



**Hazardous Materials Risk Assessment**  
**Abacus**  
**Goods Shed North**  
**710 Collins Street, Melbourne VIC 3000**



**Site Reference: APS-PRO-059**

**Our Reference : C107307 : J144435**

**Date: January 2017**

**Greencap**

✉ Level 1 / 677 High Street  
Kew East VIC 3102

☎ (03) 9890 8811

💻 [www.greencap.com.au](http://www.greencap.com.au)

# TABLE OF CONTENTS

**INTRODUCTION** ..... 3

**SCOPE OF WORKS** ..... 3

**SITE ASBESTOS RISK PROFILE** ..... 3

**SUMMARY OF IDENTIFIED ITEMS** ..... 3

**RECOMMENDATIONS** ..... 4

**HAZARDOUS MATERIALS REGISTER** ..... 6

**AREAS NOT ACCESSED** ..... 12

**PHOTOGRAPHS** ..... 13

**SAMPLE ANALYSIS RESULTS** ..... 16

**METHODOLOGY** ..... 18

**RISK ASSESSMENT FACTORS** ..... 19

**PRIORITY RATING SYSTEM** ..... 20

**ASBESTOS MANAGEMENT REQUIREMENTS** ..... 21

**HAZARDOUS MATERIAL MANAGEMENT REQUIREMENTS** ..... 22

**STATEMENT OF LIMITATIONS** ..... 24

23/01/2017  
**REPORT PREPARED BY**



**ROBERT KINSTLER**  
 Consultant - Hazardous Materials

16/02/2017  
**REPORT REVIEWED BY**



**PHIL CARBONI**  
 Hazardous Materials Consultant

08/03/2017  
**REPORT AUTHORISED BY**



**HELEN PEARCE**  
 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.

This report is not adequate for the purposes of refurbishment or demolition works. This report must be reviewed prior to the commencement of such works and a more intrusive risk assessment undertaken to identify asbestos-containing materials which may be disturbed during building demolition or refurbishment 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 Hazardous Materials Risk Assessment conducted for Abacus located at 710 Collins Street Melbourne VIC 3000. The risk assessment was performed by Robert Kinstler on 23/01/2017.

This report was performed in accordance with:

- Managing Asbestos in Workplaces: Compliance Code (WorkSafe Victoria, 2008)
- VIC Occupational Health and Safety Regulations 2007.

## Scope of Works

The scope of works for this project was as follows:

- Inspect representative and accessible areas of the site to identify the following hazardous materials: Asbestos, SMF, PCB, Lead Paint (Lead Check), Lead Paint (Chips), ODSs 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
- Take photographs of suspected hazardous materials
- Recommend control measures and actions necessary to manage any hazardous material related risks
- Collect samples of suspected asbestos-containing materials
- Undertake representative lead paint identification using LeadCheck swabs
- Collection of paint chip samples for analysis of percentage lead content
- Collection of representative dust samples for analysis of lead concentration

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
710 Collins Street (Goods Shed North) - All Levels	0	0	0
710 Collins Street (Goods Shed North) - Ground Level	0	0	0
710 Collins Street (Goods Shed North) - Mezzanine Level	0	0	0
710 Collins Street (Goods Shed North) - Level One	0	0	0
710 Collins Street (Goods Shed North) - Level Two	0	0	0
710 Collins Street (Goods Shed North) - Roof	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

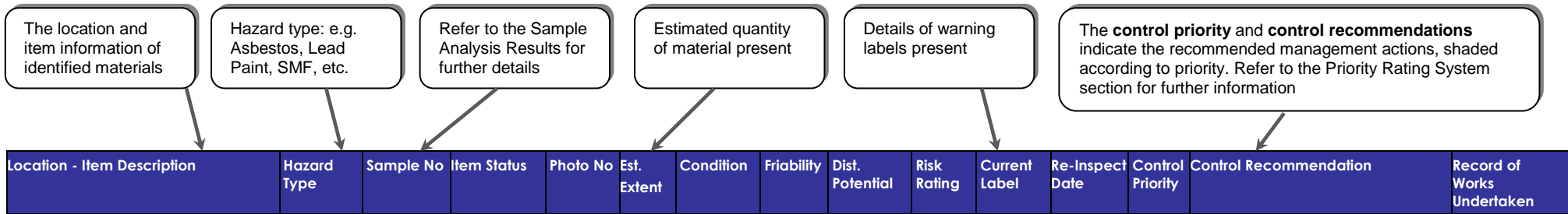
## Summary of Identified Items

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
710 Collins Street (Goods Shed North) - All Levels			YES				
710 Collins Street (Goods Shed North) - Ground Level			YES				
710 Collins Street (Goods Shed North) - Mezzanine Level			YES				
710 Collins Street (Goods Shed North) - Level One							
710 Collins Street (Goods Shed North) - Level Two			YES				
710 Collins Street (Goods Shed North) - Roof			YES				

