Demolition/Refurbishment Hazardous Materials Risk Assessment
Office of Finance and Services
Ultimo Public School
Quarry Street, Ultimo NSW 2007

Site Reference: 001-Ultimo PS

Our Reference: C107477 : J140648

Date: October 2015

Greencap

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Report Information

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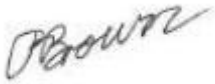
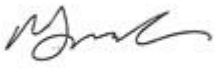
Report Prepared By	Report Reviewed By	Report Authorised By
		
Paul Brown	Adrian Spankie	Helen Pearce
01/10/2015	16/10/2015	20/10/2015
Property Risk Consultant	HazMat Team Leader	Regional Practice Manager HazMat (NSW/ACT)

Limitations - Overview

Please note there are limitations associated with this report due to a range of factors, including, but not limited to the scope of works, survey methodology and inaccessible areas. To ensure its contextual integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.

Only limited destructive auditing and sampling techniques were employed to gain access to those areas documented in the Materials Register. It is not possible to guarantee that every source of hazardous material has been detected without substantial demolition of the building.

This report is not intended to be used for the purposes of tendering, programming of works, refurbishment works or demolition works unless used in conjunction with a specification detailing the extent of the works.

Refer to the Statement of Limitations for further details.

Refer to the Areas Not Accessed for further details.

Introduction

This report presents the findings of a Demolition/Refurbishment Hazardous Materials Risk Assessment conducted for Office of Finance and Services of the site located at Quarry Street Ultimo NSW 2007. The risk assessment was performed by Paul Brown on 01/10/2015.

This report was performed in accordance with:
How to Manage and Control Asbestos in the Workplace: Code of Practice (Safe Work Australia, 2011)
NSW Work Health & Safety Regulation 2011 and the Demolition of Structures and the Demolition Work Code of Practice (Safe Work Australia, July 2015).

A previous Asbestos Materials Survey was undertaken at the school by Greencap-NAA on 25th March 2015 (reference 3305).

Scope Of Works

The scope of works for this project was as follows:

- Inspect representative and accessible areas of the site in line with the proposed refurbishment/demolition works to identify the following materials Asbestos, SMF, PCB, Lead Paint (Lead Check), Lead Paint (Chips) and Lead Dust
- Identify the likelihood of hazardous materials in inaccessible areas
- Identify the types of hazardous materials and their condition
- Assess the risks posed by the materials
- Compile a hazardous materials register for the site in line with the proposed refurbishment/demolition works (for removal purposes only)
- Take photographs of suspected hazardous materials
- Recommend removal methods and necessary actions of the identified/presumed hazardous materials

Refer to Methodology for full details.

Site Asbestos Risk Profile

The following table provides a summary of the Asbestos Risk Assessment for the site; item-specific findings are presented in the Hazardous Materials Register.

Building / Level	Number of Items by Risk Rating		
	High	Medium	Low
Building BOOA - All Levels	0	0	0
Building BOOA - Ground Level	0	0	1
Building BOOA - Level 1	0	0	0
Building BOOA - Level 2	0	0	0
Building BOOA - Level 3	0	0	0
Building BOOC - All Levels	0	0	0
Building BOOC - Ground Level	0	0	0
Building BOOD - All Levels	0	0	0
Building BOOD - Ground Level	0	0	0
Building BOOD - Level 1	0	0	0
Demountable OS60217725 - Ground Level	0	0	0
Totals	**0**	**0**	**1**

Summary of Identified Items

The following table provides a general overview of the types of hazardous materials identified on site; specific findings are presented in the Hazardous Materials Register.

Building / Level	Asbestos		Hazardous Materials				
	Friable	Non Friable	SMF	PCBs	Lead Paint	Lead Dust	ODSs
Building BOOA - All Levels							
Building BOOA - Ground Level		YES	YES		YES		
Building BOOA - Level 1							
Building BOOA - Level 2			YES				
Building BOOA - Level 3							
Building BOOC - All Levels							
Building BOOC - Ground Level			YES				
Building BOOD - All Levels							

Summary of Identified Items

Building / Level	Asbestos		Hazardous Materials				
	Friable	Non Friable	SMF	PCBs	Lead Paint	Lead Dust	ODSs
Building BOOD - Ground Level			YES				
Building BOOD - Level 1			YES				
Demountable OS60217725 - Ground Level							

Recommendations

- It is imperative that demolition or refurbishment works cease pending further sampling if materials suspected of containing asbestos or hazardous materials are encountered.
- All identified and presumed ACMs that will be disturbed during the scheduled works should be removed prior to works commencing by an appropriately licensed contractor and in accordance with the Code of Practice.
- Consider engaging an independent hygiene consultant to undertake Lead air monitoring during any removal works to ensure works are conducted safely.
- Where ACMs remain in-situ, the person with management or control of the site should update the Asbestos Register as per the requirements outlined in the Code of Practice.
- Areas highlighted in the Areas Not Accessed section as areas of 'no access' should be presumed to contain hazardous materials. Appropriate management planning should be implemented in order to control access to and maintenance activities in these areas, until such a time as they can be inspected and the presence or absence of hazardous materials can be confirmed.
- When demolition/refurbishment works are to take place, dust suppression techniques should be utilised when working with lead-containing paint. Any works which may disturb potential lead-based paint systems, should be conducted by appropriately experienced contractors under controlled conditions in accordance with the requirements of AS 4361.2-1998 Guide to lead paint management, Part 2: Residential and commercial buildings.
- Items that may be disturbed during planned refurbishment/demolition works should be removed by appropriately experienced contractors under controlled conditions prior to refurbishment/demolition works commencing.
- Contractors should use appropriate Personal Protective Equipment (PPE) including skin, eye and respiratory protection.
- Abatement of hazardous materials should be undertaken in conjunction with removal specifications to detail the extent of the works.
- All identified hazardous materials that will be disturbed by the scheduled works should be removed prior by an appropriately licensed/experienced contractor.
- Where Hazardous Materials are identified in a good condition (refer to Hazardous Materials Register) these can only remain in-situ where refurbishment or demolition works do not impact upon the area.
- Hazardous materials identified on site should be noted within the demolition/refurbishment works Safe Work Method Statement (SWMS) and any safe systems of work put into place if required.
- Greencap-NAA can assist with the implementation of any of the above recommendations.

