**	**Tracker Location No.**	**Locations**	**Condition Rating**	**Risk Rating**	**Approx Quantity**	**Recommended Management Action**	**Action Undertaken**	**Assessor/ Date assessed**
	Non-Friable)		(throughout building)						

RA = Referred to another sample as being the same material
VA = Material visually assessed as being consistent with ACM

Refer to Section 1.4 - Table 1B for presumed ACM and Section 2.2 for exclusions

Table 3B: Register of sampled materials which have been confirmed as non ACM

After School Care			
Sample number	**Type**	**Tracker Location No**	**Locations**
D2154	Vinyl floor tile	002	Main room - light brown flooring (throughout building)
P0340	Sheet	001	Exterior - wall cladding

Gambarri Centre			
Sample number	**Type**	**Tracker Location No**	**Locations**
3741-47-A10	Sheet	001	Exterior - wall cladding
D2149	Vinyl floor tile	006	Ground floor store room - beige flooring
D2151	Vinyl floor tile	028	Ground floor kitchen - cream flooring
D2152	Sheet	015	Ground floor Electrical Switchboard Room - ceiling
D2153	Sheet	021	Ground floor male toilets - walls
D2155	Sheet	018	Ground floor Preschool staff toilets - ceiling and walls
D2156	Vinyl floor tile	008	Preschool store room - green/blue vinyl flooring (throughout building)
P0324	Sheet	004	Ground floor Preschool toilets - walls

Primary			
Sample number	**Type**	**Tracker Location No**	**Locations**
D2138	Vinyl floor covering	002	Ground floor main entrance corridor - paper backing and black hessian backed flooring under carpet
D2139	Sheet	005	Ground floor male toilet to main entrance corridor - wall above urinal

Primary			
Sample number	**Type**	**Tracker Location No**	**Locations**
D2140	Vinyl floor covering	007	Ground floor indoor assembly area - red flooring under carpet
D2141	Sheet	021	Ground floor male toilet airlock to Library - walls
D2142	Vinyl floor tile	030	Ground floor Plant Room - beige vinyl flooring
D2143	Sheet	027	Ground floor Admin - infill panel under window
D2144	Sheet	001	Exterior covered walkway - infill panel
D2145	Gaskets (compressed)	043	Ground floor Boiler Room - heating hot water valve flange
D2146	Gaskets (compressed)	043	Ground floor Boiler Room - flue flange joint
D2147	Vinyl floor tile	048	Ground floor office - brown hessian backed vinyl flooring
P0152	Sheet	030	Ground floor Plant Room - wall

Refer to Section 1.4 - Table 1B for presumed ACM and Section 2.2 for exclusions

4.3 Risk Assessment

Control Measures General Requirements

- Any ACM which is not scheduled for immediate removal should be labelled and maintained in good condition.
- The details of any deterioration or removal must be entered into the ACM register.
- Maintenance and other personnel must be made aware of the location of ACM.
- The Asbestos Register must be distributed to all stakeholders.
- Unless holding a valid Asbestos Removal Licence, maintenance workers or occupants shall not remove or knowingly damage identified, presumed or suspected ACM.
- 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 Premises

- Identified, presumed or suspected ACM should be labelled with approved asbestos warning labels or signs. Where labelling is not practicable, strict administrative controls must be in place to ensure ACM is not subject to accidental damage or misuse.
- The ACM should be maintained in good condition.

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.

The asbestos register and associated risk assessments within the ASMP are designed to be reviewed by a licensed Asbestos Assessor at intervals stated in 4.2 Asbestos Register Table 3A.

Where an ACM has been disturbed, removed, enclosed, encapsulated, sealed or its condition has deteriorated, the existing asbestos risk assessment will no longer be valid and the ASMP will need to be revised by a licensed Asbestos Assessor to reflect these changes. – refer section 2.1.

Demolition or any other works within areas where asbestos is located is not to take place until the asbestos removal works have been completed and a Clearance Certificate issued by a licensed Asbestos Assessor.