## Recommendations

- Develop a Hazardous Materials Management Plan (HMMP) to manage the risks associated with remaining in-situ hazardous materials located at the site and ensure compliance with relevant Legislation, Codes of Practice and Australian Standards.
- Synthetic Mineral Fibre (SMF) materials should be removed under controlled conditions prior to demolition /refurbishment works, in accordance with the requirements of the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].
- Should any personnel come across any suspected asbestos or hazardous materials, work should cease immediately in the affected areas until further sampling and investigation is performed.
- 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.
- Prior to demolition or refurbishment works, undertake a destructive hazardous materials survey of the premises as per the requirements of AS 2601: 2001 The Demolition of Structures, Part 1.6.1, WorkSafe Victoria's Compliance Code, Managing asbestos in workplaces 2008, and Part 4.3, Division 6 of the Victorian Occupational Health and Safety Regulations 2007.
- Greencap can assist with the implementation of any of the above recommendations.



Location - Item Description	Hazard Type	Sample No	Item Status	Photo No	Est. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Re-Inspect Date	Control Priority	Control Recommendation	Record of Works Undertaken

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.

Site Details			Building Details							Audit Details				
Full Address:	710 Collins Street, Melbourne VIC 3000		Building Name:	710 Collins Street (Goods Shed North)		Number of Levels:	4		Survey Date:	23-01-2017				
Property ID:	APS-PRO-059		Est. Building Size:	5000m <sup>2</sup>		Est. Building Age:	1890		Inspected By:	Robert Kinstler				
Client Name:	Abacus		Roof Type:	Slate Tiles		Construction Type:	Brick		Company:	Greencap				
Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Ext. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
<b>710 Collins Street (Goods Shed North) - Exterior - All Levels</b>														
External Areas - Throughout No asbestos-containing materials identified	None													
<b>710 Collins Street (Goods Shed North) - Interior - All Levels</b>														
Ceiling & Ceiling Space - Various Throughout Ductwork Flange Joint - Mastic Sealant - Modern ductwork installed 2009 assumed not to contain asbestos. Silicone sealant observed in locations	Asbestos	Not Sampled Restricted Access	Presumed Negative											
Electrical Risers - General Throughout Penetrations - Pillow Insulation - SMF insulated	SMF		Positive	J144435-APS- PRO-059-Phot o010	50 Unit/s	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Lift & Lift Shaft - Throughout Installed 2009. Assumed not to contain asbestos	None													
Male, Female, Disability Access Toilets & Showers - Throughout No asbestos-containing materials identified.	None													
Office Areas - Various Throughout Ceiling Tiles - Compressed Ceiling Tiles	SMF		Positive	J144435-APS- PRO-059-Phot o008	2000 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Various Locations - Throughout Floor Covering - New Style Sheet Vinyl - To Staff Areas, Office Areas & Corridors. Various colours	Asbestos	Not Sampled	Negative											
Various Locations - Throughout Fluorescent Light Fitting - Capacitor - Modern-style light fittings throughout assumed not to contain PCB capacitors. Refurbished 2009	PCB		Presumed Negative											
Various Locations - Throughout Wall - Paint System/s - White & beige paintwork	Lead (Paint)	J144435-APS- PRO-059-LC-001	Negative											
<b>710 Collins Street (Goods Shed North) - Interior - Ground Level</b>														
Air Handling Plant Rooms x 6 - Throughout Ductwork Flange Joint - Mastic Sealant - Silicone sealant observed. Installed 2009	Asbestos	Not Sampled	Negative											
Air Handling Plant Rooms x 6 - Throughout Pipework Insulation - Sarking Insulation - Foil/SMF	SMF		Positive	J144435-APS- PRO-059-Phot o017	50 m	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	