How to use this Register

The location and item information of identified materials

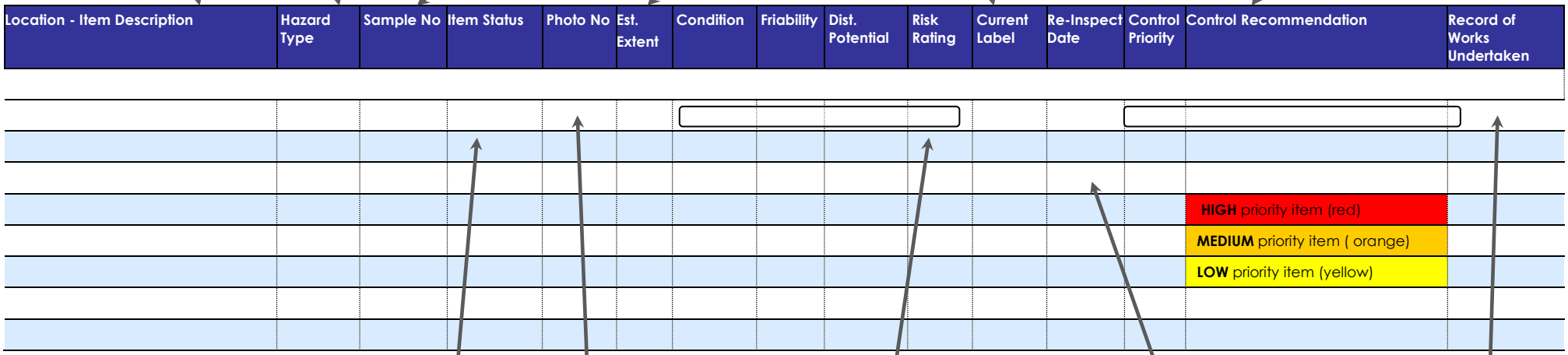
Hazard type: e.g. Asbestos, Lead Paint, SMF, etc.

Refer to the Sample Analysis Results for further details

Estimated quantity of material present

Details of warning labels present

The **control priority** and **control recommendations** indicate the recommended management actions, shaded according to priority. Refer to the Priority Rating System section for further information



This indicates if the material contains asbestos / hazardous materials:

Positive	Item contains asbestos or other hazardous material.
Negative	Item does not contain asbestos or other hazardous material covered in the scope of work.
Presumed Positive	Item has not been sampled, but is visually similar to another positive sample or it is likely to contain asbestos / hazardous materials
Presumed Negative	Item has not been sampled, but is visually similar to another negative sample or it is NOT likely to contain asbestos / hazardous materials

A photo of the item is within the Photo section

These are the **risk assessment factors** and **risk rating** of the item. Refer to the Risk Assessment Factors section for further information

Recommended re-inspection date, based on the risk rating of the material

Any information relating to remedial or removal works undertaken should be recorded by the Register controller.

Control Priority: The following priority rating system is adopted to assist in the programming and budgeting for control of asbestos risk identified in the assessment.

Priority 1 (P1)	Restrict access to area, organise abatement works ASAP, manage any remaining materials as part of an AMP.
Priority 2 (P2)	Organise remedial works in the next few months & manage any remaining materials as part of an AMP.
Priority 3 (P3)	No short-term remedial works required. Review periodically and manage as part of an AMP.
Priority 4 (P4)	No short-term remedial works required. Review periodically and manage as part of an AMP.

Hazardous Materials Register

Ultimo Public School

Site Details		Building Details				Audit Details	
Full Address:	**Quarry Street Ultimo NSW 2007**	**Building Name:**	**Building BOOA**	**Number of Levels:**	**3**	**Survey Date:**	**01-10-2015**
Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**580 m²**	**Est. Building Age:**	**1963**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick, Concrete & Fibre Cement**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Building BOOA - Exterior - All Levels														
Exterior - North Wall Cladding - Compressed Cement Sheeting	Asbestos	J140648-001-Ultimo PS-006	Negative											
Exterior - South Infill Panels - Compressed Cement Sheeting	Asbestos	J140648-001-Ultimo PS-005	Negative											
Building BOOA - Interior - All Levels														
All Rooms Fluorescent Light Fitting - Double Tube - Capacitor - New style light fittings	PCB		Presummed Negative											
Building BOOA - Exterior - Ground Level														
Exterior - North & South Eaves - Fibre Cement Sheeting	Asbestos	Not Sampled Height Restricted	Presumed Positive	J140648-001-Ultimo PS-Photo161	20 m²	Good	Non Friable	Low	Low	Not Labelled	01-10-2020	P4	Remove under controlled conditions by an appropriately licensed asbestos contractor prior to refurbishment likely to disturb the material. Maintain in-situ if not to be affected by proposed works.	
Exterior - Throughout Wall Cladding - Compressed Cement Sheeting	Asbestos	J140648-001-Ultimo PS-012	Negative											
Building BOOA - Interior - Ground Level														
All Rooms - Throughout Flexible Ductwork Insulation - Insulation Material	SMF		Presumed Positive	J140648-001-Ultimo PS-Photo025	300 m²	Good	Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
AR0017 - Throughout	None													
AR0018 - Throughout Door & Frame - Upper & Lower Paint System/s - Dark Green & Purple paint system	Lead (Paint)	Not Sampled	Presumed Positive	J140648-001-Ultimo PS-Photo008	1 m²								Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	
AR0019 - South Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-001	Presumed Negative											

Hazardous Materials Register

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Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**580 m²**	**Est. Building Age:**	**1963**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick, Concrete & Fibre Cement**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
AR0019 - Southwest Hot Water Heater - Insulation Material	SMF		Presumed Positive	J140648-001-Ultimo PS-Photo019	1 Unit/s		Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
AR0020 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	J140648-001-Ultimo PS-001	Negative											
AR0021 - East & West Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-001	Presumed Negative											
AR0023 - Throughout	None													
AR0024 - Throughout	None													
AR0025 - Throughout	None													
AR0026 - Throughout	None													
AR0027 - Throughout	None													
AR0028 - Throughout	None													
AR0029 - Throughout	None													
AR0030 - Throughout	None													
AR0031 - Throughout	None													
AR0032 - Throughout	None													
AR0033 - Throughout Fire Door - Double - Fire Door Core	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative										Tagged - 2002 R E Spence & Co Pty Ltd	
AR0034 - Throughout	None													
AR0035 - Throughout	None													
AR0036 - Throughout	None													
AR0037 - Throughout	None													
AR0038 - Throughout	None													
AR0039 - Throughout Fire Door - Double - Fire Door Core - Door Tagged-2002 R.E. Spence & Co Pty Ltd	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative											
AR0040 - Throughout Door Frame - Upper & Lower Paint System/s	Lead (Paint)	J140648-001-Ultimo PS-LC-001	Negative										Dark Green paint system	
AR0040 - Throughout Door Frame - Upper & Lower Paint System/s - Purple paint system	Lead (Paint)	J140648-001-Ultimo PS-LC-002	Negative											
AR0040 - Throughout	None													
AR0041 - Throughout	None													
AR0042 - Throughout	None													
AR0043 - Throughout	None													
AR0044 - Throughout	None													
AR0045 - Throughout	None													
AR0046 - Throughout	None													

