Demolition/Refurbishment Hazardous Material Risk Assessment
St George Community Housing
SGCH
9-11 Gibbons Street, Redfern NSW 2016

Site Reference: 001

Our Reference : C122647 : J155653

Date: March 2018

Greencap

Level 2 / 11 Khartoum Road
North Ryde NSW 2113

(02) 9889 1800

www.greencap.com.au

TABLE OF CONTENTS

09/03/2018
REPORT PREPARED BY

ADRIAN SPANKIE
Principal EHS Consultant

14/03/2018
REPORT REVIEWED BY

PAUL BROWN
Property Risk Consultant

15/03/2018
REPORT AUTHORISED BY

JAMES STEWART
Hazmat Team Manager NSW

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 Material Risk Assessment conducted for St George Community Housing located at 9-11 Gibbons Street, Redfern NSW 2016. The risk assessment was performed by Adrian Spankie on 09/03/2018.

This report was performed in accordance with:

- How to Manage and Control Asbestos in the Workplace: Code of Practice (SafeWork NSW, 2016)
- NSW Work Health & Safety Regulation 2017
- Australian Standard "AS4361.2:1998 Guide to Lead Paint Management Part 2: Residential and Commercial Buildings"
- Identification of PCB-Containing Capacitors 1997 ANZECC
- Code of Practice for the Safe Use of Synthetic Mineral Fibres
- Demolition Work Code of Practice (SafeWork NSW, Sept 2016)

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 (Chips) and Lead Dust
- Identify the likelihood of hazardous and flammable/combustible materials in inaccessible areas
- Identify the types of hazardous and flammable/combustible materials and their condition
- Assess the risks posed by the materials
- Compile a hazardous and flammable/combustible materials register for the site in line with the proposed refurbishment/demolition works (for removal purposes only)
- Take photographs of suspected hazardous and flammable/combustible materials
- Recommend removal methods and necessary actions of the identified/presumed hazardous and flammable/combustible 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
Main building - Ground Level	0	1	2
Main building - Level One	0	0	0
Main building - Roof	0	0	0
Mowers Shed - All Levels	0	0	0
Mowers Shed - Ground Level	0	0	2
Mowers Shed - Level One	0	0	0
Total	**0**	**1**	**4**

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	FCM
Main building - Ground Level		YES			YES		YES	
Main building - Level One			YES				YES	
Main building - Roof					YES			
Mowers Shed - All Levels				YES	YES			
Mowers Shed - Ground Level		YES	YES					
Mowers Shed - Level One					YES			

Recommendations

- 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.
- Engage an independent asbestos consultant to undertake asbestos fibre air monitoring and clearance inspections during and following the asbestos removal, if required.
- 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.
- Confirm that the contractor conducting works involving refrigerants holds a refrigerant trading authorisation with the Australian Refrigeration Council (ARC) and a refrigerant handling licence under the Ozone and Synthetic Gas Management Regulations 1995.
- Ensure that the air-conditioning contractor engaged to conduct maintenance and repair work involving refrigerants conducts the appropriate recovery and recycling of refrigerants.
  Ozone depleting refrigerants should be decanted by a suitably licensed contractor in accordance with the Australia & New Zealand Refrigerant Handling Code of Practice 2007, Part 1. Self-Contained Low Charged Systems prior to the de-commissioning of the equipment.
- 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 4361.2-2017 Guide to lead paint management, Part 2: Residential and commercial buildings.
- Consider engaging an independent hygiene consultant to undertake Lead air monitoring during any removal works to ensure works are conducted safely.
- Capacitors and electrical components identified as containing Polychlorinated Biphenyls (PCBs) should be de-energised by a licensed electrician and removed under controlled conditions and disposed of in accordance with environmental protection guidelines prior to refurbishment or demolition works.
- 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.
- 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.
- It is imperative that demolition or refurbishment works cease pending further sampling if materials suspected of containing asbestos or hazardous materials are encountered.
- Greencap can assist with the implementation of any of the above recommendations.