Site Details		Building Details				Audit Details	
Full Address:	710 Collins Street, Melbourne VIC 3000	Building Name:	710 Collins Street (Goods Shed North)	Number of Levels:	4	Survey Date:	23-01-2017
Property ID:	APS-PRO-059	Est. Building Size:	5000m <sup>2</sup>	Est. Building Age:	1890	Inspected By:	Robert Kinstler
Client Name:	Abacus	Roof Type:	Slate Tiles	Construction Type:	Brick	Company:	Greencap

Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Ext. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Bike Rooms x 3 - Throughout No asbestos-containing materials identified	None													
CSIRO - Office Areas No asbestos-containing materials identified. Refurbished 2016	None													
EWIS/Fire Indicator Panel Room - Throughout No asbestos-containing materials identified	None													
Hydrant Booster/Sprinkler Control Valve Room - Throughout	None													
Lobby (Bourke St) - Throughout No asbestos-containing materials identified	None													
Lobby Corridor - Throughout Fire Door - Fire Door Core - Melbourne Fire Doors - Installed 2009 assumed not to contain asbestos	Asbestos	Not Sampled Restricted Access	Negative										Based on the age of installation, it is assumed that this item does not contain asbestos.	
Mimic Panel (Bourke St Lobby) - Throughout No asbestos-containing materials identified	None													
Platform 28 - Male, Female & Disability Access Toilets Constructed 2009. New-style cement sheet or plaster backing assumed to ceramic tiles	None													
Platform 28 - Public Areas No asbestos-containing materials identified	None													
Platform 28 - Staff Areas Floor Covering - New Style Sheet Vinyl - Black, on concrete	Asbestos	Not Sampled	Negative											
Platform 28 - Various Throughout Constructed 2009. New-style cement sheet or plaster backing assumed to ceramic tiles	None													
Subfloor Access - Within Ductwork Insulation - Sarking Insulation - Under heritage section	SMF		Positive	J144435-APS-PRO-059-Photo018	1000 m	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Victorian Building Authority Offices - Office Areas No asbestos-containing materials identified	None													

710 Collins Street (Goods Shed North) - Interior - Mezzanine Level

Site Details		Building Details					Audit Details	
Full Address:	710 Collins Street, Melbourne VIC 3000	Building Name:	710 Collins Street (Goods Shed North)	Number of Levels:	4	Survey Date:	23-01-2017	
Property ID:	APS-PRO-059	Est. Building Size:	5000m <sup>2</sup>	Est. Building Age:	1890	Inspected By:	Robert Kinstler	
Client Name:	Abacus	Roof Type:	Slate Tiles	Construction Type:	Brick	Company:	Greencap	

Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Ext. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Air Handling Plant Rooms x 6 - Throughout Ductwork Flange Joint - Mastic Sealant - Silicone sealant observed. Installed 2009	Asbestos	Not Sampled	Negative											
Air Handling Plant Rooms x 6 - Throughout Pipework Insulation - Sarking Insulation - Foil/SMF	SMF		Positive	J144435-APS-PRO-059-Photo016	50 m	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Board Rooms x 2 - Throughout No asbestos-containing materials identified	None													
Comms Room - Throughout No asbestos-containing materials identified	None													
CSIRO - Office Areas No asbestos-containing materials identified. Refurbished 2016	None													
Main Switchboard Room - Throughout Fire Door - Fire Door Core - Melbourne Fire Doors - Installed 2009 assumed not to contain asbestos	Asbestos	Not Sampled Restricted Access	Negative										Based on the age of installation, it is assumed that this item does not contain asbestos.	
Main Switchboard Room - Throughout Modern-style switchboards installed circa 2009 assumed not to contain asbestos	None													
Office Areas (Heritage Section) - Ceiling Areas Ductwork Insulation - Sarking Insulation - Painted black	SMF		Positive	J144435-APS-PRO-059-Photo015	100 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Platform 28 - Public Areas No asbestos-containing materials identified	None													
Platform 28 - Staff Areas Floor Covering - New Style Sheet Vinyl - Black, on concrete	Asbestos	Not Sampled	Negative											
Platform 28 - Various Throughout Constructed 2009. New-style cement sheet or plaster backing assumed to ceramic tiles	None													
Prep Kitchen - Throughout No asbestos-containing materials identified	None													
Security Office - Ceiling Areas Flexible Ductwork Insulation - Sarking Insulation - Foil/SMF	SMF		Positive	J144435-APS-PRO-059-Photo014	5 m	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Store Rooms x 2 - Throughout No asbestos-containing materials identified	None													