Hazardous Materials Register

Ultimo Public School

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Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**580 m²**	**Est. Building Age:**	**1963**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick, Concrete & Fibre Cement**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Building BOOA - Interior - Level 1														
All Rooms - Throughout Ceiling - Vermiculite	Asbestos	Similar To: J140648-001-Ultimo PS-002	Presumed Negative											
AR1025 - Throughout	None					Good								
AR1026 - Throughout	None													
AR1027 - Throughout	None													
AR1028 - Throughout	None													
AR1029 - West Fire Door - Double - Fire Door Core - Tagged - 2002 R E Spence & Co Pty Ltd	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative											
AR1030 - Throughout	None													
AR1031 - Throughout	None													
AR1032 - Throughout	None													
AR1033 - Throughout	None													
AR1034 - Throughout	None													
AR1035 - Throughout	None													
AR1036 - Throughout	None													
AR1037 - Throughout Fire Door - Double - Fire Door Core	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative											
AR1038 - Throughout	None													
AR1039 - Throughout	None													
AR1040 - Throughout	None													
AR1041 - Throughout	None													
AR1042 - Throughout	None													
AR1043 - Throughout	None													
AR1044 - Throughout	None													
AR1045 - Throughout	None													
AR1046 - Throughout Ceiling - Vermiculite	Asbestos	J140648-001-Ultimo PS-002	Negative											
AR1046 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-001	Presumed Negative											
AR1047 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-001	Presumed Negative											
AR1048 - Throughout Door Lining - Fibre Cement Sheeting	Asbestos	J140648-001-Ultimo PS-003	Negative											
AR1048 - West Door & Frame - Upper & Lower Paint System/s	Lead (Paint)	J140648-001-Ultimo PS-LC-003	Negative											

Hazardous Materials Register

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Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**580 m²**	**Est. Building Age:**	**1963**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick, Concrete & Fibre Cement**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
AR1049 - Throughout	None													
AR1050 - Throughout	None													
AR1051 - Throughout	None													
Building BOOA - Interior - Level 2														
All Rooms - ceiling Space Ceiling - Vermiculite	Asbestos	J140648-001-Ultimo PS-004	Negative											
All Rooms - ceiling Space Ceiling Space - Insulation Batts	SMF		Positive	J140648-001-Ultimo PS-Photo066	500 m²	Good	Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
AR2019	None													
AR2020 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-001	Presumed Negative											
AR2021 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-001	Presumed Negative											
AR2022 Door Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-003	Presumed Negative											
AR2023 - Throughout	None													
AR2024 - Throughout	None													
AR2025 - Throughout	None													
AR2026 - Throughout	None													
AR2027 - Throughout	None													
AR2028 - Throughout	None													
AR2029 Fire Door - Double - Fire Door Core - Tagged - 2002 R E Spence Co Pty Ltd	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative											
AR2030 - Throughout	None													
AR2031 - Throughout Metal Work - Upper & Lower Paint System/s	Lead (Paint)	J140648-001-Ultimo PS-LC-004	Negative											
AR2032 - Throughout Fire Door - Double - Fire Door Core - Tagged - 2002 R E Spence Co Pty Ltd	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative											
AR2033 - Throughout	None													
AR2034 - Throughout	None													
AR2035 - Throughout Door Lining - Fibre Cement Sheeting - 2 x Doors	Asbestos	Similar To: J140648-001-Ultimo PS-003	Presumed Negative											

Hazardous Materials Register

Ultimo Public School

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Full Address:	**Quarry Street Ultimo NSW 2007**	**Building Name:**	**Building BOOA**	**Number of Levels:**	**3**	**Survey Date:**	**01-10-2015**
Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**580 m²**	**Est. Building Age:**	**1963**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick, Concrete & Fibre Cement**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
AR2036 - Throughout Fire Door - Fire Door Core - Tagged - R E Spence Co Pty Ltd	Asbestos	Similar To: J140648-001-Ultimo PS-011	Presumed Negative											
AR2036 - Throughout Riser - Pillow Insulation	SMF		Presumed Positive	J140648-001-Ultimo PS-Photo092	6 Unit/s								Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
AR2037 - Throughout	None													
AR2038 - Throughout	None													
AR2039 - Throughout	None													
AR2040 - Throughout	None													
AR2041 - Throughout	None													
AR2042 - Throughout	None													
AR2043 - Throughout	None													
AR2044 - Throughout	None													
Building BOOA - Interior - Level 3														
AR3001 - Throughout	None													
AR3002 - Throughout	None													

Hazardous Materials Register

Ultimo Public School

Site Details		Building Details				Audit Details	
Full Address:	**Quarry Street Ultimo NSW 2007**	**Building Name:**	**Building BOOC**	**Number of Levels:**	**1**	**Survey Date:**	**01-10-2015**
Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**250 m²**	**Est. Building Age:**	**2005**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick & Concrete**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Building BOOC - Interior - All Levels														
All Rooms Fluorescent Light Fitting - Double Tube - Capacitor - New style light fittings	PCB		Presumed Negative											
Building BOOC - Exterior - Ground Level														
CR0001 - Throughout	None													
CR0002 - Throughout	None													
CR0003 - Throughout	None													
CR0004 - Throughout	None													
CR0005 - Throughout	None													
CR0006 - Throughout	None													
CR0008 - Throughout	None													
Building BOOC - Interior - Ground Level														
CR0007 - Throughout	None													
CR0007 - Throughout Roof Lining - Sarking Insulation	SMF		Positive	J140648-001-Ultimo PS-Photo159	300 m²	Good	Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
CR0009 - Throughout	None													

Hazardous Materials Register

Ultimo Public School

Site Details		Building Details				Audit Details	
Full Address:	**Quarry Street Ultimo NSW 2007**	**Building Name:**	**Building BOOD**	**Number of Levels:**	**2**	**Survey Date:**	**01-10-2015**
Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**850 m²**	**Est. Building Age:**	**1964**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick and Concrete**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Building BOOD - All Levels														
All Rooms Fluorescent Light Fitting - Double Tube - Capacitor - New style light fittings	PCB		Presumed Negative											
Building BOOD - Interior - Ground Level														
DR0001 - Throughout	None													
DR0002 - South Hot Water Heater - Insulation Material	SMF		Presumed Positive	J140648-001-Ultimo PS-Photo097	1 Unit/s	Good	Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
DR0003 - Throughout	None													
DR0004 - Throughout	None													
DR0005 - Throughout	None													
DR0006 - Throughout	None													
DR0008 - Throughout	None													
DR0009 - Throughout Door Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-003	Presumed Negative											
DR0009 - Throughout	None													
DR0010 - Throughout	None													
DR0011 - Throughout	None													
DR0012 - Throughout	None													
DR0013 - Throughout	None													
DR0014 - Throughout	None													
DR0015 - Throughout	None													
DR0016 - Throughout	None													
DR0017 - Throughout	None													
DR0018 - Throughout	None													
DR0019 - Throughout	None													
Various Rooms - Throughout Fire Door - Double - Fire Door Core - Tagged - R E Spence Co Pty Ltd	Asbestos	J140648-001-Ultimo PS-011	Negative											
Building BOOD - Interior - Level 1														
All Rooms - Throughout Ceiling Space - Insulation Batts	SMF		Positive	J140648-001-Ultimo PS-Photo115	500 m²	Good	Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	