5 ASBESTOS MANAGEMENT

5.1 Control Measures

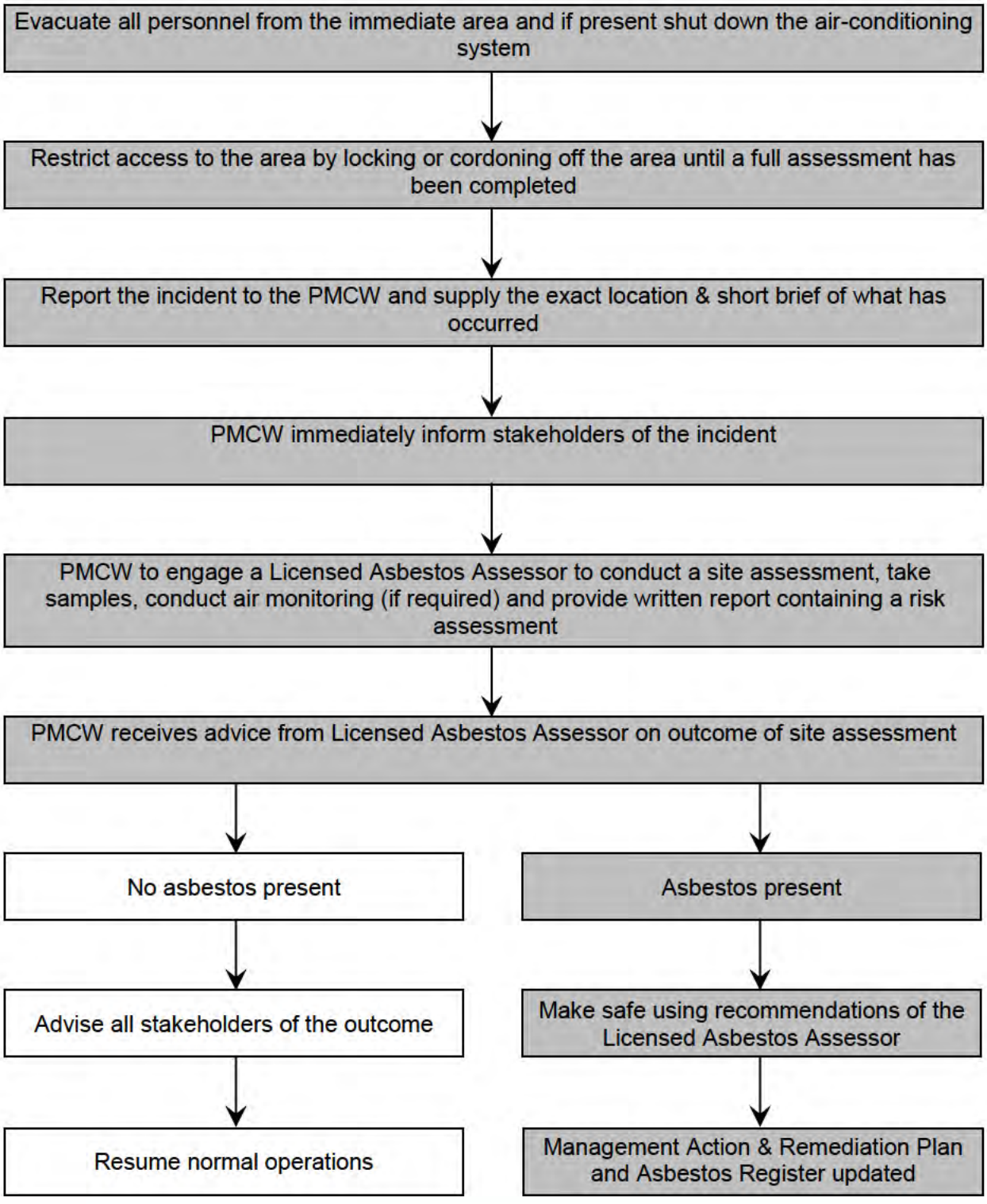
General requirements

- ACM identified as representing an exposure risk (see Table 3A) should be removed or otherwise controlled.
- Any ACM that is not scheduled for immediate removal should be labelled with appropriate warnings and maintained in good condition.
- The location of ACM must be entered into the Asbestos Register.
- Maintenance and other personnel must be made aware of the location of ACM.
- The Asbestos Register must be freely available.
- Unless holding a valid Asbestos Removal Licence, maintenance workers, trades or occupants shall not remove or knowingly damage identified ACM.
- Before any planned demolition, refurbishment or maintenance, its effect upon any in situ asbestos must be established by reference to this document, including amendments.

5.1.1 Accidental damage or disturbance to ACM

5.2 Asbestos Emergency Procedures

The following course of action should be taken **immediately** if asbestos containing material (ACM) or suspected ACM is disturbed, or is accidentally damaged.



5.3 Management of ACM

The options for short to medium-term management of ACM are outlined below.

1. Defer action

✓ Appropriate when	× Not appropriate when	✓ Advantages	× Disadvantages
Negligible risk of exposure ***and*** Asbestos inaccessible and fully contained ***or*** Asbestos stable and not liable to damage	Possibility of deterioration or damage Airborne dust exceeds recommended exposure standard	No initial cost Cost of removal deferred	Hazard remains Need for continuing assessment Asbestos management program required

2. Encapsulate or seal[1]

✓ Appropriate when	× Not appropriate when	✓ Advantages	× Disadvantages
Removal difficult or not feasible Firm bond to substrate Damage unlikely Short life of structure	Asbestos deteriorating Application of sealant may cause damage to material Water damage likely Large areas of damaged asbestos	Quick and economical for repairs to damaged areas May be an adequate technique to control release of asbestos dust	Hazard remains Cost for large areas may be near removal cost Asbestos management system required Eventual removal may be more difficult and costly