Site Details		Building Details					Audit Details	
Full Address:	710 Collins Street, Melbourne VIC 3000	Building Name:	710 Collins Street (Goods Shed North)	Number of Levels:	4	Survey Date:	23-01-2017	
Property ID:	APS-PRO-059	Est. Building Size:	5000m <sup>2</sup>	Est. Building Age:	1890	Inspected By:	Robert Kinstler	
Client Name:	Abacus	Roof Type:	Slate Tiles	Construction Type:	Brick	Company:	Greencap	

Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Ext. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Victorian Building Authority Offices - Office Areas No asbestos-containing materials identified														
<b>710 Collins Street (Goods Shed North) - Interior - Level One</b>														
Degani Cafe - Staff Areas Floor Covering - New Style Sheet Vinyl - Beige, on concrete	Asbestos	Not Sampled	Negative											
Degani Cafe - Various Throughout Constructed 2009. New-style cement sheet or plaster backing assumed to ceramic tiles	None													
Demo Room - Throughout No asbestos-containing materials identified	None													
Main Lobby (Collins St) - Throughout No asbestos-containing materials identified	None													
<b>710 Collins Street (Goods Shed North) - Interior - Level Two</b>														
Ceiling Space - Office Areas Beams - Sprayed Vermiculite - Beige	Asbestos	J144435-APS-PRO-059-002	Negative											
Ceiling Space - Office Areas Ductwork Insulation - Sarking Insulation - Foil/SMF	SMF		Positive	J144435-APS-PRO-059-Photo009	50 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Ceiling Space - Office Areas Flexible Ductwork Insulation - Sarking Insulation	SMF		Positive	J144435-APS-PRO-059-Photo013	50 m	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Ceiling Space - Office Areas Roof Lining - Sarking Insulation - Foil/SMF	SMF		Positive		500 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Office Areas - Throughout No asbestos-containing materials identified	None													
Various Locations - Throughout Fire Door - Fire Door Core - Melbourne Fire Doors - Installed 2009 assumed not to contain asbestos	Asbestos	Not Sampled Restricted Access	Negative										Based on the age of installation, it is assumed that this item does not contain asbestos.	
<b>710 Collins Street (Goods Shed North) - Exterior - Roof</b>														
Plant Enclosure - Various Throughout Pipework Flange Joint - Gasket - Sampled at CONDWF pipework	Asbestos	J144435-APS-PRO-059-001	Negative										Remove Labels	

Site Details		Building Details					Audit Details	
Full Address:	710 Collins Street, Melbourne VIC 3000	Building Name:	710 Collins Street (Goods Shed North)	Number of Levels:	4	Survey Date:	23-01-2017	
Property ID:	APS-PRO-059	Est. Building Size:	5000m <sup>2</sup>	Est. Building Age:	1890	Inspected By:	Robert Kinstler	
Client Name:	Abacus	Roof Type:	Slate Tiles	Construction Type:	Brick	Company:	Greencap	

Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Ext. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
Plant Enclosure - Various Throughout Pipework Insulation - Glass Fibre - Metal clad	SMF		Positive	J144435-APS-PRO-059-Photo002	6 Unit/s	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Various Locations - Adjacent Plant Rooms Split System Air Con Unit - R410A - HFC Blend - Modern-style AC units assumed to contain R410A. Installed 2009	ODS		Presumed Negative											
<b>710 Collins Street (Goods Shed North) - Interior - Roof</b>														
Boiler Plant Room - Central Boiler Insulation - Glass Fibre - Assumed within circa 2009 boilers	SMF		Presumed Positive	J144435-APS-PRO-059-Photo005	2 Unit/s	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Boiler Plant Room - Throughout Ceiling - Sarking Insulation - To underside of metal roof	SMF		Positive	J144435-APS-PRO-059-Photo003	100 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Boiler Plant Room - Various Throughout Pipework Flange Joint - Gasket	Asbestos	Similar To: J144435-APS-PRO-059-001	Presumed Negative											
Boiler Plant Room - Various Throughout Pipework Insulation - Sarking Insulation	SMF		Positive	J144435-APS-PRO-059-Photo011	50 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Chiller Plant Room - Ceiling Areas Ductwork Flange Joint - Mastic Sealant - Modern ductwork installed 2009 assumed not to contain asbestos	Asbestos	Not Sampled	Presumed Negative											
Chiller Plant Room - Throughout Ceiling - Sarking Insulation - To underside of metal roof	SMF		Positive	J144435-APS-PRO-059-Photo004	100 m <sup>2</sup>	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Chiller Plant Room - Various Throughout Pipework Flange Joint - Gasket	Asbestos	Similar To: J144435-APS-PRO-059-001	Presumed Negative											
Chiller Plant Room - Various Throughout Pipework Flange Joint - Gasket	Asbestos	Similar To: J144435-APS-PRO-059-001	Presumed Negative											
Chiller Plant Room - Various Throughout Pipework Insulation - Glass Fibre - Metal clad & sarking insulation	SMF		Positive	J144435-APS-PRO-059-Photo012	50 m	Good	Bonded (SMF)						Maintain in good condition and incorporate into a HMMP. Remove under controlled conditions prior to demolition or refurbishment.	
Chiller Plant Room - Various Throughout Plant & Equipment - Insulation - Chiller plant assumed not to contain asbestos internal insulation	Asbestos	Not Sampled Restricted Access	Presumed Negative											

Site Details		Building Details						Audit Details	
Full Address:	710 Collins Street, Melbourne VIC 3000	Building Name:	710 Collins Street (Goods Shed North)	Number of Levels:	4	Survey Date:	23-01-2017		
Property ID:	APS-PRO-059	Est. Building Size:	5000m <sup>2</sup>	Est. Building Age:	1890	Inspected By:	Robert Kinstler		
Client Name:	Abacus	Roof Type:	Slate Tiles	Construction Type:	Brick	Company:	Greencap		

Location - Item Description	Hazard Type	Sample No.	Item Status	Photo No.	Ext. Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Reinspect Date	Control Priority	Control Recommendation	Record of Works Undertaken
External Areas - Throughout No asbestos-containing materials identified	None													

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 of 1 Building

Area / Item	Not Accessed	Comments
	710 Collins Street (Goods Shed North)	
Behind ceramic wall tiles throughout	All	710 Collins Street (Goods Shed North) - No access without destructive methods
Ceiling spaces	Some	710 Collins Street (Goods Shed North) - Restricted access within
Culverts and floor trenches or tunnels	Some	710 Collins Street (Goods Shed North) - Restricted access
Fire door cores	All	710 Collins Street (Goods Shed North) - No fire doors were compromised at time of inspection
Gaskets, mastics & sealants to pipework, ductwork, mechanical equipment & construction/expansion joints	Some	710 Collins Street (Goods Shed North) - Restricted access
Height restricted areas of site and ceiling where safe lifting platforms were not provided	All	710 Collins Street (Goods Shed North) - Internal & external areas
Inside mechanical equipment	All	710 Collins Street (Goods Shed North) - Plant assumed live at time of inspection
Lift shaft, landing doors and cabin fittings and doors all levels	All	710 Collins Street (Goods Shed North) - No internal access
Roof	All	710 Collins Street (Goods Shed North) - No safe access at time of inspection
Under carpeted floor coverings in office areas	Some	710 Collins Street (Goods Shed North) - Representative areas accessed
Wall cavities	All	710 Collins Street (Goods Shed North) - No access without destructive methods
Waterproof membranes	All	710 Collins Street (Goods Shed North) - No waterproofing was compromised at time of inspection
Within air conditioning re-heat boxes	All	710 Collins Street (Goods Shed North) - Plant assumed live at time of inspection
Within electrical switchboard cupboard or backing	Some	710 Collins Street (Goods Shed North) - Live electrical hazard
Within internal walls partitioning	All	710 Collins Street (Goods Shed North) - No access without destructive methods