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Full Address:	**Quarry Street Ultimo NSW 2007**	**Building Name:**	**Building BOOD**	**Number of Levels:**	**2**	**Survey Date:**	**01-10-2015**
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Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick and Concrete**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
All Rooms - Throughout Roof Lining - Sarking Insulation	SMF		Positive	J140648-001-Ultimo PS-Photo114	500 m²	Good	Bonded (SMF)						Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this material will be impacted by refurbishment/ demolition works.	
DR1001 - Throughout	None													
DR1002 - Throughout	None													
DR1003 - Throughout	None													
DR1004 - Throughout	None													
DR1005 - Throughout	None													
DR1006 - Throughout	None													
DR1007 - Throughout	None													
DR1008 - Throughout	None													
DR1009 - Throughout	None													
DR1010 - Throughout	None													
DR1011 - Throughout	None													
DR1012 - Throughout	None													
DR1013 - Throughout	None													
DR1014 - Throughout	None													
DR1015 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-010	Presumed Negative											
DR1016 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-010	Presumed Negative											
DR1017 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	Similar To: J140648-001-Ultimo PS-010	Presumed Negative											
DR1018 - Throughout	None													
DR1019 - Throughout	None													
DR1020 - Throughout Wall Lining - Fibre Cement Sheeting	Asbestos	J140648-001-Ultimo PS-010	Negative											
DR1021 - Throughout	None													
DR1022 - Throughout	None													
DR1024 - Throughout	None													
DR1025 - Throughout	None													
DR1026 - Throughout	None													

Hazardous Materials Register

Ultimo Public School

Site Details		Building Details				Audit Details	
Full Address:	**Quarry Street Ultimo NSW 2007**	**Building Name:**	**Demountable OS60217725**	**Number of Levels:**	**1**	**Survey Date:**	**01-10-2015**
Property ID:	**001-Ultimo PS**	**Est. Building Size:**	**100 m²**	**Est. Building Age:**	**1980**	**Inspected By:**	**Paul Brown**
Client Name:	**Office of Finance and Services**	**Roof Type:**	**Metal**	**Construction Type:**	**Metal and Fibre cement sheet**	**Company:**	**GreencapNAA**

Location - Item Description	Hazard Type	Sample No	Item Status	Photo No.	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	ReInspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Demountable OS60217725 - Exterior - Ground Level														
Exterior - East Stairs - Compressed Cement Sheeting	Asbestos	J140648-001-Ultimo PS-009	Negative											
Exterior - East & West Eaves - Fibre Cement Sheeting	Asbestos	J140648-001-Ultimo PS-008	Negative											
Demountable OS60217725 - Interior - Ground Level														
All Rooms - Throughout Ceiling - Fibre Cement Sheeting	Asbestos	J140648-001-Ultimo PS-007	Negative											
All Rooms - Throughout Wall - Upper & Lower Paint System/s - Light Blue & Orange paint systems	Lead (Paint)	J140648-001-Ultimo PS-LC-006	Negative											
Wet area - East Door & Frame - Upper & Lower Paint System/s - Olive Green & Grey paint systems	Lead (Paint)	J140648-001-Ultimo PS-LC-005	Negative											

Areas Not Accessed

It is noted that Asbestos Materials may be contained within or behind those areas identified in the below table: Areas Not Accessed. Caution should be exercised when accessing these areas, particularly in relation to potential disturbance of the building fabric or concealed spaces.

1 - 4 of 4 Buildings

Area / Item	Not Accessed				Comments
	Building BOOA	Building BOOC	Building BOOD	Demountable OS60217725	
Behind ceramic wall tiles throughout	All	All	All	All	Building BOOA - To avoid damage to rooms Building BOOC - To avoid damage to rooms Building BOOD - To avoid damage to rooms Demountable OS60217725 - To avoid damage to rooms
Building facade fixing brackets	All	All	All	All	Building BOOA - No safe access available Building BOOC - To avoid damage to rooms Building BOOD - To avoid damage to rooms Demountable OS60217725 - To avoid damage to rooms
Height restricted areas of site and ceiling where safe lifting platforms were not provided	All	All	All	All	Building BOOA - No safe access available Building BOOC - No safe access available. Building BOOD - No safe access available Demountable OS60217725 - No safe access available
Inaccessible Ceiling spaces	Some	Some	Some	All	Building BOOA - Various Throughout Building BOOC - Store room Building BOOD - Throughout various rooms Demountable OS60217725 - To avoid damage to rooms
Inaccessible Culverts and floor trenches or tunnels	All	All	All	All	Building BOOA - No safe access available Building BOOC - No safe access available. Building BOOD - No safe access available Demountable OS60217725 - No safe access available
Roof	All	All	All	All	Building BOOA - No safe access at time of inspection Building BOOC - No safe access at time of inspection Building BOOD - No safe access at time of inspection Demountable OS60217725 - No safe access at time of inspection

Areas Not Accessed

It is noted that Asbestos Materials may be contained within or behind those areas identified in the below table: Areas Not Accessed. Caution should be exercised when accessing these areas, particularly in relation to potential disturbance of the building fabric or concealed spaces.

1 - 4 of 4 Buildings

Area / Item	Not Accessed				Comments
	Building BOOA	Building BOOC	Building BOOD	Demountable OS60217725	
Under floor coverings	Some		Some	Some	Building BOOA - Various classrooms Building BOOD - Throughout various rooms Demountable OS60217725 - In some areas
Wall cavities	All	All	All	All	Building BOOA - To avoid damage to rooms Building BOOC - To avoid damage to rooms Building BOOD - To avoid damage to rooms Demountable OS60217725 - To avoid damage to rooms
Within internal walls partitioning	All	All	All	All	Building BOOA - To avoid damage to rooms Building BOOC - To avoid damage to rooms Building BOOD - To avoid damage to rooms Demountable OS60217725 - To avoid damage to rooms

Photographs

Ultimo Public School 01-10-2015

Photo No: J140648-001-Ultimo PS-Photo161
Result: Asbestos - Presumed Positive
Building/Level: Building BOOA-Ground Level
Room/Location: Exterior-North & South
Feature/Material: Eaves-Fibre Cement Sheeting