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

3. Removal

✓ Appropriate when	✗ Not appropriate when	✓ Advantages	✗ Disadvantages
Surface friable or asbestos poorly bonded to substrate Asbestos is severely water-damaged or liable to further damage or deterioration Located in air conditioning duct Airborne asbestos exceeds recommended exposure standard Other control techniques inappropriate	Located on complex and inaccessible surfaces Removal extremely difficult and other techniques offer satisfactory alternative	Hazard removed No further action required	Increases immediate risk of exposure especially to removal workers Creates major disturbance in building Often highest cost, most complex and time-consuming method Removal may increase fire risk in building; substitute required Possible contamination of whole building if removal is done poorly

5.4 PMCW Decision Record

Option 1: Defer action

Item no.	ACM and Location	Reason	Authorisation	Date

Option 2: Encapsulate or seal

Item no.	ACM and Location	Reason	Authorisation	Date

Option 3: Removal

Item no.	ACM and Location	Reason	Authorisation	Date

5.5 Timetable for Action

The timetable for action should be administered to ensure the PMCW has a clear plan for all works which may affect ACM in the workplace. This includes maintenance work, scheduled removal work and risk assessment reviews that may impact ACM.

Table 4: Timetable for action

ACM removal/ work	Date of scheduled works	Details	Authorisation	Date

ACM removal/ work	Date of scheduled works	Details	Authorisation	Date

6 RESPONSIBILITIES

6.1 PMCW Responsibilities

The PMCW must:

- ensure the ACM register and all relevant information pertaining to asbestos in the workplace is freely available upon request
- provide occupants with up-to-date information relating to the condition and relative risk of ACM in the workplace
- provide information on the control measures in place to contain ACM-related risk
- provide information to staff and contractors on measures to be taken to ensure there is no exposure to asbestos in the workplace, either through accident or negligence

PMCW Action Record

Record all communication activities undertaken to inform staff/occupants of ACM in the workplace.

Action	Authorisation	Date

6.2 Updating the Risk Assessment

The register of ACM, including any risk assessments, should be reviewed at the intervals stated in 4.2 Asbestos Register Table 3A or earlier where:

- a risk assessment indicates the need for reassessment
- any ACM has been disturbed or moved

A visual inspection of identified ACM should be undertaken as part of any review.

Current legislation requires that an Asbestos Management Plan and Risk Assessments are required in addition to an Asbestos Register and Survey. Licensed Asbestos Assessors at Robson Environmental Pty Ltd are able to produce these documents to comply with your obligations.

Each review 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 ASMP

Details of any mitigating actions must be recorded in the 2.4 Asbestos Register Table 3A.

6.3 Key Personnel

This section outlines the responsibilities of all persons involved in the safe management of ACM.

1. PMCW

Name:	
Contact details:	
Responsibilities:	*e.g. provision of information*

2. Occupational Health and Safety Representative

Name:	
Contact details:	
Responsibilities:	*e.g. keeping occupants informed of any changes to the status of ACM in the workplace*

3. Facilities Management (if applicable)

Name:	
Contact details:	
Responsibilities:	*e.g. arrange removal and repair works as required; maintaining the ASMP*

4. Other

Name:	
Contact details:	
Responsibilities:	

7 ASBESTOS REMOVAL WORKS

7.1 PMCW Responsibilities

Where it has been determined that ACM is to be removed, the PMCW 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 licensed Asbestos Assessor.

The PMCW should provide a detailed scope of works for the Asbestos Removalist, including potential hazards, details about areas which may contain asbestos and arrangements for clearance inspections and air monitoring.

7.2 Removalist Responsibilities

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

- provide a site-specific Asbestos Removal Control Plan (ARCP)
- 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 current legislation

7.3 Approval to Begin Asbestos Removal Works

All removal methods and procedures are required to be undertaken in accordance with current legislation.

The PMCW in conjunction with an Asbestos Assessor will inform the Asbestos Removalist of the Scope of Work.

The Asbestos Assessor will be required to provide a clearance certificate on satisfactory completion of the works.

7.4 Work in Areas Containing Asbestos – Trades Personnel

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

Work must not proceed under any circumstance without first contacting the PMCW.

Refer to this ASMP (including amendments) to determine if ACM are likely to be encountered in the general work area. If no ACM is located in the area of intended work, the area may be entered by all relevant personnel on an unrestricted basis.

Work in areas where ACM will, or is likely to be disturbed will only be given to ACT licensed Asbestos Removalists and all access and works will be in accordance with current legislation.

7.5 Emergency Work in Areas Containing Asbestos

If emergency work is required, contact the PMCW. If the PMCW determines that asbestos is likely to be encountered a licensed Asbestos Removalists must undertake any asbestos removal or remediation works. Telephone WorkSafe ACT for emergency approval of asbestos work. Advise WorkSafe ACT in writing within 24 hours.

