Pre-Demolition Hazardous Materials Survey Report

Lot 20, 214 Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

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Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fife Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Pre-Demolition Hazardous Materials Survey of Lot 20, Aldington Road, Kemps creek NSW. (herein referred to as "the site"). The site inspection was carried out on the 12th of January 2022.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
External eaves and high walls	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Front and rear entrance ceiling	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Level 2, bathroom, and toilet wall lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Level 2, bathroom ensuite wall lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
Level 1, Kitchen sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Internal 2nd Roof space Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Internal 2nd Landing Sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead based paint

No lead-based paint was found to be present.

Lead containing dust (LCD)

No lead containing dust was found to be present

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Targeted Predemolition Hazardous Materials Survey.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 14th of January 2022 by Charly Golding an Occupational Hygienist representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM)
- Synthetic mineral fibre (SMF)
- Lead-based- paint
- Polychlorinated Biphenyls (PCB)
- Ozone Depleting Substances (ODS)

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 20, Aldington Road, Kemps Creek NSW
Inspected areas/ (interior and exterior)	

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation.

Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.5 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
External eaves and high walls	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Front and rear entrance ceiling	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Level 2, bathroom, and toilet wall lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Level 2, bathroom ensuite wall lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
Level 1, Kitchen sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Internal 2nd Roof space Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Internal 2nd Landing Sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead based paint

No lead-based paint was found to be present.

Lead containing dust (LCD)

No lead containing dust was found to be present

4 Conclusions and recommendations

Recommendations for asbestos:

Risk	Type	Recommended Action
High Medium and Low	Non-Friable Asbestos	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square metres (m^2) of non-friable asbestos containing material. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6].
High Medium and Low	Friable Asbestos	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the asbestos removal. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6]. .

Recommendations for Asbestos

Risk	Type	Recommended Action
High Medium and Low	Friable Asbestos	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the asbestos removal. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6]. .
High Medium and Low	Non- Friable Asbestos	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square metres (m^2) of non-friable asbestos containing material. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6].

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Medium and Low	Friable SMF	Remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not compulsory, but it is recommended during and after the removal. The material can be disposed as a General waste construction. Clearance is not required but a visual inspection prior demolition is recommended. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool
Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Recommendations for ODS

Gas type	Disposal
Non-ozone depleting substances.	Require removal(de-gas) prior works by a Refrigerant Handling Licensed contractor for air conditioning and refrigeration systems and a Fixed System Installation and Decommissioning Licensed contractor for extinguisher systems in accordance with the Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;.

Negligible risk score does not require any actions.

Appendix I – Aerial photographs

Figure 1. Approximate location of the subject area located at Lot 20, Aldington Road, Kemps Creek NSW (Map adapted from *Nearmap* accessed on 22/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 20 **Site Address:** Lot 20, Aldington Road, Kemps Creek NSW **Circa:**
Occupational Hygienist: Charly Golding **Inspection Date:** 12.01.2022 **Res-inspection Date:**