Photo No: J140648-001-Ultimo PS-Photo025
Result: SMF - Presumed Positive
Building/Level: Building BOOA-Ground Level
Room/Location: All Rooms-Throughout
Feature/Material: Flexible Ductwork Insulation-Insulation Material

Photo No: J140648-001-Ultimo PS-Photo008
Result: Lead (Paint) - Presumed Positive
Building/Level: Building BOOA-Ground Level
Room/Location: AR0018-Throughout
Feature/Material: Door & Frame-Upper & Lower Paint System/s

Photo No: J140648-001-Ultimo PS-Photo019
Result: SMF - Presumed Positive
Building/Level: Building BOOA-Ground Level
Room/Location: AR0019-Southwest
Feature/Material: Hot Water Heater-Insulation Material

Photo No: J140648-001-Ultimo PS-Photo066
Result: SMF - Positive
Building/Level: Building BOOA-Level 2
Room/Location: All Rooms-ceiling Space
Feature/Material: Ceiling Space-Insulation Batts

Photo No: J140648-001-Ultimo PS-Photo092
Result: SMF - Presumed Positive
Building/Level: Building BOOA-Level 2
Room/Location: AR2036-Throughout
Feature/Material: Riser-Pillow Insulation

Photographs

Ultimo Public School 01-10-2015

Photo No: J140648-001-Ultimo PS-Photo159
Result: SMF - Positive
Building/Level: Building BOOC-Ground Level
Room/Location: CR0007-Throughout
Feature/Material: Roof Lining-Sarking Insulation

Photo No: J140648-001-Ultimo PS-Photo097
Result: SMF - Presumed Positive
Building/Level: Building BOOD-Ground Level
Room/Location: DR0002-South
Feature/Material: Hot Water Heater-Insulation Material

Photo No: J140648-001-Ultimo PS-Photo115
Result: SMF - Positive
Building/Level: Building BOOD-Level 1
Room/Location: All Rooms-Throughout
Feature/Material: Ceiling Space-Insulation Batts

Photo No: J140648-001-Ultimo PS-Photo114
Result: SMF - Positive
Building/Level: Building BOOD-Level 1
Room/Location: All Rooms-Throughout
Feature/Material: Roof Lining-Sarking Insulation

GREENCAP | NAA

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Thursday, 08/10/2015

Our ref: C107477:J140648-001-Ultimo PS

Peta Anderson
Office of Finance and Services
Level 14 McKell Building, 2 - 24 Rawson Place
SYDNEY NSW 2000

Dear Peta,

Re: Asbestos Identification Analysis - Ultimo Public School (3305), Quarry Street, Ultimo NSW 2007

This letter presents the results of asbestos fibre identification analysis performed on 12 samples collected by Paul Brown of Greencap-NAA Pty Ltd on Friday, 02 October 2015. The samples were collected from Ultimo Public School (3305), Quarry Street, Ultimo NSW 2007.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory in accordance with Greencap-NAA Test Method NALAB 302 Asbestos Identification Analysis and following the guidelines of Australian Standard AS4964-2004.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact Helen Pearce.

Yours sincerely
GreencapNAA

Simon Day : Approved Identifier

Simon Day : Approved Signatory

NATA
WORLD RECOGNISED ACCREDITATION

Sydney Laboratory
Sample Analysis Results

GREENCAP NAA

Thursday, 08/10/2015

Our ref: C107477:J140648-001-Ultimo PS

Site Location:	Ultimo Public School (3305), Quarry Street, Ultimo NSW 2007		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J140648-001-Ultimo PS -001	Building BOOA - Ground Level - AR0020 - Throughout - Wall Lining - Fibre Cement Sheeting Pale green painted/coated gold-grey fibre-cement sheet material ~ 19 x 15 x 6 mm	No Asbestos Detected Organic Fibres
2	J140648-001-Ultimo PS -002	Building BOOA - Level 1 - AR1046 - Throughout - Ceiling - Vermiculite Gold-grey compressed/formed powder, mica vermiculite-type material ~ 90 x 50 x 10 mm	No Asbestos Detected
3	J140648-001-Ultimo PS -003	Building BOOA - Level 1 - AR1048 - Throughout - Door Lining - Fibre Cement Sheeting Lime-painted gold-grey fibre-cement sheet material ~ 10 x 10 x 2 mm	No Asbestos Detected Organic Fibres
4	J140648-001-Ultimo PS -004	Building BOOA - Level 2 - All Rooms - Ceiling Space - Ceiling - Vermiculite Gold-grey compressed/formed powder, mica vermiculite-type material ~ 70 x 50 x 10 mm	No Asbestos Detected
5	J140648-001-Ultimo PS -005	Building BOOA - All Levels - Exterior - South - Infill Panels - Compressed Cement Sheeting Dark blue-painted grey compressed fibre-cement sheet material ~ 5 x 5 x 1 mm	No Asbestos Detected Organic Fibres
6	J140648-001-Ultimo PS -006	Building BOOA - All Levels - Exterior - North - Wall Cladding - Compressed Cement Sheeting Dark blue-painted grey compressed fibre-cement sheet material ~ 10 x 5 x 2 mm	No Asbestos Detected Organic Fibres
7	J140648-001-Ultimo PS -007	Demountable OS60217725 - Ground Level - All Rooms - Throughout - Ceiling - Fibre Cement Sheeting White-painted gold-grey fibre-cement sheet material ~ 15 x 10 x 4 mm	No Asbestos Detected Organic Fibres
8	J140648-001-Ultimo PS -008	Demountable OS60217725 - Ground Level - Exterior - East & West - Eaves - Fibre Cement Sheeting White-painted gold-grey layered fibre-cement sheet material ~ 12 x 7 x 6 mm	No Asbestos Detected Organic Fibres
9	J140648-001-Ultimo PS -009	Demountable OS60217725 - Ground Level - Exterior - East - Stairs - Compressed Cement Sheeting Olive green, dark grey-painted gold-grey compressed fibre-cement sheet material ~ 20 x 15 x 6 mm	No Asbestos Detected Organic Fibres
10	J140648-001-Ultimo PS -010	Building BOOD - Level 1 - DR1020 - Throughout - Wall Lining - Fibre Cement Sheeting Pale green painted/coated gold-grey fibre-cement sheet material ~ 25 x 10 x 4 mm	No Asbestos Detected Organic Fibres

Sydney Laboratory
Sample Analysis Results

GREENCAP NAA

Thursday, 08/10/2015

Our ref: C107477:J140648-001-Ultimo PS

Site Location:	Ultimo Public School (3305), Quarry Street, Ultimo NSW 2007		
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
11	J140648-001-Ultimo PS -011	Building BOOD - Ground Level - Various Rooms - Throughout - Fire Door - Double - Fire Door Core Bronze compressed/formed powder, mica vermiculite-type material ~ 15 x 15 x 2 mm	No Asbestos Detected
12	J140648-001-Ultimo PS -012	Building BOOA - Ground Level - Exterior - Throughout - Wall Cladding - Compressed Cement Sheeting Dark blue-painted gold-grey compressed fibre-cement sheet material ~ 23 x 8 x 4 mm	No Asbestos Detected Organic Fibres

Asbestos

This assessment was undertaken in accordance with the following documents and within the constraints of the scope of works:

How to Manage and Control Asbestos in the Workplace: Code of Practice (Safe Work Australia, 2011)
NSW Work Health & Safety Regulation 2011

Twelve (12) representative samples of suspected asbestos-containing material were collected and placed in plastic bags with clip-lock seals. These samples were analysed in Greencap's NATA-accredited laboratory for the presence of asbestos by Polarised Light Microscopy.