A licensed Asbestos Assessor will be required to provide a clearance certificate on satisfactory completion of the works.

7.6 Monitoring Arrangements

To ensure control measures are effective, air monitoring should be performed whenever friable ACM is being removed from buildings. A Risk Assessment may also require that air monitoring is undertaken during or at the completion of the removal of non friable ACM.

All air monitoring must be performed by a competent person accredited to perform air sampling for asbestos. Sampling should be performed in accordance with the '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 removal and associated works do 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 Asbestos Assessor instructing the contractor to take the appropriate 'Control /Action' as listed below.

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

7.7 Clearance Inspections Prior To Re-Occupation

Following removal work, a clearance inspection must be undertaken prior to re-occupation of an asbestos work area. This shall be conducted by a licensed Asbestos Assessor.

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

7.8 ACM removal/maintenance record

The Asbestos Register, Section 4.2, Table 3A, is to be completed by the PMCW after receiving appropriate clearance certification from a licensed Asbestos Assessor.

The 'Work Performed' and 'Asbestos Control Measure' Tables on the following page are required to be completed by the PMCW.

1. Work Performed

Company name	Contact details	Date of work + job no.	Scope of work

2. Asbestos Control Measures

Work performed	Air monitoring/ decontamination	Clearance certificate issued	Other

3. Additional Information

8 UPDATING THE ASMP

Where an ACM has been disturbed, removed, enclosed, encapsulated, sealed or its condition has deteriorated, the existing asbestos risk assessment will no longer be valid and the ASMP will need to be revised by a licensed Asbestos Assessor to reflect these changes.

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 ASMP
- details of any mitigating factors must be recorded in 2.4 Asbestos Register – Table 3A

9 APPENDICES

9.1 APPENDIX A – Laboratory Results

[redacted]

ASBESTOS IDENTIFICATION REPORT

CLIENT: Robson Environmental
DATE: 21 July 2009
ADDRESS: 9 Lyell Street, Fyshwick ACT 2609
REPORT NO: 9AA0592AD
JOB NO: 3741 – 47
PAGE NO: 1 of 1
JOB CLIENT: ACT Property Group
JOB LOCATION: Yarralumla Primary & Preschool, Gambarri Centre, Montesorri Preschool & after school care
RESULTS:

Sample	Sample size	Description	Asbestos*	SMF*	OF*
3741-47-A1	(a) 45x40x3	Beige flooring	No **		
3741-47-A2	(b) 45x20x3	Brown linoleum flooring	No **		
3741-47-A3	(b) 3x2x1	Grey fibrous sheeting, painted pale blue	Chrysotile, crocidolite, amosite		
3741-47-A4	(a) 20x10x2	White fibrous sheeting, painted white	Chrysotile, amosite		Yes
3741-47-A5	(a) 90x45x5	Pale brown fibrous sheeting, painted yellow	Chrysotile		Yes
3741-47-A6	(b) 15x10x3	Dark beige flooring	No **		
3741-47-A7	(a) 70x50x5	Off-white fibrous sheeting, painted white	Chrysotile, amosite		
3741-47-A8	(b) 5x5x1	White fibrous sheeting	Chrysotile, amosite		
3741-47-A9	(b) 20x15x2	Light brown flooring	No **		
3741-47-A10	(a) 20x15x2	Pale grey fibrous sheeting, painted yellow	No		Yes

APPROVED IDENTIFIER: [redacted] APPROVED SIGNATORY: [redacted]
CHECKED BY: [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.
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 (Synthetic Mineral Fibre) is commonly known as glass fibre and OF (Organic Fibre) includes natural fibres (eg cellulose) and synthetic organic fibre but not high temperature fibres (eg Teflon fibres). A blank in the SMF or OF column implies not detected. Tr in the SMF or OF column indicates identification in Trace amount
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: [redacted]
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Robson ENVIRONMENTAL
Effective Environmental Solutions

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Fibre Identification Certificate of Analysis

Report Number: 7335-47 Date of Report: 24.04.2012 Samples Taken by: Robson Environmental Page 1 of 1

Client Details		Laboratory Details	
Client:	ACT Property	Address:	140 Gladstone Street, Fyshwick, Canberra 2609
Attention:		Manager:	[redacted]
Received:	24 April 2012	Telephone:	02 6239 5656
Client Reference:	YarralumlaSchool	Fax:	02 6239 5669
Email/Tel.No:		Email:	fibreid@robsonenviro.com

Test Specification(s) Employed: AS4964 (2004) & In-House Procedure No.2

Methodology Summary

Samples of material are examined to determine the presence of asbestos fibres using AS4964 (2004) & In-House Procedure No.2 i.e. Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by **Polarised Light Microscopy** (**PLM**) in conjunction with **Dispersion Staining** (**DS**). Unequivocal identification of asbestos minerals present is made by assessing fibre properties to see whether the values are typical and consistent with published data. This provides a reasonable degree of certainty to determine whether a fibre under investigation is asbestiform or not. Careful application of the test procedure provides sufficient diagnostic clues to allow unequivocal identification of asbestos types, and so, to determine whether a sample contains asbestos or not. If sufficient diagnostic clues are absent, then positive identification of fibrous asbestos is not possible.