PHOTO NO.: J144435-APS-PRO-059-PHOTO010  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ALL LEVELS  
 ROOM/LOCATION: ELECTRICAL RISERS - GENERAL THROUGHOUT  
 FEATURE/MATERIAL: PENETRATIONS - PILLOW INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO008  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ALL LEVELS  
 ROOM/LOCATION: OFFICE AREAS - VARIOUS THROUGHOUT  
 FEATURE/MATERIAL: CEILING TILES - COMPRESSED CEILING TILES  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO017  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - GROUND LEVEL  
 ROOM/LOCATION: AIR HANDLING PLANT ROOMS X 6 - THROUGHOUT  
 FEATURE/MATERIAL: PIPEWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO018  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - GROUND LEVEL  
 ROOM/LOCATION: SUBFLOOR ACCESS - WITHIN  
 FEATURE/MATERIAL: DUCTWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -

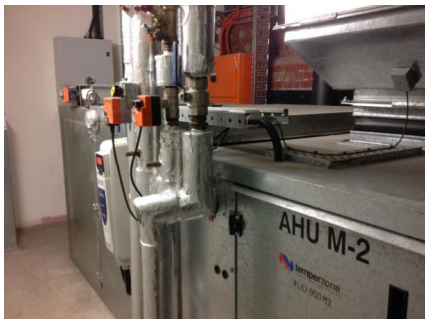


PHOTO NO.: J144435-APS-PRO-059-PHOTO016  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - MEZZANINE LEVEL  
 ROOM/LOCATION: AIR HANDLING PLANT ROOMS X 6 - THROUGHOUT  
 FEATURE/MATERIAL: PIPEWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -

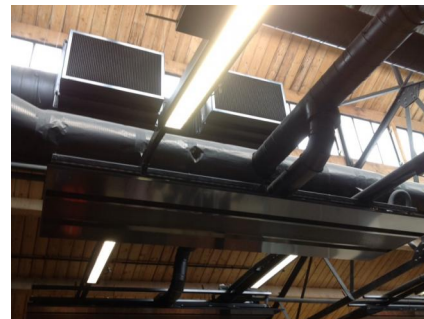


PHOTO NO.: J144435-APS-PRO-059-PHOTO015  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - MEZZANINE LEVEL  
 ROOM/LOCATION: OFFICE AREAS (HERITAGE SECTION) - CEILING AREAS  
 FEATURE/MATERIAL: DUCTWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO014  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - MEZZANINE LEVEL  
 ROOM/LOCATION: SECURITY OFFICE - CEILING AREAS  
 FEATURE/MATERIAL: FLEXIBLE DUCTWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO009  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - LEVEL TWO  
 ROOM/LOCATION: CEILING SPACE - OFFICE AREAS  
 FEATURE/MATERIAL: DUCTWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO013  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - LEVEL TWO  
 ROOM/LOCATION: CEILING SPACE - OFFICE AREAS  
 FEATURE/MATERIAL: FLEXIBLE DUCTWORK INSULATION - SARKING INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO002  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ROOF ROOM  
 ROOM/LOCATION: PLANT ENCLOSURE - VARIOUS THROUGHOUT  
 FEATURE/MATERIAL: PIPEWORK INSULATION - GLASS FIBRE  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO005  
 RESULT: SMF - PRESUMED POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ROOF ROOM  
 ROOM/LOCATION: BOILER PLANT ROOM - CENTRAL  
 FEATURE/MATERIAL: BOILER INSULATION - GLASS FIBRE  
 SAMPLE NO.: -

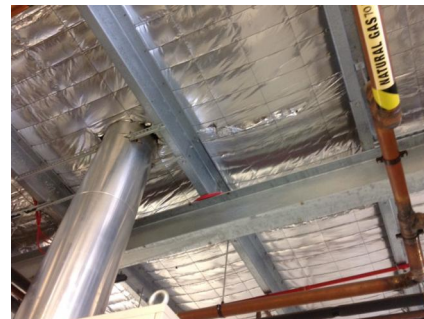


PHOTO NO.: J144435-APS-PRO-059-PHOTO003  
 RESULT: SMF - POSITIVE  
 BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ROOF ROOM  
 ROOM/LOCATION: BOILER PLANT ROOM - THROUGHOUT  
 FEATURE/MATERIAL: CEILING - SARKING INSULATION  
 SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO011  
RESULT: **SMF - POSITIVE**  
BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ROOF  
ROOM/LOCATION: **BOILER PLANT ROOM - VARIOUS THROUGHOUT**  
FEATURE/MATERIAL: **PIPEWORK INSULATION - SARKING INSULATION**  
SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO004  
RESULT: **SMF - POSITIVE**  
BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ROOF  
ROOM/LOCATION: **CHILLER PLANT ROOM - THROUGHOUT**  
FEATURE/MATERIAL: **CEILING - SARKING INSULATION**  
SAMPLE NO.: -