Where it was determined that asbestos was present, a risk and priority assessment was conducted in accordance with Greencap's standard Risk Assessment and Priority Ranking System. Refer to section on Priority Rating System for detailed information on this system.

Inaccessible areas that are likely to contain asbestos have been assumed to contain asbestos until further inspection and analysis of samples has been undertaken by an approved analyst.

A strategy of using representative samples of suspected asbestos-containing materials has been used to minimise the number of samples and degree of disturbance. Because of this strategy, findings of the audit should be interpreted such that all visually similar materials in the same vicinity must be assumed to be composed of the same material until proven otherwise.

Limited destructive sampling techniques have been used to gain access into restricted areas for the purpose of determining the likelihood of asbestos materials in these areas. Due to the nature of the survey methodology, it is possible that not every area of the site have been accessed. Reference should be made to the 'Areas Not Accessible' section of this report for further details. Subject to the limitations associated with the scope of works, this audit was conducted in accordance with the requirements of AS 2601-2001 The Demolition of Structures and the Demolition Work Code of Practice (Safe Work Australia, 2013).

SMF

Synthetic Mineral Fibre (SMF) Accessible areas where Synthetic Mineral Fibre (SMF) insulation was visually confirmed as being present were noted to give a general indication to the presence of materials throughout the building.

PCB

Polychlorinated Biphenyls (PCBs) Representative light fittings containing capacitors were inspected where safely practicable and details noted for cross-referencing with the ANZECC Identification of PCB-Containing Capacitors - 1997. Where metal capacitors were not listed on the database, these capacitors are noted as suspected to contain polychlorinated biphenyls.

Lead Paint

Representative painted surfaces were tested unobtrusively for the presence of lead using the LeadCheck paint swab method. This method can give an instantaneous qualitative result and reproducibly detect lead in paints at concentrations of 0.5% (5,000ppm) and above, and may indicate lead in some paint films as low as 0.2% (2,000ppm). The sampling program was representative of the various types of paints found within the site, concentrating on areas where lead based paints may have been used (Eg. Gloss paints on doors, railings, guttering and downpipes, columns, window and door architraves, skirting boards etc). The objective of lead paint identification in this survey is to highlight the presence of lead-based paints within the building, not to specifically quantify every source of lead-based paint.

Where possible, painted surfaces returning a positive result for lead using the LeadCheck paint swab method were sampled. Six (6) LeadCheck swab samples were taken for on-site analysis with no paint chip samples collected during this survey.

Lead Dust

The collection and analysis of 0 suspected lead containing dust samples were conducted in accordance with AS 4874-2000 'Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans' and analysed in an external NATA-accredited laboratory by ICP-AES methods. Refer to Lead Sample Analysis Report.

ODS

Ozone Depleting Substances (ODSs) Representative items of air conditioning and chiller plant suspected of containing ozone-depleting substances (ODSs) were noted and cross referenced with known ozone-depleting gases published by the United Nations Environment Program.

Limited destructive sampling techniques have been used to gain access into restricted areas for the purpose of determining the likelihood of asbestos and other hazardous materials in these areas. Due to the nature of the survey methodology, it is possible that not every area of the site have been accessed. Reference should be made to the 'Areas Not Accessible' section of this report for further details. Subject to the limitations associated with the scope of works, this

audit was conducted in accordance with the requirements of AS 2601-2001 The Demolition of Structures and the Demolition Work Code of Practice (Safe Work Australia, 2013).

Risk Assessment Factors - Asbestos

The presence of asbestos-containing materials (ACMs) does not necessarily constitute an exposure risk. However, if the ACM is sufficiently disturbed to cause the release of airborne respirable fibres, then an exposure risk may be posed to individuals. The assessment of the exposure risk posed by ACMs assesses (a) the material condition and friability, and (b) the disturbance potential.

Material Condition

The assessment factors for material condition include:

- Evidence of physical deterioration and/or water damage.
- Degree of friability of the ACM.
- Surface treatment, lining or coating (if present).
- Likelihood to sustain damage or deterioration in its current location and state.

Physical Condition and Damage

The condition of the ACM is rated as either being good, fair or poor.

Good refers to an ACM that has not been damaged or has not deteriorated
Fair refers to an ACM having suffered minor cracking or de-surfacing.
Poor describes an ACM which has been damaged or its condition has deteriorated over time.

Friability and Surface Treatment

The degree of friability of ACMs describes the ease of which the material can be crumbled, and hence to release fibres, and takes into account surface treatment.

Friable asbestos
(e.g. sprayed asbestos beam insulation (limpet), pipe lagging) can be easily crumbled and is more hazardous than non-friable asbestos products.
Non-friable asbestos
also referred to as bonded asbestos, typically comprises asbestos fibres tightly bound in a stable non-asbestos matrix or impregnated with a coating. Examples of non-friable asbestos products include asbestos cement materials (sheeting, pipes etc), asbestos containing vinyl floor tiles, compressed gaskets and electrical backing boards.

Disturbance Potential

In order to assess the disturbance potential, the following factors are considered:

- Requirement for access for either building work or maintenance operations.
- Likelihood and frequency of disturbance of the ACM.
- Accessibility of the ACM.
- Proximity of the ACM to air plenums and direct air stream.
- Quantity and exposed surface areas of ACM.
- Normal use and activity in area, and numbers of persons in vicinity of ACM.

These factors are used to determine (i) the potential for fibre generation, and (ii) the potential for exposure to person/s, as a rating of low, medium or high disturbance potential:

It is Greencap's understanding that all items are likely to be disturbed due to the proposed refurbishment / demoltion works.

Risk Status

The risk factors described previously are used to rank the asbestos exposure risk posed by the presence of the ACM.

- A low risk rating describes ACMs that pose a low exposure risk to personnel, employees and the general public providing they stay in a stable condition, for example asbestos materials that are in good condition and have low accessibility.
- A medium risk rating applies to ACMs that pose an increased exposure risk to people in the area.
- A high risk rating applies to ACMs that pose a higher exposure risk to personnel or the public in the vicinity of the material due to their condition or disturbance potential.