Client Supplied Samples

Robson Environmental is not responsible for the accuracy or competence of sampling carried by third parties. Sample location(s) and/or sample type(s) of third party samples delivered to the laboratory are given by the client at the time of delivery. Under these circumstances, Robson Environmental cannot be held responsible for the interpretation of the results shown. When the test certificate indicates that bulk samples were taken by the client, they are outside the scope of our NATA Accreditation for sampling. Robson Environmental takes responsibility of information reported only when a staff member takes the sample(s).

Reporting of Results

'Asbestos Detected': Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'No Asbestos Detected': No Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'UMF Detected': Mineral fibres of unknown type detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**). Confirmation by another independent analytical technique may be necessary.
"Hand-picked" refers to small discrete amounts of asbestos unevenly distributed in a large body of non-asbestos material.

Limit of Detection & Reporting Limit

Known limitations of the test procedure using **Polarised Light Microscopy** (**PLM**) are:

- **PLM** is a qualitative technique only;
- It does not cover identification of airborne or water-borne asbestos;
- The less encountered asbestos mineral fibres actinolite, anthophyllite and tremolite exhibit a wide range of optical properties that preclude unequivocal identification by **PLM** and **Dispersion Staining** (DS). Thus, the method is used to positively identify the three major asbestos minerals: amosite ("brown"), chrysotile ("white") and crocidolite ("blue");
- Valid identification requires that the sample material contains a sufficient quantity of the unknown fibres in excess of the practical detection limit used (in this case, **PLM** and **Dispersion Staining**, which has a calculated practical detection limit of 0.01-0.1% equivalent to 0.1-1g/kg (*AS4946-2004:App.A4*).

Results relate only to the sample(s) submitted for testing.
Test report must not be reproduced except in full.
Test report issued in accordance with NATA's accreditation requirements and compliance with ISO/IEC 17025.

Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
P0321		Boiler Room: Pipe	Gasket	<1g	No Asbestos Detected
P0322		Boiler Room: Ceiling around flue	Insulation Board	1000mm^2	Chrysotile Asbestos Detected
P0323		Heating Pump Room: Debris	Pipe Insulation	<1g	Chrysotile Asbestos Detected
P0324		Toilet: Wall	AC Sheet	<1g	No Asbestos Detected
P0325		External Walls	Fibrous Cement Sheet	<1g	No Asbestos Detected

[redacted]
Approved Identifier

NATA
No. 3181

[redacted]
Approved Signatory

Document issued in accordance with NATA's accreditation requirements and without alterations or erasure and must not be duplicated unless in full

733547_Fibre ID res_20120424 Page 1 of 1

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Fibre Identification Certificate of Analysis

Report Number: 7335-47 Date of Report: 11.05.2012 Samples Taken by: Robson Environmental Page 1 of 1

Client Details		Laboratory Details	
Client:	ACT Property Group	Address:	140 Gladstone Street, Fyshwick, Canberra 2609
Attention:		Manager:	
Received:	7.5.2012	Telephone:	02 6239 5656
Client Reference:	Yarralumla School	Fax:	02 6239 5669
Email:		Email:	fibreid@robsonenviro.com

Test Specification(s) Employed: AS4964 (2004) & In-House Procedure No.2

Methodology Summary

Samples of material are examined to determine the presence of asbestos fibres using AS4964 (2004) & In-House Procedure No.2 i.e. Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by **Polarised Light Microscopy** (**PLM**) in conjunction with **Dispersion Staining** (**DS**). Unequivocal identification of asbestos minerals present is made by assessing fibre properties to see whether the values are typical and consistent with published data. This provides a reasonable degree of certainty to determine whether a fibre under investigation is asbestiform or not. Careful application of the test procedure provides sufficient diagnostic clues to allow unequivocal identification of asbestos types, and so, to determine whether a sample contains asbestos or not. If sufficient diagnostic clues are absent, then positive identification of fibrous asbestos is not possible.

Client Supplied Samples

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- **PLM** is a qualitative technique only;
- It does not cover identification of airborne or water-borne asbestos;
- The less encountered asbestos mineral fibres actinolite, anthophyllite and tremolite exhibit a wide range of optical properties that preclude unequivocal identification by **PLM** and **Dispersion Staining** (DS). Thus, the method is used to positively identify the three major asbestos minerals: amosite ("brown"), chrysotile ("white") and crocidolite ("blue");
- Valid identification requires that the sample material contains a sufficient quantity of the unknown fibres in excess of the practical detection limit used (in this case, **PLM** and **Dispersion Staining**, which has a calculated practical detection limit of 0.01-0.1% equivalent to 0.1-1g/kg (AS4946-2004:App. A4).