How to use this Register

The location and item information of identified materials

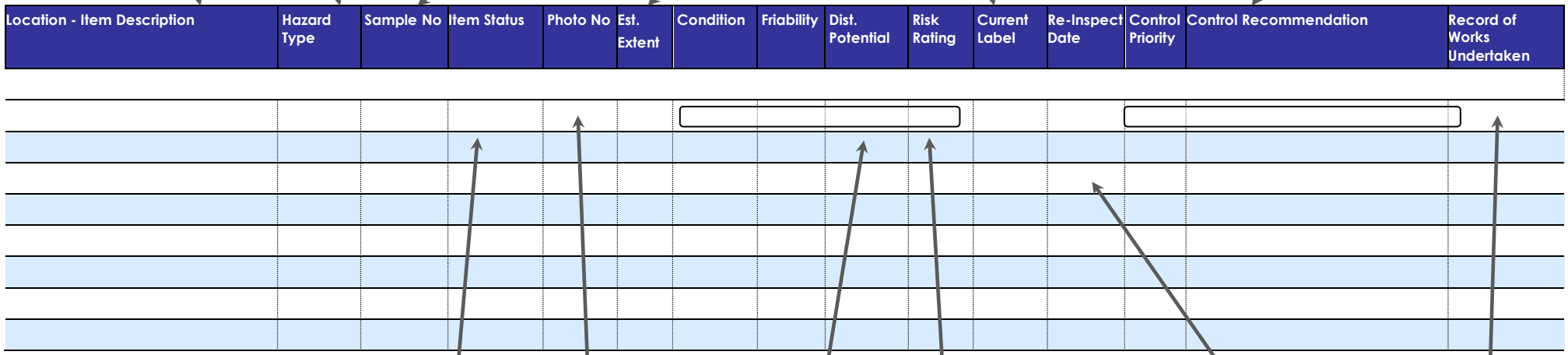
Hazard type: e.g. Asbestos, Lead Paint, SMF, etc.

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

The potential of disturbance to material to liberate asbestos fibres

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

Site Details		Building Details				Audit Details	
Full Address:	**9-11 Gibbons Street, Redfern NSW 2016**	**Building Name:**	**Main building**	**Number of Levels:**	**2**	**Survey Date:**	**09-03-2018**
Property ID:	**001**	**Est. Building Size:**	**500m²**	**Est. Building Age:**	**30**	**Inspected By:**	**Adrian Spankie**
Client Name:	**St George Community Housing**	**Roof Type:**	**Concrete, Waterproof Membrane**	**Construction Type:**	**Brick Walls, Concrete Floor Slab**	**Company:**	**Greencap**

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
Main building - Exterior - Ground Level														
Electrical box - On upper wall Electrical - Fuse Board - Compressed Bituminous Electrical Panel	Asbestos	Not Sampled Height Restricted	Presumed Positive	J155653-001-Photo018	1 Unit/s	Good	Non Friable	Low	Low	Not Labelled	09/03/2023	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.	
External window frames - Main elevations Door & Frame - Upper & Lower Paint System/s	Lead (Paint)	J155653-001-LP-005	Positive, 3.9% w/w	J155653-001-Photo021	50 m²	Good							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	
External window frames - Main elevations Window Frame - Upper & Lower Paint System/s	Lead (Paint)	J155653-001-LP-004	Negative, <1% w/w											
Pavement - Adjacent outside wall Telecommunications Pit - Moulded Fibre Cement - Outside the perimeter fence on Gibbons Street.	Asbestos	Not Sampled Restricted Access	Presumed Positive	J155653-001-Photo025 J155653-001-Photo024	3 Unit/s	Fair	Non Friable	Medium	Medium	Not Labelled	09/06/2018	P2	If it will be affected by the work on the site, engage a licensed asbestos contractor to undertake remedial/removal works on this item as soon as practicable (within 3 months).	
Roof - Throughout Roof Covering - Bituminous Material - No access	Asbestos	Not Sampled Height Restricted	Presumed Positive	J155653-001-Photo017	200 m²	Good	Non Friable	Low	Low	Not Labelled	09/03/2023	P4	Arrange access to sample and confirm asbestos content. If positive, remove under controlled conditions by an appropriately licensed asbestos contractor prior to refurbishment likely to disturb the material.	
Soffit - Main elevations Bulkhead - Upper & Lower Paint System/s	Lead (Paint)	Not Sampled Height Restricted	Presumed Positive	J155653-001-Photo022	10 m²	Fair							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	
Main building - Interior - Ground Level														
Cleansing store - Throughout Floor Covering - Vinyl Tiles & Adhesive	Asbestos	Similar To: J155653-001-003	Presumed Negative											
Hallway - Throughout Floor Covering - Vinyl Tiles & Adhesive	Asbestos	J155653-001-003	Negative											
Office - Front wall Split System Air Con Unit - R401A - HCFC Blend	ODS		Presumed Positive	J155653-001-Photo019	1 Unit/s	Good							Removal by an adequately licensed contractor using the correct handling and disposal of refrigerants.	
Team leaders office - Rear wall Split System Air Con Unit - R401A - HCFC Blend	ODS		Presumed Positive	J155653-001-Photo015	1 Unit/s	Good							Removal by an adequately licensed contractor using the correct handling and disposal of refrigerants.	
Main building - Interior - Level One														