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Lot 20																
External	Ground	External surround	Bitumen mastic to concrete floor slabs	Asbestos	16	m^2	1	21.1994-ASB1	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
External	Ground	Eaves and high level wall panels	Fibre cement	Asbestos	50	m^2	2	21.1994-Asb2	Chrysotile asbestos found	N/A	Accessible	Good	Low	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
External	Ground	Storage and animal cages (by main property) low level wall lining	Fibre cement	Asbestos	6	m^2	3	21.1994-Asb6	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
External	Ground	Storage and animal cages (by main property) high level wall lining by entrance door	Fibre cement	Asbestos	14	m^2	-	Same as 21.1994-Asb6	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
External	Ground	Front balcony	Presumed non ODS-R32	ODS	1	Units	7	N/A	Presumed non ODS gas	N/A	Accessible	Good	Low	Low	Require removal(de-gas) prior works by a Refrigerant Handling Licensed contractor for air conditioning and refrigeration systems and a Fixed System Installation and Decommissioning Licensed contractor for extinguisher systems in accordance with the Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;.	N/A
Internal	Ground	Front and rear entrance, ceiling	Fibre cement	Asbestos	26	m^2	4	Same as 21.1994-Asb2	Chrysotile asbestos found	N/A	Accessible	Good	Low	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Internal	Ground	Toilet, boxing lining	Fibre cement	Asbestos	3	m^2	-	21.1992-Asb5	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
Internal	Ground	Garage	Bitumen mastic to concrete floor slabs	Asbestos	10	LM	5	Same as 21.1994-Asb1	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
Internal	Level 2	Bathroom and toilet wall lining	Fibre cement	Asbestos	16	m^2	6	21.1994-Asb 3	Chrysotile asbestos found	non-friable	Accessible	Good	Low	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
Internal	Level 2	Bathroom ensuite wall lining	Fibre cement	Asbestos	12	m^2	6	Same as 21.1994-Asb3	Chrysotile asbestos found	N/A	Accessible	Good	Low	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
Internal	Level 2	Roof space	Insulation	Asbestos	12	m^2	-	21.1994-Asb4	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
Internal	Level 1	Kitchen sarking insulation to skylight surrounding	Insulation	SMF	2	m^2	-	Visual Inspection	Presumed SMF	Non-friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.	N/A
External	Ground	Wood storage shed (adjacent metal outbuilding along driveway)	Presumed non ODS-R32	ODS	1	Units	-	N/A	Presumed non ODS gas	N/A	Accessible	Good	Low	Low	Require removal(de-gas) prior works by a Refrigerant Handling Licensed contractor for air conditioning and refrigeration systems and a Fixed System Installation and Decommissioning Licensed contractor for extinguisher systems in accordance with the Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;.	N/A

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Internal	2nd	Roof space	Sarking insulation to ceiling	SMF	30	m2	-	Visual Inspection	Presumed SMF	Non-friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.	N/A
Internal	2nd	Landing	Sarking insulation to skylight surround	SMF	4	m2	-	Visual Inspection	Presumed SMF	Non-friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.	N/A

Appendix III – Photographs

Photograph 1. External surround, non asbestos Bitumen mastic to concrete slab, as observed on 12/01/2022.

Photograph 2. External eaves, asbestos containing fibre cement, as observed on 12/01/2022.

Photograph 3. External, storage and animal cages wall lining and entrance door, non-asbestos containing fibre cement, as observed on 12/01/2022.

Photograph 4. Internal, front and rear entrance - asbestos containing ceiling lining, as observed on 12/01/2022.

Photograph 5. Internal, ground level, non asbestos bitumen mastic to concrete floor slabs, as observed on 12/01/2022.

Photograph 6. Internal, bathroom ensuite wall lining, sbestos containing fibre cement, as observed on 12/01/2022.

Photograph 7. External front balcony, non ODS gas R32, as observed on 12/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;

[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Graton Projects and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Graton Projects 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

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Pre-Demolition Hazardous Materials Survey Report

Lot 21, 214 Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

21.1994| HBM2 | Date: 23rd March 2022

Document information

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Project Manager

CONTENTS

Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fife Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Pre-Demolition Hazardous Materials Survey of Lot 21, Aldington Road, Kemps creek NSW. (herein referred to as "the site"). The site inspection was carried out on the 12th of January 2022.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
Residence 198A - External Ground, Main building, all around, eaves and awnings	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Residence 198A - External, Ground Southern side of the main building, light control panel, service board	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Residence 198B - External, Ground Main building, all around, eaves and awnings	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Residence 198B - External Ground Main building, power distribution box, light control panel	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
Residence 198A - Internal, Ground Main building, ceiling void Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Residence 198A - External Ground Storage shed, northern side, " Suspect SMF insulation within hot water unit"	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Residence 198B - Internal Ground Ceiling void Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Residence 198B - Internal Ground Ceiling void SMF lining to AC ductwork	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

Location	Material	Risk score	Recommendation
Residence 198A - Internal Ground Garage Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.
Residence 198A - Internal Ground Laundry Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.
Residence 198A - Internal Ground Toilet Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.
Residence 198A - Internal Ground Storage shed Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.