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Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
P0339		Garubarri Centre external wall	Wall Cladding	5g	No Asbestos Detected
P0340		After School Care external wall	Wall Cladding	10g	No Asbestos Detected

Approved Signatory

NATA
No. 3181

Approved Identifier

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Table 5 to Procedure No.2

Robson ENVIRONMENTAL
Effective Environmental Solutions

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W: www.robsonenviro.com.au

Fibre Identification Certificate of Analysis

Report Number: 7667 Date of Report: 31/10/2011 Samples Taken by: [redacted] Page 1 of 1

Client Details	Laboratory Details
Client: ACT Property Group	Address: 140 Gladstone Street, Fyshwick, Canberra 2609
Attention: Michael McCrorey	Manager: [redacted]
Received: 28/10/2011	Telephone: 02 6239 5656
Client Reference: Yarralumla Primary	Fax: 02 6239 5669
Email: michael.mccrorey@act.gov.au	Email: fibreid@robsonenviro.com

Test Specification(s) Employed: AS4964 (2004) & In-House Procedure No.2

Methodology Summary

Samples of material are examined to determine the presence of asbestos fibres using AS4964 (2004) & In-House Procedure No.2 i.e. Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by **Polarised Light Microscopy** (**PLM**) in conjunction with **Dispersion Staining** (**DS**). Unequivocal identification of asbestos minerals present is made by assessing fibre properties to see whether the values are typical and consistent with published data. This provides a reasonable degree of certainty to determine whether a fibre under investigation is asbestiform or not. Careful application of the test procedure provides sufficient diagnostic clues to allow unequivocal identification of asbestos types, and so, to determine whether a sample contains asbestos or not. If sufficient diagnostic clues are absent, then positive identification of fibrous asbestos is not possible.

Client Supplied Samples

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Reporting of Results

'Asbestos Detected': Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'No Asbestos Detected': No Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'UMF Detected': Mineral fibres of unknown type detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**). Confirmation by another independent analytical technique may be necessary.
"Hand-picked" refers to small discrete amounts of asbestos unevenly distributed in a large body of non-asbestos material.

Limit of Detection & Reporting Limit

Known limitations of the test procedure using **Polarised Light Microscopy** (**PLM**) are:

- **PLM** is a qualitative technique only;
- It does not cover identification of airborne or water-borne asbestos;
- The less encountered asbestos mineral fibres actinolite, anthophyllite and tremolite exhibit a wide range of optical properties that preclude unequivocal identification by **PLM** and **Dispersion Staining** (DS). Thus, the method is used to positively identify the three major asbestos minerals: amosite ("brown"), chrysotile ("white") and crocidolite ("blue");
- Valid identification requires that the sample material contains a sufficient quantity of the unknown fibres in excess of the practical detection limit used (in this case, **PLM** and **Dispersion Staining**, which has a calculated practical detection limit of 0.01-0.1% equivalent to 0.1-1g/kg (*AS4946-2004:App.A4*).

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Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
P0150	-	Small electrical room External pipe insulation	Fibrous insulation	<1g	No Asbestos Detected
P0151	-	Small electrical room Electrical room – modern sheet walls	Fibrous sheet material	<1g	No Asbestos Detected
P0152	-	Small electrical room Top of switchboard - debris	Fibrous sheet material	<1g	No Asbestos Detected
P0153	-	Large electrical room Electrical room floor debris	Fibrous sheet material	<1g	Chrysotile Asbestos Amosite Asbestos
P0154	-	Large electrical room Electrical room – sheet walls	Fibrous sheet material	<1g	Chrysotile Asbestos Amosite Asbestos

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Approved Signatory

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7667_Fibre ID res_20111031 Page 1 of 1

Fibre Identification Certificate of Analysis

Report Number: T-01035 Date of Report: 3/05/2019 Samples Taken by: Robson Environmental Page 1 of 3

Client Details	Laboratory Details
Client: ACT Property Group (Schools)	Address: 140 Gladstone Street, Fyshwick, Canberra 2609
Attention: ACT Response Centre	Manager:
Received: 3/05/2019 2:05:20 PM	Telephone:
Client Reference: Yarralumla Primary, Gambarri Centre, Yarralumla Preschool, Montesorri Preschool, After School Care	Fax: 02 6239 5669
Email:	Email: hazmat@robsonenviro.com.au

Test Specification(s) Employed: AS4964 (2004) & In-House Procedure No.2

Methodology Summary

Samples of material are examined to determine the presence of asbestos fibres using AS4964 (2004) & In-House Procedure No.2 i.e. Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by **Polarised Light Microscopy** (**PLM**) in conjunction with **Dispersion Staining** (**DS**). Unequivocal identification of asbestos minerals present is made by assessing fibre properties to see whether the values are typical and consistent with published data. This provides a reasonable degree of certainty to determine whether a fibre under investigation is asbestiform or not. Careful application of the test procedure provides sufficient diagnostic clues to allow unequivocal identification of asbestos types, and so, to determine whether a sample contains asbestos or not. If sufficient diagnostic clues are absent, then positive identification of fibrous asbestos is not possible.