Hazardous Materials Register

Site Details		Building Details				Audit Details	
Full Address:	**9-11 Gibbons Street, Redfern NSW 2016**	**Building Name:**	**Main building**	**Number of Levels:**	**2**	**Survey Date:**	**09-03-2018**
Property ID:	**001**	**Est. Building Size:**	**500m²**	**Est. Building Age:**	**30**	**Inspected By:**	**Adrian Spankie**
Client Name:	**St George Community Housing**	**Roof Type:**	**Concrete, Waterproof Membrane**	**Construction Type:**	**Brick Walls, Concrete Floor Slab**	**Company:**	**Greencap**

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
Hallway - Doors Door & Frame - Upper & Lower Paint System/s	Lead (Paint)	J155653-001-LP-003	Negative, <1% w/w											
Hallway - Throughout Floor Covering - Vinyl Tiles & Adhesive	Asbestos	Similar To: J155653-001-001	Presumed Negative											
Landing - Mid level Floor Covering - Vinyl Tiles & Adhesive	Asbestos	Similar To: J155653-001-001	Presumed Negative											
Locker room - Throughout Floor Covering - Bituminous Material - Under floor screed	Asbestos	J155653-001-002	Negative											
Lunch room Hot Water Heater - Insulation Material	SMF		Presumed Positive	J155653-001-Photo007	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.	
Lunch room - Rear wall Split System Air Con Unit - R401A - HCFC Blend	ODS		Presumed Positive	J155653-001-Photo008	1 Unit/s	Good							Removal by an adequately licensed contractor using the correct handling and disposal of refrigerants.	
Lunch room - Throughout Floor Covering - Vinyl Tiles & Adhesive	Asbestos	J155653-001-001	Negative											
Lunch room - Throughout Window Frame - Upper & Lower Paint System/s	Lead (Paint)	J155653-001-LP-002	Negative, <1% w/w											
Male Toilets - Throughout Wall - Upper & Lower Paint System/s	Lead (Paint)	J155653-001-LP-001	Negative, <1% w/w											
Utility room - Throughout Hot Water Heater - Insulation Material - Water heater	SMF		Presumed Positive	J155653-001-Photo003	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.	
Main building - Exterior - Roof														
Roof - Main elevations Fascia - Upper & Lower Paint System/s	Lead (Paint)	Not Sampled Height Restricted	Presumed Positive	J155653-001-Photo023	10 m²	Fair							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	

Hazardous Materials Register

Site Details		Building Details				Audit Details	
Full Address:	**9-11 Gibbons Street, Redfern NSW 2016**	**Building Name:**	**Mowers Shed**	**Number of Levels:**	**2**	**Survey Date:**	**09-03-2018**
Property ID:	**001**	**Est. Building Size:**	**300m²**	**Est. Building Age:**	**70**	**Inspected By:**	**Adrian Spankie**
Client Name:	**St George Community Housing**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick Walls, Concrete Floor Slab**	**Company:**	**Greencap**