PHOTO NO.: J144435-APS-PRO-059-PHOTO012  
RESULT: **SMF - POSITIVE**  
BUILDING/LEVEL: 710 COLLINS STREET (GOODS SHED NORTH) - ROOF  
ROOM/LOCATION: **CHILLER PLANT ROOM - VARIOUS THROUGHOUT**  
FEATURE/MATERIAL: **PIPEWORK INSULATION - GLASS FIBRE**  
SAMPLE NO.: -

## GOODS SHED NORTH 23-01-2017



**Greencap Pty Ltd**  
**ABN: 76 006 318 010**  
Level 1 / 677 High Street  
Kew East VIC 3102  
Australia  
P: (03) 9890 8811  
F: (03) 9890 8911  
[www.greencap.com.au](http://www.greencap.com.au)

Friday, 03/02/2017

Our ref: C107307:J144435 - APS-PRO-059

Evan Kidd  
Abacus  
264-278 George Street  
**SYDNEY NSW 2000**

Dear Evan,

**Re: Asbestos Identification Analysis - 710 Collins Street, Melbourne VIC 3000**

This letter presents the results of asbestos fibre identification analysis performed on 2 samples collected by Robert Kinstler of Greencap on Monday, 23 January 2017. The samples were collected from 710 Collins Street, Melbourne VIC 3000.

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

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 Amy Bell.

Yours sincerely,  
**Greencap**



**Kelly Arnott : Approved Identifier**



**Kelly Arnott : Approved Signatory**



This document shall not be reproduced except in full Accredited for compliance with ISO/IEC 17025 - Testing. Corporate Site No. 5450, Site No. 5443 Melbourne Laboratory. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards.

## GOODS SHED NORTH 23-01-2017

Melbourne Laboratory  
Sample Analysis Results



Friday, 03/02/2017

Our ref: C107307:J144435 - APS-PRO-059

<b>Site Location:</b>		710 Collins Street, Melbourne VIC 3000	
	<b>Sample ID</b>	<b>Sample Location/Description/Weight or Size</b>	<b>Analysis Result</b>
1	J144435 - APS-PRO-059  - 001	710 Collins Street (Goods Shed North) - Roof - Plant Enclosure - Pipework Flange Joint - Gasket - Sampled at CONDWF pipework  Beige compressed fibrous sheet material  ~ 3 x 3 x 2 mm	No Asbestos Detected Organic Fibres
2	J144435 - APS-PRO-059  - 002	710 Collins Street (Goods Shed North) - Level Two - Ceiling Space - Office Areas - Beams - Sprayed Vermiculite - Beige  Beige loosely-formed powder, mica, fibre vermiculite-type material  ~ 33 x 17 x 3 mm	No Asbestos Detected Organic Fibres

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

## Asbestos

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

Managing Asbestos in the Workplace: Compliance Code (WorkSafe Victoria, 2008)  
VIC Occupational Health and Safety Regulations 2007

Two (2) 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.

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.

## 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.

## Lead Paint

One (1) LeadCheck paint swab test was taken of representative painted surfaces to determine the presence of lead within paint. 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 down pipes, 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.

No lead paint chip samples were collected during the survey.

Where possible, painted surfaces returning a positive result for lead using the LeadCheck paint swab method were sampled. 0 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

The collection and analysis of no suspected lead-containing dust samples were collected during this survey.

## 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.

## 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.

## 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:

### 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.

<b>Priority 1 (P1)</b>	<b>Action:</b>	<b>Restrict Access to Area &amp; Organise Abatement Works as soon as practicable &amp; Manage any remaining materials as part of an AMP</b>
------------------------	----------------	---

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.

<b>Priority 2 (P2)</b>	<b>Action:</b>	<b>Organise Remedial Works as soon as practicable &amp; Manage any remaining materials as part of an AMP</b>
------------------------	----------------	--

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).

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

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.

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

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.

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, 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 (SafeWork Australia, 2016)'.

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 "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.

This report has been prepared in accordance with the agreement between Abacus 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 Abacus 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 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.