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Reporting of Results

'Asbestos Detected': Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'No Asbestos Detected': No Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'UMF Detected': Mineral fibres of unknown type detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**). Confirmation by another independent analytical technique may be necessary.
"Hand-picked" refers to small discrete amounts of asbestos unevenly distributed in a large body of non-asbestos material.
Non asbestos fibres such as "Organic" and "Synthetic Mineral Fibres" detected in samples will be marked with an *. Please refer to non asbestos fibre table beneath main table.

Limit of Detection & Reporting Limit

Known limitations of the test procedure using **Polarised Light Microscopy** (**PLM**) are:

- **PLM** is a qualitative technique only;
- It does not cover identification of airborne or water-borne asbestos;
- The less encountered asbestos mineral fibres actinolite, anthophyllite and tremolite exhibit a wide range of optical properties that preclude unequivocal identification by **PLM** and **Dispersion Staining** (DS). Thus, the method is used to positively identify the three major asbestos minerals: amosite ("brown"), chrysotile ("white") and crocidolite ("blue");
- Valid identification requires that the sample material contains a sufficient quantity of the unknown fibres in excess of the practical detection limit used (in this case, **PLM** and **Dispersion Staining**, which has a calculated practical detection limit of 0.01-0.1% equivalent to 0.1-1g/kg (AS4946-2004:App. A4).

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Accredited for compliance with ISO/IEC 17025

After School Care

Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
D2154		main room - light brown flooring	Vinyl floor tile	2g	No Asbestos Detected*

Gambarri Centre

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

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Fibre Identification Certificate of Analysis

Laboratory Report Number: T-01035 **Analyst:** **Page** Page **2** of **3**

Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
D2148		Toilets adjacent Staff Office - walls	Sheet	1g	Chrysotile Asbestos Detected
D2149		store room - beige flooring	Vinyl floor tile	2g	No Asbestos Detected*
D2150		store room - to underside of sin	Bituminous pad to underside of sink	<1g	Chrysotile Asbestos Detected
D2151		kitchen - cream flooring	Vinyl floor tile	2g	No Asbestos Detected*
D2152		Electrical Switchboard Room - ceiling	Sheet	1g	No Asbestos Detected*
D2153		Male toilets - walls	Sheet	<1g	No Asbestos Detected*

Preschool

Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
D2155		Staff toilets - ceiling and walls	Sheet	<1g	No Asbestos Detected*
D2156		Store Room - green/blue vinyl flooring	Vinyl floor tile	2g	No Asbestos Detected*

Primary

Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
D2138		Main entrance corridor - paper backing and black hessian backed flooring under carpet	Vinyl floor covering	1g	No Asbestos Detected*
D2139		Male toilet to main entrance corridor - wall above urinal	Sheet	1g	No Asbestos Detected*
D2140		Indoor Assembly - red flooring under carpet	Vinyl floor covering	1g	No Asbestos Detected*
D2141		Male toilet airlock - walls	Sheet	<1g	No Asbestos Detected*
D2142		Plant Room - beige vinyl flooring	Vinyl floor tile	1g	No Asbestos Detected*
D2143		Admin - infill panel under window	Sheet	<1g	No Asbestos Detected*
D2144		Undercover walkway - infill panel	Sheet	<1g	No Asbestos Detected*
D2145		boiler room - heating hot water valve flange	Gaskets (compressed)	<1g	No Asbestos Detected*
D2146		boiler room - flue flange joint	Gaskets (compressed)	<1g	No Asbestos Detected*
D2147		Office - brown heassian backed vinyl flooring	Vinyl floor tile	<1g	No Asbestos Detected*

Non Asbestos Fibre Table
* D2138 - Organic Fibres Detected
* D2139 - Organic Fibres Detected
* D2140 - Organic Fibres Detected
* D2141 - Organic Fibres Detected
* D2142 - Organic, Synthetic Mineral Fibres Detected

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Fibre Identification Certificate of Analysis

Laboratory Report Number: T-01035 **Analyst:** [redacted] **Page** Page **3** of **3**

* D2143 - Organic Fibres Detected
* D2144 - Organic Fibres Detected
* D2146 - Organic, Synthetic Mineral Fibres Detected
* D2145 - Organic Fibres Detected
* D2147 - Organic Fibres Detected
* D2149 - Organic Fibres Detected
* D2151 - Organic Fibres Detected
* D2152 - Organic Fibres Detected
* D2153 - Organic Fibres Detected
* D2154 - Organic Fibres Detected
* D2155 - Organic Fibres Detected
* D2156 - Organic Fibres Detected