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
Mowers Shed - Interior - All Levels														
All areas - Ceilings Fluorescent Light Fitting - Capacitor - In Office areas on ground and first floor. Older units assumed to contain PCB	PCB		Presumed Positive	J155653-001-Photo029 J155653-001-Photo030	5 Unit/s	Good							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	
Roof - Roof frame Framework - Upper & Lower Paint System/s	Lead (Paint)	Not Sampled Height Restricted	Presumed Positive	J155653-001-Photo034 J155653-001-Photo033	60 m²	Good							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	
Mowers Shed - Interior & Exterior - All Levels														
All areas - Doors and windows Door & Frame - Upper & Lower Paint System/s - Green paint systems	Lead (Paint)	J155653-001-LP-007	Positive, 3.5% w/w	J155653-001-Photo031 J155653-001-Photo032		Fair							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	
Mowers Shed - Interior - Ground Level														
Below stairs - Adjacent outside wall Electrical - Fuse Board - Bituminous Material	Asbestos	J155653-001-004	Positive	J155653-001-Photo036	1 m²	Good	Non Friable	Low	Low	Not Labelled	09/03/2023	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.	
Electrical cupboard - Fuses Fuse Holders - Internal Components - Older ceramic fuses	Asbestos	J155653-001-005	Negative											
Main shed - At Gibbons St end Electrical Distribution Board - Compressed Bituminous Electrical Panel	Asbestos	Similar To: J155653-001-004	Presumed Positive	J155653-001-Photo038	1 Unit/s	Good	Non Friable	Low	Low	Not Labelled	09/03/2023	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.	
Main shed - Below floor	Storage Tanks	Not Sampled No access to area below floor	Presumed Positive	J155653-001-Photo027		Not able to determine							It appears that there are tanks or voids below the floor slab but there is currently no access. Their presence should be confirmed prior to the commencement of demolition works.	
Main shed - Roof lining Insulation - Sarking Insulation	SMF		Presumed Positive	J155653-001-Photo026	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.	
Mowers Shed - Interior & Exterior - Level One														

GREENCAP

Hazardous Materials Register

Site Details		Building Details				Audit Details	
Full Address:	**9-11 Gibbons Street, Redfern NSW 2016**	**Building Name:**	**Mowers Shed**	**Number of Levels:**	**2**	**Survey Date:**	**09-03-2018**
Property ID:	**001**	**Est. Building Size:**	**300m²**	**Est. Building Age:**	**70**	**Inspected By:**	**Adrian Spankie**
Client Name:	**St George Community Housing**	**Roof Type:**	**Metal**	**Construction Type:**	**Brick Walls, Concrete Floor Slab**	**Company:**	**Greencap**

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 areas - Window frames Window Frame - Upper & Lower Paint System/s	Lead (Paint)	J155653-001-LP-006	Positive, 1.1% w/w	J155653-001-Photo028	50 m²	Fair							Remove by an appropriately experienced contractor under controlled conditions and using correct PPE if this item will be impacted by refurbishment/ demolition works.	

Areas Not Accessed

It is noted that Hazardous 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 - 2 of 2 Buildings

Area / Item	Not Accessed		Comments
	Main building	Mowers Shed	
Culverts and floor trenches or tunnels		All	Mowers Shed - There appear to be tanks or voids below the floor slab
Height restricted areas of site and ceiling where safe lifting platforms were not provided	All	All	Main building - No access to high level areas Mowers Shed - No access to roof or inside of roof
Inside mechanical equipment	All	All	Main building - Very little equipment present and no suspected ACM present. Mowers Shed - Plant and equipment was not inspected as it was live and/or in use.
Roof	All	All	Main building - No access but could observe roof felt. Mowers Shed - No access to the roof
Waterproof membranes	All		Main building - No access to roof membrane.
Within electrical switchboard cupboard or backing	All		Main building - Electrical supply was still live to the site.