Lead Based Paint

No lead-based paint was found to be present.

Lead Containing Dust (LCD)

No lead containing dust was found to be present

Lead Containing Material

Location	Material	Risk score	Recommendation
Ground Top of the power distribution box,	Lead flashing	Low	Maintain in current condition remove prior to demolition and dispose as a hazardous waste.

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Targeted Pre-Demolition Hazardous Materials Survey.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 12th of January 2022 by Suman Sigdel & Charly Golding, both Occupational Hygienist representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM)
- Synthetic mineral fibre (SMF)
- Lead-based- paint
- Polychlorinated Biphenyls (PCB)
- Ozone Depleting Substances (ODS)

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 21, Aldington Road, Kemps creek NSW
Inspected areas/ (interior and exterior)	All areas except rear storage shed adjacent 198B residence.

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).
- No access within rear storage shed adjacent 198B residence no keys available at the time of inspection.

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation.

Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.5 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
Residence 198A - External Ground, Main building, all around, eaves and awnings	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Residence 198A - External, Ground Southern side of the main building, light control panel, service board	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Residence 198B - External, Ground Main building, all around, eaves and awnings	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Residence 198B - External Ground Main building, power distribution box, light control panel	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
Residence 198A - Internal, Ground Main building, ceiling void Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Residence 198A - External Ground Storage shed, northern side, " Suspect SMF insulation within hot water unit"	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Residence 198B - Internal Ground Ceiling void Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
Residence 198B - Internal Ground Ceiling void SMF lining to AC ductwork	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

Location	Material	Risk score	Recommendation
Residence 198A - Internal Ground Garage Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.
Residence 198A - Internal Ground Laundry Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.
Residence 198A - Internal Ground Toilet Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.
Residence 198A - Internal Ground Storage shed Fluorescent light fittings	Mineral Insulating Oil	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003. Refer to section 4 for further information.

Lead based paint

No lead-based paint was found to be present.

Lead containing dust (LCD)

No lead containing dust was found to be present

Lead containing material

Location	Material	Risk score	Recommendation
Ground Top of the power distribution box,	Lead flashing	Low	Maintain in current condition remove prior to demolition and dispose as a hazardous waste.

4 Conclusions and recommendations

Recommendations for asbestos

Risk	Type	Recommended Action
High Medium and Low	Non-Friable Asbestos	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square metres (m^2) of non-friable asbestos containing material. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6].
High Medium and Low	Friable Asbestos	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the asbestos removal. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6]. .

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Recommendations for PCBs

Risk score	Hazmat material	Recommended Action
High	PCB oil spill from broken capacitors or transformers	For removal of PCB leaking capacitors, contaminated materials and spillages it is recommended to restrict access to the area and remove as soon as possible by a hazardous removal contractor. EPA and SafeWork Australia must be notified. It is recommended to perform air monitoring during and after remediation. The management of PCBs must be performed in accordance with the EPA Polychlorinated Biphenyl (PCB) chemical control order 1997[19] If the concentration of PCBs less than 50mg/kg it can be disposed as general solid waste. Otherwise at an authorised PCB waste facility. It is recommended to obtain a clearance to ensure the area is safe prior to occupancy or works. For further information refer to the Code of Practice for the Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993[18] and EPA Waste Classification Guidelines Part 1.[20]
Low	Polychlorinated Biphenyls (PCB) containing capacitors	Remove PCBs containing capacitors, prior to demolition or refurbishment by a hazardous removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not required. If the concentration of PCBs less than 50mg/kg it can be disposed as general solid waste. Otherwise dispose at an authorised PCB waste facility. Clearance is not required but a visual inspection prior demolition is recommended. For further information refer to the Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993 and EPA Waste Classification Guidelines Part 1.

Negligible risk score does not require any actions.