Priority Actions

The following priority rating system is adopted to assist in the programming and budgeting for the control of asbestos risk identified in the assessment.

Priority 1 (P1)	**Action:**	**Restrict Access to Area &** **Organise Abatement Works as soon as practicable &** **Manage any remaining materials as part of an AMP**

Area has ACMs, which are either damaged or are being exposed via continual disturbance. Due to these conditions, there is an increased potential for exposure and/or transfer of the material to other locations with continued unrestricted use of the area. Representative asbestos fibre monitoring should be conducted in the area during normal building operation where recommended. Prompt abatement of the asbestos hazard is recommended.

As an interim, restrict access.

Priority 2 (P2)	**Action:**	**Organise Remedial Works in the next few months &** **Manage any remaining materials as part of an AMP**

Area has ACMs with a potential for disturbance due to the following conditions:

1. Material has been disturbed or damaged and its current condition, while not posing an immediate hazard, is unstable.
2. The material is accessible and when disturbed, can present a short-term exposure risk.
3. Demolition, renovation, refurbishment, maintenance, modification or new installations, involving air-handling systems, ceilings, lighting, fire safety systems or floor layout.

Appropriate abatement measures should be taken as soon as practicable. A negligible exposure risk exists if materials remain under the control of an Asbestos Management Plan (AMP).

Priority 3 (P3)	**Action:**	**No Short-Term Remedial Works Required** **Review periodically and Manage as part of an AMP**

Area has ACMs, where:

1. The condition of friable ACMs is currently stable and has low potential of being disturbed.
2. The ACM is currently in a non-friable form, may have slight damage, but does not present an exposure risk unless cut, drilled, sanded or otherwise abraded.

This presents a low risk of exposure where the materials are left undisturbed under the control of an Asbestos Management Plan (AMP). Defer any major action unless materials are to be disturbed as a result of maintenance, refurbishment or demolition operations.

Priority 4 (P4)	**Action:**	**No Short-Term Remedial Works Required** **Review periodically and Manage as part of an AMP**

Area has ACMs in a non-friable form and in good condition. It is unlikely that the material can be disturbed under normal circumstances and can be safely subjected to normal traffic. Even if it were subjected to minor disturbance the material poses a negligible health risk. These materials should be maintained in good condition and their condition monitored during subsequent reviews. As with any asbestos materials, these materials must be removed prior to renovations that may impact on the materials.

Where ACMs are identified in a good condition (refer to Hazardous Materials Register) these can remain in-situ unless refurbishment or demolition works impact upon the area.

The Occupational Health and Safety Regulations of most Australian states & territories refer to a Code of Practice for Guidance on identification and management of asbestos materials (ACMs) in workplaces. The requirements are summarised below.

Asbestos Management Plan (AMP)

An AMP should be developed for the site as per the Code of Practice. The AMP should be a broad ranging document detailing the following information:

- The site's asbestos material register.
- Responsibilities for relevant persons in the management of ACMs.
- Mechanisms for communicating the location, type and condition of ACMs, the risks posed by these and the control measures adopted to minimise these risks.
- Training arrangements for workers and contractors.
- A Procedure for reviewing and updating the AMP and the register.
- Air Monitoring and clearance inspection arrangements.
- Timetable for action to review risk assessments and undertake asbestos management activities.
- Records of any maintenance or service work conducted on ACMs, including clearance certificates for removed items.

Updates to Register, AMP and Risk Assessments

The asbestos register and the AMP should be reviewed (via visual inspection by a competent person) and updated at least every 5 years or earlier where a risk assessment indicates the need for a re-assessment or if any ACMs have been removed or updated as per the requirements of the Code of Practice.

Risk assessments should be reviewed regularly and as specified by the Code of Practice, particularly when there is evidence that the risk assessment is no longer valid, control measures are shown to be ineffective or there is a significant change planned for the workplace or work practices or procedures relevant to the risk assessment; or there is a change in ACM condition or ACMs have since been enclosed, encapsulated or removed.

Labelling

All confirmed or presumed ACMs (or their enclosures) should be labelled to identify the material as asbestos-containing or presumed asbestos-containing and to warn that the items should not be disturbed as per the requirements of the Code of Practice.

Training

Staff and site personnel must be provided with Asbestos Awareness training in accordance with the Code of Practice. Training should inform staff how to work safely alongside asbestos by instructing them of:

1. The health risks associated with asbestos.
2. Their roles and responsibilities under the AMP.
3. Procedures for managing asbestos on-site.
4. The correct use of control measures and safe work methods to minimise the risks from asbestos.

Refurbishment / Demolition Requirements

This audit is limited by the Scope of Works and Methodology outlined within this report.

Generally, a new audit or revised audit is required prior to any planned refurbishment, alteration, demotion or upgrade works that may disturb ACMs at the site in accordance with Australia Standard AS 2601: The Demolition of Structures and Demolition Work Code of Practice(Safe Work Australia, July 2015).

Removal of Asbestos Materials

Any works involving the removal of ACMs should be undertaken by a Licensed Asbestos Removal Contractor (LARC). In addition, an appropriately qualified independent Asbestos Consultant / Occupational Hygienist should undertake asbestos fibre air monitoring during/after works, and issue a Clearance Certificate to validate the works have been undertaken safely.

All works should be conducted in accordance with legislative requirements and following the requirements of the document 'How to Safely Remove Asbestos: Code of Practice (Safe Work Australia, 2011)'.

Where ACMs are identified in a good condition (refer to Hazardous Materials Register) these can remain in-situ unless refurbishment or demolition works impact upon the area.

The Occupational Health and Safety Regulations of most Australian states & territories have requirements for the identification and control of risks within workplaces. These broad requirements extends to the hazardous materials that may be present within buildings at the workplace. The requirements for management of hazardous materials is summarised below.

Synthetic Mineral Fibre (SMF)

Synthetic Mineral Fibre (SMF) is a man-made insulation material used extensively in industrial, commercial and residential sites as fire rating, reinforcement in construction materials and as acoustic and thermal insulators. Types of SMF materials include fibreglass, rockwool, ceramic fibres and continuous glass filaments.

There are two basic forms of Synthetic Mineral Fibre (SMF) insulation, bonded and un-bonded.

- Bonded SMF is where adhesives, binders or cements have been applied to the SMF before delivery and the SMF product has a specific shape.
- Un-bonded SMF has no adhesives, binders or cements and the SMF is loose material packed into a package.

Exposure to SMF can result in short-term skin, eye and respiratory irritation. SMF is also classified as a possible human carcinogen with a possible increase in risk in lung cancer from long-term exposure.