Photographs

PHOTO NO.: **J155653-001-PHOTO018**

RESULT: **ASBESTOS - PRESUMED POSITIVE**

BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**

ROOM/LOCATION: **ELECTRICAL BOX - ON UPPER WALL**

FEATURE/MATERIAL: **ELECTRICAL - FUSE BOARD - COMPRESSED BITUMINOUS ELECTRICAL PANEL**

SAMPLE NO.: **NOT SAMPLED HEIGHT RESTRICTED**

PHOTO NO.: **J155653-001-PHOTO021**

RESULT: **LEAD (PAINT) - POSITIVE, 3.9% W/W**

BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**

ROOM/LOCATION: **EXTERNAL WINDOW FRAMES - MAIN ELEVATIONS**

FEATURE/MATERIAL: **DOOR & FRAME - UPPER & LOWER PAINT SYSTEM/S**

SAMPLE NO.: **J155653-001-LP-005**

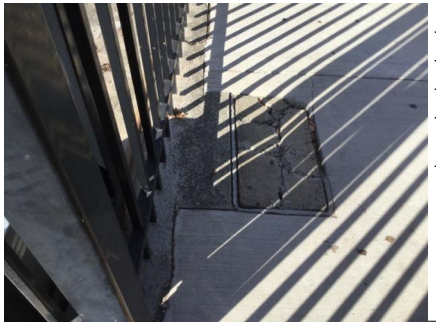


PHOTO NO.: **J155653-001-PHOTO025**

RESULT: **ASBESTOS - PRESUMED POSITIVE**

BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**

ROOM/LOCATION: **PAVEMENT - ADJACENT OUTSIDE WALL**

FEATURE/MATERIAL: **TELECOMMUNICATIONS PIT - MOULDED FIBRE CEMENT**

SAMPLE NO.: **NOT SAMPLED RESTRICTED ACCESS**

PHOTO NO.: **J155653-001-PHOTO024**

RESULT: **ASBESTOS - PRESUMED POSITIVE**

BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**

ROOM/LOCATION: **PAVEMENT - ADJACENT OUTSIDE WALL**

FEATURE/MATERIAL: **TELECOMMUNICATIONS PIT - MOULDED FIBRE CEMENT**

SAMPLE NO.: **NOT SAMPLED RESTRICTED ACCESS**

PHOTO NO.: **J155653-001-PHOTO017**

RESULT: **ASBESTOS - PRESUMED POSITIVE**

BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**

ROOM/LOCATION: **ROOF - THROUGHOUT**

FEATURE/MATERIAL: **ROOF COVERING - BITUMINOUS MATERIAL**

SAMPLE NO.: **NOT SAMPLED HEIGHT RESTRICTED**

PHOTO NO.: **J155653-001-PHOTO022**

RESULT: **LEAD (PAINT) - PRESUMED POSITIVE**

BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**

ROOM/LOCATION: **SOFFIT - MAIN ELEVATIONS**

FEATURE/MATERIAL: **BULKHEAD - UPPER & LOWER PAINT SYSTEM/S**

SAMPLE NO.: **NOT SAMPLED HEIGHT RESTRICTED**

Photographs

PHOTO NO.: **J155653-001-PHOTO019**
RESULT: **ODS - PRESUMED POSITIVE**
BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**
ROOM/LOCATION: **OFFICE - FRONT WALL**
FEATURE/MATERIAL: **SPLIT SYSTEM AIR CON UNIT - R401A - HCFC BLEND**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO015**
RESULT: **ODS - PRESUMED POSITIVE**
BUILDING/LEVEL: **MAIN BUILDING - GROUND LEVEL**
ROOM/LOCATION: **TEAM LEADERS OFFICE - REAR WALL**
FEATURE/MATERIAL: **SPLIT SYSTEM AIR CON UNIT - R401A - HCFC BLEND**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO007**
RESULT: **SMF - PRESUMED POSITIVE**
BUILDING/LEVEL: **MAIN BUILDING - LEVEL ONE**
ROOM/LOCATION: **LUNCH ROOM**
FEATURE/MATERIAL: **HOT WATER HEATER - INSULATION MATERIAL**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO008**
RESULT: **ODS - PRESUMED POSITIVE**
BUILDING/LEVEL: **MAIN BUILDING - LEVEL ONE**
ROOM/LOCATION: **LUNCH ROOM - REAR WALL**
FEATURE/MATERIAL: **SPLIT SYSTEM AIR CON UNIT - R401A - HCFC BLEND**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO003**
RESULT: **SMF - PRESUMED POSITIVE**
BUILDING/LEVEL: **MAIN BUILDING - LEVEL ONE**
ROOM/LOCATION: **UTILITY ROOM - THROUGHOUT**
FEATURE/MATERIAL: **HOT WATER HEATER - INSULATION MATERIAL**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO023**
RESULT: **LEAD (PAINT) - PRESUMED POSITIVE**
BUILDING/LEVEL: **MAIN BUILDING - ROOF**
ROOM/LOCATION: **ROOF - MAIN ELEVATIONS**
FEATURE/MATERIAL: **FASCIA - UPPER & LOWER PAINT SYSTEM/S**
SAMPLE NO.: **NOT SAMPLED HEIGHT RESTRICTED**