[redacted]

NATA
No. 3181
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[redacted]

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Fibre Identification Certificate of Analysis

Report Number: T-04919
R.E. Job Number:
Date of Report: 7/12/2017
Samples Taken by: [redacted]

Client Details		Laboratory Details	
Client:	[redacted]	Address:	140 Gladstone Street, Fyshwick, Canberra 2609
Attention:	[redacted]	Manager:	[redacted]
Received:	05/12/2017	Telephone:	[redacted]
Client Reference:	Yarralumla Primary	Fax:	02 6239 5669
Email:	[redacted]	Email:	hazmat@robsonenviro.com.au

Test Specification(s) Employed: AS4964 (2004) & In-House Procedure No.2

Methodology Summary

Samples of material are examined to determine the presence of asbestos fibres using AS4964 (2004) & In-House Procedure No.2 i.e. Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by **Polarised Light Microscopy** (**PLM**) in conjunction with **Dispersion Staining** (**DS**). Unequivocal identification of asbestos minerals present is made by assessing fibre properties to see whether the values are typical and consistent with published data. This provides a reasonable degree of certainty to determine whether a fibre under investigation is asbestiform or not. Careful application of the test procedure provides sufficient diagnostic clues to allow unequivocal identification of asbestos types, and so, to determine whether a sample contains asbestos or not. If sufficient diagnostic clues are absent, then positive identification of fibrous asbestos is not possible.

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Reporting of Results

'Asbestos Detected': Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'No Asbestos Detected': No Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'UMF Detected': Mineral fibres of unknown type detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**). Confirmation by another independent analytical technique may be necessary.
"Hand-picked" refers to small discrete amounts of asbestos unevenly distributed in a large body of non-asbestos material.
Non asbestos fibres such as "Organic" and "Synthetic Mineral Fibres" detected in samples will be marked with an *. Please refer to non asbestos fibre table beneath main table.

Limit of Detection & Reporting Limit

Known limitations of the test procedure using **Polarised Light Microscopy** (**PLM**) are:

- **PLM** is a qualitative technique only;
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- The less encountered asbestos mineral fibres actinolite, anthophyllite and tremolite exhibit a wide range of optical properties that preclude unequivocal identification by **PLM** and **Dispersion Staining** (DS). Thus, the method is used to positively identify the three major asbestos minerals: amosite ("brown"), chrysotile ("white") and crocidolite ("blue");
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Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
F1055		Hallway outside Montesorri & Yarralumla Preschools room - ceiling	Sheet	1g	No Asbestos Detected*
F1056		Preschool kitchen area - cream and black flooring under carpet and underlay	Vinyl floor tile	<1g	No Asbestos Detected*
F1057		Hallway outside Montesorri & Yarralumla Preschools room - blue flooring	Vinyl floor covering	1g	No Asbestos Detected*
F1058		Preschool building Electrical Switchboard Room - wall panels on inside of room	Sheet	<1g	Amosite, Chrysotile Asbestos Detected

Non Asbestos Fibre Table

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Client: [redacted]
T-04919_Yarralumla Primary-Fibre Identification Certificate of Analysis_20171207

Fibre Identification Certificate of Analysis

Laboratory Report Number: T-04919 **Analyst:** [redacted] **Page** 2 of 2

* F1055 - Organic Fibres Detected
* F1056 - Organic Fibres Detected
* F1057 - Organic Fibres Detected

[redacted]

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[redacted]

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Fibre Identification Certificate of Analysis

Report Number: T-05876
R.E. Job Number: 7335471

Date of Report: 21/05/2018

Samples Taken by:

Client Details		Laboratory Details	
Client:	ACT Property Group (Schools)	Address:	140 Gladstone Street, Fyshwick, Canberra 2609
Attention:	ACT Response Centre	Manager:	
Received:	21/05/2018	Telephone:	02 6239 5656
Client Reference:	Yarralumla Primary School	Fax:	02 6239 5669
Email:		Email:	hazmat@robsonenviro.com.au

Test Specification(s) Employed: AS4964 (2004) & In-House Procedure No.2

Methodology Summary

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Reporting of Results

'Asbestos Detected': Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
'No Asbestos Detected': No Asbestos detected by **Polarised Light Microscopy** (PLM), including **Dispersion Staining** (**DS**)
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Sample No.	Client Ref.	Location	Physical Structure	Sample Description	Analysis of Fibrous Content
O1318		Gambarri Centre and Montessori Building - Wall cavity adjacent Staff room (room 17) - Pipe lagging to hot water pipes	Pipe lagging (fibrous)	<1g	Chrysotile Asbestos Detected

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Client: ACT Property Group (Schools) 7335471_T-05876_Yarralumla Primary School-Fibre Identification Certificate of Analysis_20180521