Appendix I – Aerial photographs

Figure 1. Approximate location of the subject area located at Lot 21, Aldington Road, Kemps creek NSW (Map adapted from *Nearmap* accessed on 22/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 21 , 198A and 198B Aldington Road, Keemps Creek NSW **Site Address:** Keemps Creek NSW **Circa: 1978**
Occupational Hygienist: CG, SS, JM and AW **Inspection Date:** 12.01.2022 (198B Aldington) and 13.01.2022 (198A Aldington)) **Res-inspection Date:**

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
198A Aldington Road, Keemps Creek NSW																
External	Ground	Main building ,northern side, concrete joints	Bitumen mastic to concrete floor slabs	Asbestos	120	LM	-	Asb1	No asbestos detected	N/A	Accessible	Good	N/A	Negligible	No asbestos detected. No further action required.	N/A
External	Ground	Main building, all around, eaves and awnings	Fibre cement	Asbestos	100	m2	3	Asb2	Chrysotile asbestos found	Non-friable	Accessible	Good	N/A	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
Internal	Ground	Main building, ceiling void	Sarking insulation to ceiling and insulation batts	SMF	20	m2	5	Visual inspection	Presumed to contain SMF	Non friable	Accessible	Good	Good	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	N/A
External	Ground	Main building, southern side, window	Mastic	Asbestos	144	LM	-	Asb3	No asbestos detected	N/A	Accessible	Good	N/A	Negligible	No asbestos detected. No further action required.	N/A
Internal	Ground	Garage	Fluorescent light fittings	Mineral Insulating Oil	2	units	-	Visual inspection	Suspect Positve	N/A	Accessible	Good	Low	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003.	N/A
Internal	Ground	Laundry	Fluorescent light fittings	Mineral Insulating Oil	1	units	-	Visual inspection	Suspect Positve	N/A	Accessible	Good	Low	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003.Refer to section 4 for further information.	N/A
Internal	Ground	Toilet	Fluorescent light fittings	Mineral Insulating Oil	3	units	-	Visual inspection	Suspect Positve	N/A	Accessible	Good	Low	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003.Refer to section 4 for further information.	N/A
External	Ground	Southern side of the main building, light control panel, service board	Bituminious electrical backing board	Asbestos	<1	m2	4	No Sample taken due to electrical hazard	Presumed to contain asbestos	N/A	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessability for public	Accessability to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
External	Ground	Southern side of the main building, storage container	Fibre cement	Asbestos	84	m2	-	Asb4	SMF detected	Non-friable	Accessible	Good	Good	Negligible	No asbestos detected. No further action required.	N/A
External	Ground	Southern side of the main building, storage container	Insulation	Asbestos	84	m^2	-	Asb5	SMF detected	Non-friable	Accessible	Good	Low	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
External	Ground	Southern side of the main building, shed next to storage container, ground	Fibre cement	Asbestos	<1	m^2	-	Asb6	No asbestos detected	N/A	Accessible	Good	Negligible	Negligible	No asbestos detected. No further action required.	N/A
External	Ground	Storage shed, northern side, ground	Suspect SMF insulation within hot water unit	SMF	1	unit	-	No Sample taken due to inaccessibility	Suspect SMF	N/A	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Refer to section 4 for further information.	N/A
External	Ground	Eastern side of the main building, table top lining, adjcent to hills hoist.	Fibre cement	Asbestos	<2	m^2	-	Asb7	No asbestos detected	N/A	Accessible	Good	Good	Negligible	No asbestos detected. No further action required.	N/A
Internal	Ground	Storage shed	Fluorescent light fittings	Mineral Insulating Oil	1	units	-	Visual inspection	Suspect Positve	N/A	Accessible	Good	Low	Low	All fluorescent lights should be treated as containing PCBs. Capacitors should be checked against Australian and New Zealand Environment and Conservation Council (ANZECC) 1997 booklet prior to demolition. Remove and dispose prior to demolition or refurbishment as per the PCB Management Plan, ANZECC 2003.Refer to section 4 for further information.	N/A
1988 Aldington Road, Keemps Creek NSW (CG)																
External	Ground	Main building , all around, eaves and awnings	Eaves lining	Asbestos	28	m2	1	21-asb1	Chrysotile asbestos found	Non-friable	Accessible	Accessible	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
External	Ground	Main building, power distribution box, light control panel	Bituminious electrical backing board	Asbestos	<1	m2	2	No Sample taken due to electrical hazard	Presumed to contain asbestos	Non-friable	Accessible	Accessible	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition

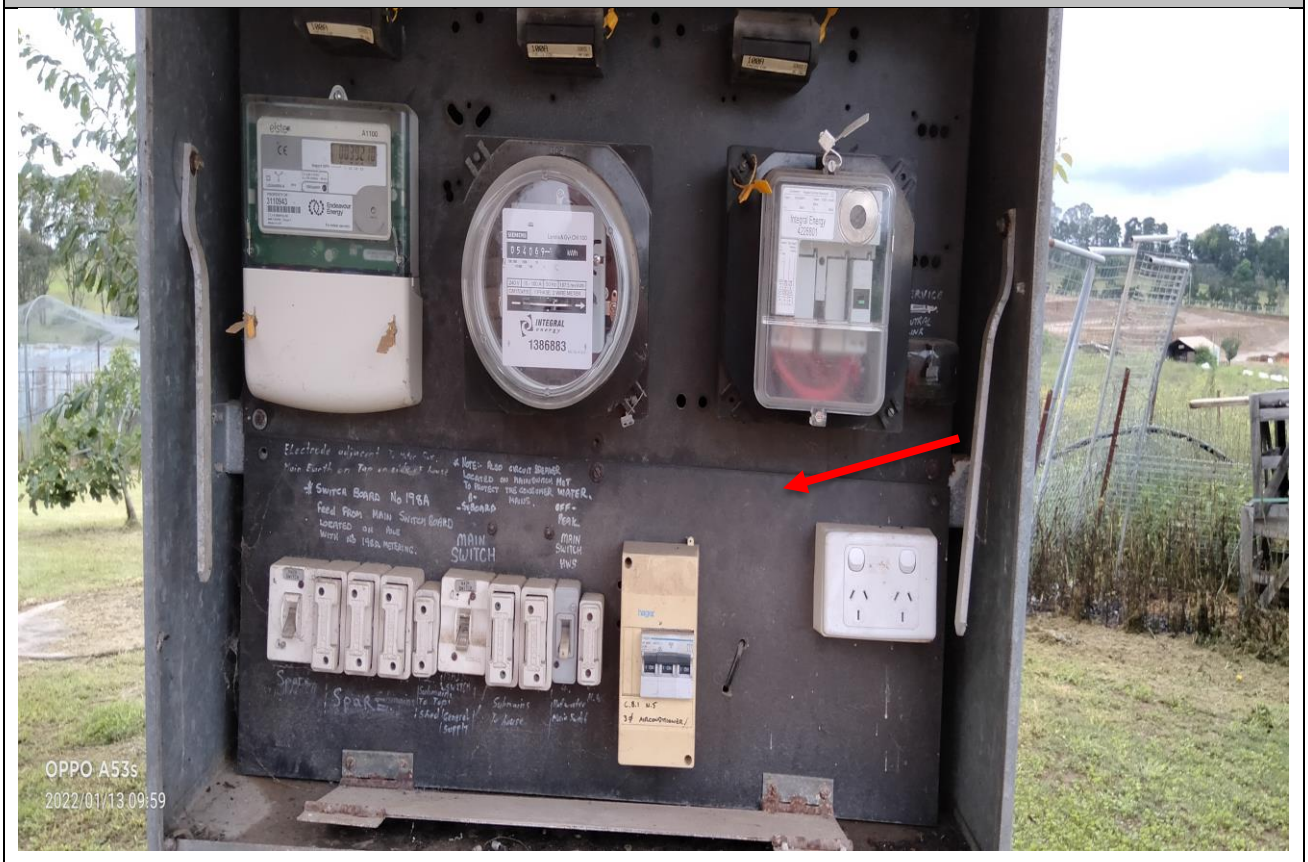
Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessability for public	Accessability to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
External	Ground	Top of the power distribution box,	Lead flashing	Lead	<2	m3	-	Visual inspection	Presumed Lead containing	N/A	Accessible	Accessible	Good	Low	Maintain in current condition remove prior to demolition and dispose as a hazardous waste.	N/A
Internal	Ground	Lounge	Lining panel within fireplace	Asbestos	1	m2	-	21-asb2	No asbestos detected	Non-friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No further action required.	N/A
Internal	Ground	Ceiling void	Sarking insulation to ceiling	SMF	36	m2	-	Visual inspection	Presumed SMF	Non-friable	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	N/A
Internal	Ground	Ceiling void	SMF lining to AC ductwork	SMF	26	Linear m	-	Presumed	Presumed asbestos containing	non-friable	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
External	Ground	External	Concrete structuals	Lead paint	36	Linear m	-	21-pb1	0.052% w/w	N/A	Accessible	Accessible	Good	Negligible	Non lead containing paint system identified. No further action required.	N/A