Photographs

PHOTO NO.: **J155653-001-PHOTO029**
RESULT: **PCB - PRESUMED POSITIVE**
BUILDING/LEVEL: **MOWERS SHED - ALL LEVELS**
ROOM/LOCATION: **ALL AREAS - CEILINGS**
FEATURE/MATERIAL: **FLUORESCENT LIGHT FITTING - CAPACITOR**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO030**
RESULT: **PCB - PRESUMED POSITIVE**
BUILDING/LEVEL: **MOWERS SHED - ALL LEVELS**
ROOM/LOCATION: **ALL AREAS - CEILINGS**
FEATURE/MATERIAL: **FLUORESCENT LIGHT FITTING - CAPACITOR**
SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO034**
RESULT: **LEAD (PAINT) - PRESUMED POSITIVE**
BUILDING/LEVEL: **MOWERS SHED - ALL LEVELS**
ROOM/LOCATION: **ROOF - ROOF FRAME**
FEATURE/MATERIAL: **FRAMEWORK - UPPER & LOWER PAINT SYSTEM/S**
SAMPLE NO.: **NOT SAMPLED HEIGHT RESTRICTED**

PHOTO NO.: **J155653-001-PHOTO033**
RESULT: **LEAD (PAINT) - PRESUMED POSITIVE**
BUILDING/LEVEL: **MOWERS SHED - ALL LEVELS**
ROOM/LOCATION: **ROOF - ROOF FRAME**
FEATURE/MATERIAL: **FRAMEWORK - UPPER & LOWER PAINT SYSTEM/S**
SAMPLE NO.: **NOT SAMPLED HEIGHT RESTRICTED**

PHOTO NO.: **J155653-001-PHOTO031**
RESULT: **LEAD (PAINT) - POSITIVE, 3.5% W/W**
BUILDING/LEVEL: **MOWERS SHED - ALL LEVELS**
ROOM/LOCATION: **ALL AREAS - DOORS AND WINDOWS**
FEATURE/MATERIAL: **DOOR & FRAME - UPPER & LOWER PAINT SYSTEM/S**
SAMPLE NO.: **J155653-001-LP-007**

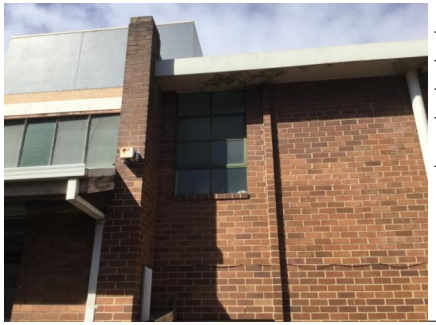


PHOTO NO.: **J155653-001-PHOTO032**
RESULT: **LEAD (PAINT) - POSITIVE, 3.5% W/W**
BUILDING/LEVEL: **MOWERS SHED - ALL LEVELS**
ROOM/LOCATION: **ALL AREAS - DOORS AND WINDOWS**
FEATURE/MATERIAL: **DOOR & FRAME - UPPER & LOWER PAINT SYSTEM/S**
SAMPLE NO.: **J155653-001-LP-007**