The use of and the safe removal of SMF materials should be conducted in accordance with the National Code of Practice for the safe use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].

Polychlorinated Biphenyls (PCBs)

Polychlorinated Biphenyls (PCBs) are a toxic organochlorine used as insulating fluids in electrical equipment such as transformers, capacitors and fluorescent light ballasts that were largely banned from importation in Australia in the 1970s.

PCBs are listed as a probable human carcinogen and should be managed in accordance with the ANZECC Polychlorinated Biphenyls Management Plan, 2003. The handling and disposal of PCBs must be performed in accordance with applicable state and commonwealth environmental protection laws as scheduled PCB waste.

The following Personal Protective Equipment (PPE) should be worn when handling items containing or suspected to contain PCBs - nitrile gloves, eye protection, and disposable overalls. The PPE should be worn when removing capacitors from light fittings in case PCBs leak from the capacitor housing.

Lead Paint

Lead paint, as defined by the Australian Standard "AS4361.2: 1998 Guide to Lead Paint Management; Part 2: Residential and Commercial Buildings", is that which contains in excess of 1% Lead by weight.

Lead carbonate (white lead) was once the main white pigment in paints for houses and public buildings. Paint with lead pigment was manufactured up until the late 1960's, and in 1969 the National Health and Medical Research Council's Uniform Paint Standard was amended to restrict lead content in domestic paint.

Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Lead paint is assessed based on two potential routes of exposure. Firstly by the likelihood of inhalation or ingestion by people working in the vicinity of the paint and secondly by the condition of the paint. Paint that is flaking or in poor condition is more likely to be ingested than paint that is in a good, stable condition.

Any work relating to lead paint should be conducted in accordance with the 'National Code of Practice for the Control and Safe Use of Inorganic Lead at Work [NOHSC: 2015 (1994)]'.

Lead in Dust

Lead is ubiquitous in the urban environment, resulting from industrial processes, lead containing paint and as a by-product from the combustion of leaded petrol and other sources. Lead can accumulate as a constituent of settled dust, particularly in areas not frequently cleaned (such as ceiling spaces, plant rooms, etc) in older buildings.

There is currently no specific criteria for "lead in dust" in Australia, however a criteria for lead in soil in residential settings of 300mg/kg is established. The use of this criteria for lead in dust is supported by a number of government agencies and papers, including the WA Department of Health 'Report on Lead Dust Monitoring in residences undertaken in Esperance Between 1 July and 8 August 2007' (December 2007), the NSW EPA document 'Managing Lead Contamination in Home Maintenance, Renovation and Demolition Practices: A Guide for Councils' (February 2003) and the EnHealth document 'Health-based Soil Investigation Levels' (March 2001).

Settled dust in ceilings, etc. is generally more finely divided than soils, and the disturbance or removal of dust with elevated lead content has the potential to exceed exposure standards for inspirable dust and lead.

Prior to undertaking any removal work, the risk for potential exposure must be assessed and consideration to conducting health surveillance and biological monitoring should be given. Since it is difficult to use engineering controls to control airborne dust levels for some dust removal work situations (e.g. enclosed ceiling spaces), there is a greater reliance on personal respiratory protection to provide a safe working environment for the workers carrying out this task. Hence, any workers undertaking such tasks should have adequate training in correct work procedures, including the selection, use and maintenance of personal protective equipment and good personal hygiene practices.

Ozone Depleting Substances (ODSs)

Ozone Depleting Substances (ODSs) are those substances which deplete the earth's ozone layer and have been widely used in a range of commercial and industrial applications. All bulk imports of these substances (except HCFCs and methyl bromide) are banned into Australia under an international agreement known as the Montreal Protocol.

Hydrochlorofluorocarbons (HCFC) are refrigerants of low ozone depleting potential that are commonly used in air-conditioning plant, chillers and condensers. HCFCs are subject to Australian Government controls on import and manufacture as part of a phase out quota system in accordance with the Montreal Protocol and the Commonwealth Ozone Protection & Synthetic Greenhouse Gas Management Act 1989. Imports of these substances will be fully banned by 2020 with only very limited supplies then available until 2030 to service remaining HCFC-dependant equipment.

Maintenance contractors working with these gases should have procedures in place to safely work with, store, handle and dispose of materials correctly.

Statement Of Limitations

This report has been prepared in accordance with the agreement between Office of Finance and Services and GreencapNAA.

Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.

This report is solely for the use of Office of Finance and Services and any reliance on this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments are provided by GreencapNAA.

This report relates only to the identification of asbestos containing materials used in the construction of the building and does not include the identification of dangerous goods or hazardous substances in the form of chemicals used, stored or manufactured within the building or plant.

The following should also be noted:

While the survey has attempted to locate the asbestos containing materials within the site it should be noted that the review was a visual inspection and a limited sampling program was conducted and/or the analysis results of the previous report were used. Representative samples of suspect asbestos materials were collected for analysis. Other asbestos materials of similar appearance are assumed to have a similar content.

Not all suspected asbestos materials were sampled. Only those asbestos materials that were physically accessible could be located and identified. Therefore it is possible that asbestos materials, which may be concealed within inaccessible areas/voids, may not have been located during the audit. Such inaccessible areas fall into a number of categories.

(a) Locations behind locked doors;
(b) Inset ceilings or wall cavities;
(c) Those areas accessible only by dismantling equipment or performing minor localised demolition works;
(d) Service shafts, ducts etc., concealed within the building structure;
(e) Energised services, gas, electrical, pressurised vessel and chemical lines;
(f) Voids or internal areas of machinery, plant, equipment, air-conditioning ducts etc;
(g) Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure. These voids are only accessible during major demolition works;
(h) Height restricted areas
(i) Areas deemed unsafe or hazardous at time of audit.

In addition to areas that were not accessible, the possible presence of hazardous building materials may not have been assessed because it was not considered practicable as:

1. It would require unnecessary dismantling of equipment; and/or
2. It was considered disruptive to the normal operations of the building; and/or
3. It may have caused unnecessary damage to equipment, furnishings or surfaces; and/or
4. The hazardous material was not considered to represent a significant exposure risk; and
5. The time taken to determine the presence of the hazardous building material was considered prohibitive.

Only minor destructive auditing and sampling techniques were employed to gain access to those areas documented in the Hazardous Materials Register. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of hazardous material has been detected.

During the course of normal site works care should be exercised when entering any previously inaccessible areas or areas mentioned above and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. Therefore during any refurbishment or demolition works, further investigations and assessment may be required should any suspect material be observed in previously inaccessible areas or areas not fully inspected previously, i.e. carpeted floors.

This report is not intended to be used for the purposes of tendering, programming of works, refurbishment works or demolition works unless used in conjunction with a specification detailing the extent of the works. To ensure its contextual integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.