Appendix III – Photographs

Photograph 1. 198B residence, External surround, asbestos containing eaves lining, as observed on 12/01/2022.

Photograph 2. 198B residence, External, presumed asbestos containing electrical backing board, as observed on 12/01/2022.

Photograph 3. 198A residence, External surround, asbestos containing eaves lining, as observed on 12/01/2022.



Photograph 4. 198A residence, External, presumed asbestos containing electrical backing board, as observed on 12/01/2022.

Photograph 5. Internal, main building, ceiling void – presumed SMF sarking and insulation batts as observed on 12/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;
[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Fife Capital DSI Pty Ltd and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Fife Capital DSI Pty Ltd 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200132

Date Received: 17.01.2022
Date Analysed: 24.01.2022
Report Date: 24.01.2022
Client: ADE Consulting Group
Job Location: Kemps Creek (Fife Capital HMS) - Lot 21
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
198B Aldington Asb1	2022000833	Fibre Cement	3.2 x 1.6 x 0.6	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198B Aldington Asb2	2022000834	Fibre Cement	3.8 x 2.6 x 0.7	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

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Approved Signatory

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General Comments:

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Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

For sample "198A Aldington Asb3", due to the sample size not meeting the Australian Standard 4964-2004 requirements, the result might be compromised.
A size of 2.0 x 2.0 x 0.5 cm is required

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
198A Aldington Asb1	2022000836	Bitmuminous Membrane	2.6 x 1.5 x 0.6	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198A Aldington Asb2	2022000837	Fibre Cement	2.6 x 2.6 x 0.2	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198A Aldington Asb3	2022000838	Fibre cement	2.1 x 1.0 x 0.2	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198A Aldington Asb4	2022000839	Fibre Cement	4.3 x 3.3 x 0.6	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198A Aldington Asb5	2022000840	Fibrous Mass Insulation	3.6 x 2.1 x 0.1	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198A Aldington Asb6	2022000841	Fibre Cement	6.2 x 3.1 x 0.4	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
198A Aldington Asb7	2022000842	Fibre Cement	4.2 x 1.0 x 0.2	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Hayden Nancarrow	**Date Reported:**	24/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	1
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	18/01/2022
		Date of Analysis:	18/01/2022

Cust Ref: 21.1994

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022000835
	Sample Name	198B Aldington Pb 1

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Lead	mg/kg	10	516
Lead (w/w)	%	0.005	0.052

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
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ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

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Pre-Demolition Hazardous Materials Survey Report

Lot 22, Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

21.1994| HBM3 | Date: 23rd March 2022

Document information

Report title: Pre-Demolition Hazardous Materials Survey Report
Prepared for: Fife Capital DSI Pty Ltd
Project address: Lot 22, Aldington Road, Kemps Creek NSW
File reference: 21.1994/HBM2
Report reference: HBM3.V1F
Date: 23rd March 2022

Document control

Version	Date	Author	Revision description	Reviewer
V1D	15/02/2022	Suman Sigdel	Draft for internal review	Charly Golding
V1F	23/03/2022	Suman Sigdel	Final to issue	Charly Golding