Photographs

PHOTO NO.: **J155653-001-PHOTO036**

RESULT: **ASBESTOS - POSITIVE**

BUILDING/LEVEL: **MOWERS SHED - GROUND LEVEL**

ROOM/LOCATION: **BELOW STAIRS - ADJACENT OUTSIDE WALL**

FEATURE/MATERIAL: **ELECTRICAL - FUSE BOARD - BITUMINOUS MATERIAL**

SAMPLE NO.: **J155653-001-004**

PHOTO NO.: **J155653-001-PHOTO038**

RESULT: **ASBESTOS - PRESUMED POSITIVE**

BUILDING/LEVEL: **MOWERS SHED - GROUND LEVEL**

ROOM/LOCATION: **MAIN SHED - AT GIBBONS ST END**

FEATURE/MATERIAL: **ELECTRICAL DISTRIBUTION BOARD - COMPRESSED BITUMINOUS ELECTRICAL PANEL**

SAMPLE NO.: **SIMILAR TO: J155653-001-004**

PHOTO NO.: **J155653-001-PHOTO027**

RESULT: **STORAGE TANKS - PRESUMED POSITIVE**

BUILDING/LEVEL: **MOWERS SHED - GROUND LEVEL**

ROOM/LOCATION: **MAIN SHED - BELOW FLOOR**

FEATURE/MATERIAL: **NON-HAZARDOUS FEATURE - NON-HAZARDOUS MATERIAL**

SAMPLE NO.: **NOT SAMPLED NO ACCESS TO AREA BELOW FLOOR**

PHOTO NO.: **J155653-001-PHOTO026**

RESULT: **SMF - PRESUMED POSITIVE**

BUILDING/LEVEL: **MOWERS SHED - GROUND LEVEL**

ROOM/LOCATION: **MAIN SHED - ROOF LINING**

FEATURE/MATERIAL: **INSULATION - SARKING INSULATION**

SAMPLE NO.: **-**

PHOTO NO.: **J155653-001-PHOTO028**

RESULT: **LEAD (PAINT) - POSITIVE, 1.1% W/W**

BUILDING/LEVEL: **MOWERS SHED - LEVEL ONE**

ROOM/LOCATION: **ALL AREAS - WINDOW FRAMES**

FEATURE/MATERIAL: **WINDOW FRAME - UPPER & LOWER PAINT SYSTEM/S**

SAMPLE NO.: **J155653-001-LP-006**

Greencap Pty Ltd
ABN: 76 006 318 010
Level 2 / 11 Khartoum Road
North Ryde NSW 2113
Australia
P: (02) 9889 1800
F: (02) 9889 1811
www.greencap.com.au

Lab Report Date: Tuesday, 13/03/2018

Our ref: C122647:J155653 - 001

Martin Bilbe
St George Community Housing
Level 5, 38 Humphreys Lane
HURSTVILLE NSW 2220

Dear Martin,

Re: Asbestos Identification Analysis - St George Community Housing, 9-11 Gibbons Street, Redfern NSW 2016

This letter presents the results of asbestos fibre identification analysis performed on 5 samples collected by Adrian Spankie of Greencap on Friday, 09 March 2018. The samples were collected from St George Community Housing, 9-11 Gibbons Street, Redfern NSW 2016.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory by the method of Australian Standard AS4964-2004 and supplementary work instruction in house method NALAB 302 Asbestos Identification.

The analysis was completed on Tuesday, 13 March 2018.

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 Adrian Spankie.

Yours sincerely,
Greencap

Holly Kitamura : Approved Identifier

Holly Kitamura : Approved Signatory

NATA
WORLD RECOGNISED ACCREDITATION

This document shall not be reproduced except in full
Accredited for compliance with ISO/IEC 17025 - Testing.
Corporate Site No. 5450, Site No. 3402 Sydney Laboratory.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

Sydney Laboratory
Sample Analysis Results

GREENCAP

Report Date: Tuesday, 13/03/2018

Our ref: C122647:J155653 - 001

Site Location:	St George Community Housing, 9-11 Gibbons Street, Redfern NSW 2016		
	Sample ID	**Sample Location/Description/Weight or Size**	**Analysis Result**
1	J155653 - 001 - 001	Main building - Interior - Level One - Lunch room - Throughout - Floor Covering - Vinyl Tiles & Adhesive Grey brittle vinyl material and associated amber adhesive material ~ 65 x 55 x 5 mm	No Asbestos Detected Organic Fibres
2	J155653 - 001 - 002	Main building - Interior - Level One - Locker room - Throughout - Floor Covering - Bituminous Material Grey compressed powder, quartz screed material and attached amber and black-brown bituminous adhesive material ~ 40 x 25 x 4	No Asbestos Detected Organic Fibres
3	J155653 - 001 - 003	Main building - Interior - Ground Level - Hallway - Throughout - Floor Covering - Vinyl Tiles & Adhesive Grey brittle vinyl material and associated amber adhesive material ~ 75 x 45 x 3 mm	No Asbestos Detected Organic Fibres
4	J155653 - 001 - 004	Mowers - Interior - Ground Level - Below stairs - Adjacent outside wall - Electrical - Fuse Board - Bituminous Material Black-brown compressed resinous, organic fibrous board material ~ 10 x 10 x <1 mm	**Chrysotile (white asbestos)**
5	J155653 - 001 - 005	Mowers - Interior - All Levels - Electrical cupboard - Fuses - Fuse Holders - Internal Components Cream compressed resin and metal component ~ 60 x 40 x 20 mm	No Asbestos Detected

*** Shaded row with bolded text indicates sample contains a positive result for asbestos.**

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 186907

Client Details

Client	Greencap - NAA Pty Ltd
Attention	Adrian Spankie
Address	Level 2, 11 Khartoum Rd, North Ryde, NSW, 2113

Sample Details

Your Reference	**J155653**
Number of Samples	7 PAINT
Date samples received	09/03/2018
Date completed instructions received	09/03/2018

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

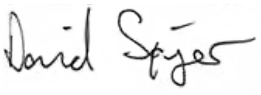
Date results requested by	13/03/2018
Date of Issue	13/03/2018

NATA Accreditation Number 2901. This document shall not be reproduced except in full.

Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Long Pham, Team Leader, Metals

Authorised By



David Springer, General Manager

Sample Analysis Results

Client Reference: J155653

Lead in Paint						
Our Reference		186907-1	186907-2	186907-3	186907-4	186907-5
Your Reference	UNITS	J155653-001-LP001	J155653-001-LP002	J155653-001-LP003	J155653-001-LP004	J155653-001-LP005
Type of sample		PAINT	PAINT	PAINT	PAINT	PAINT
Date Sampled		09/03/2018	09/03/2018	09/03/2018	09/03/2018	09/03/2018
Date prepared	-	12/03/2018	12/03/2018	12/03/2018	12/03/2018	12/03/2018
Date analysed	-	13/03/2018	13/03/2018	13/03/2018	13/03/2018	13/03/2018
Lead in paint	%w/w	0.3	0.1	0.4	0.3	3.9

Lead in Paint			
Our Reference		186907-6	186907-7
Your Reference	UNITS	J155653-001-LP006	J155653-001-LP007
Type of sample		PAINT	PAINT
Date Sampled		09/03/2018	09/03/2018
Date prepared	-	12/03/2018	12/03/2018
Date analysed	-	13/03/2018	13/03/2018
Lead in paint	%w/w	1.1	3.5

Client Reference: J155653

Method ID	Methodology Summary
Metals-004	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.

Client Reference: J155653

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			12/03/2018	1	12/03/2018	12/03/2018		12/03/2018	[NT]
Date analysed	-			13/03/2018	1	13/03/2018	13/03/2018		13/03/2018	[NT]
Lead in paint	%w/w	0.05	Metals-004	<0.05	1	0.3	0.3	0	97	[NT]

Client Reference: J155653

Result Definitions	
NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions	
Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Client Reference: J155653

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

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 (SafeWork Australia, 2016)
NSW Work Health & Safety Regulation 2017

5 representative sample(s) 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 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, 2016).

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 SMF materials throughout the building.

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.

Where possible, suspected lead based painted surfaces were sampled for laboratory analysis. 7 paint chip samples were collected in clip-lock plastic bags and sent to an external NATA-accredited laboratory for analysis of lead content (represented as a percentage) by ICP-AES methods.

Lead Dust

No lead dust samples were collected during the audit due to the lack of roof spaces.

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.

Flammable and Combustible Materials

The identification of flammable and combustible materials (or containers that have held these materials) was restricted to a visual assessment. This excluded materials and items that it was assumed would be removed prior to the site being handed over for demolition.

Above and Below Ground Storage Tanks

We undertake a visual inspection of the site for the presence of above and below ground storage tanks and associated services, during the inspection, where access allowed. No sub-surface investigations or SafeWork searches for dangerous goods will be undertaken as part of this assessment. This was undertaken in accordance with the Work Health & Safety Regulation 2011.

Limited destructive sampling techniques have been used to gain access into restricted areas for the purpose of determining the likelihood of 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, 2016).

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
Friable asbestos or ACM is asbestos or ACM in powder form, or able to be crumbled, pulverised, or reduced to a powder by hand pressure when it is dry e.g. sprayed asbestos beam insulation (limpet), pipe lagging.

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 / demolition 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 as soon as practicable &** **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 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, Feb 2016).

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 (SafeWork Australia, 2016)'.

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 have requirements for the identification and control of risks within workplaces. These broad requirements extends to the hazardous materials that may be present within the workplace. The requirements for management of hazardous materials are 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 "Guidelines for the Management of Lead Based Paint, Ministry of Health, 2013", 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 St George Community Housing and Greencap.

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 St George Community Housing 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 Greencap.

This report relates only to the identification of hazardous 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 hazardous 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 hazardous materials were collected for analysis. Other hazardous materials of similar appearance are assumed to have a similar content.

Not all suspected hazardous materials were sampled. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that hazardous 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 hazardous materials 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.