For and on behalf of:
ADE Consulting Group Pty Ltd
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Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fife Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Pre-Demolition Hazardous Materials Survey of Lot 22, Aldington Road, Kemps creek NSW. (herein referred to as "the site"). The site inspection was carried out on the 12th of January 2022.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

East Building

Location	Material	Risk score	Recommendation
Internal Ground Living room Mastic around chimney flue	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Internal Ground Living room FC ceiling lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Internal Ground Throughout property FC ceiling lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External Ground Main building, Presumed power distribution box backing panel	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External Ground FC eaves lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

West building

Location	Material	Risk score	Recommendation
Internal Ground Adjoining walkway between main property FC ceiling lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

East building

Location	Material	Risk score	Recommendation
Internal Ground Living room Rope seal to furness door	Rope	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
External Ground SMF insulation within hot water unit	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

West building

Location	Material	Risk score	Recommendation
Internal, Ground Garage Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition

			works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead Based Paint

No lead-based paint was found to be present.

Lead Containing Dust (LCD)

No lead containing dust was found to be present

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Pre-Demolition Hazardous Materials Survey.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 12th of January 2022 by Suman Sigdel, an Occupational Hygienist representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM)
- Synthetic mineral fibre (SMF)
- Lead-based- paint
- Polychlorinated Biphenyls (PCB)
- Ozone Depleting Substances (ODS)

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 22, Aldington Road, Kemps creek NSW
Inspected areas/ (interior and exterior)	All internal and external areas.

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation.

Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.5 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

East Building

Location	Material	Risk score	Recommendation
Internal Ground Living room Mastic around chimney flue	Fibre cement	Low	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. , removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.
Internal Ground Living room FC ceiling lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Internal Ground Throughout property FC ceiling lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External Ground Main building, Presumed power distribution box backing panel	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External Ground FC eaves lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

West building

Location	Material	Risk score	Recommendation
Internal Ground Adjoining walkway between main property FC ceiling lining	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

East building

Location	Material	Risk score	Recommendation
Internal Ground Living room Rope seal to furness door	Rope	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
External Ground Suspect SMF insulation within hot water unit	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

West building

Location	Material	Risk score	Recommendation
Internal, Ground Garage Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition

			works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead Based Paint

No lead-based paint was found to be present.

Lead Containing Dust (LCD)

No lead containing dust was found to be present

4 Conclusions and recommendations

Recommendations for asbestos

Risk	Type	Recommended Action
High Medium and Low	Non-Friable Asbestos	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square metres (m^2) of non-friable asbestos containing material. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6].
High Medium and Low	Friable Asbestos	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the asbestos removal. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6]. .

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Negligible risk score does not require any actions.

Appendix I – Aerial photographs

Figure 1. Approximate location of the subject area located at Lot 22, Aldington Road, Kemps creek NSW (Map adapted from *Nearmap* accessed on 22/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 22
Occupational Hygienist: Charly Golding

Site Address: Lot 22, Aldington Road, Kemps Creek NSW
Inspection Date: 12.01.2022

Circa:
Res-inspection Date:

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Lot 22 - East Building																
External	Ground	External surround	Bitumen mastic to concrete floor slabs	Asbestos	16	m^2	-	180 Aldington - ASB1	No asbestos detected	N/A	Accessible	Good	Low	Low	No asbestos detected. No further action required.	N/A
Internal	Ground	Living room	Rope seal to furness door	Asbestos / SMF	1	m^2	-	180 Aldington - ASB2	No asbestos detected - SMF detected	Non-friable	Accessible	Good	Good	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.	N/A
Internal	Ground	Living room	Mastic around chimney flue	Asbestos	1	m^2	3	180 Aldington - ASB3	Chrysotile asbestos detected	Friable	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. , removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demoltion
Internal	Ground	Living room	FC ceiling lining	Asbestos	26	m^2	1	180 Aldington - ASB4	Chrysotile asbestos detected	N/A	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demoltion
Internal	Ground	Throughout property	FC ceiling lining	Asbestos	60	m^2	1	refer to 180 Aldington - ASB4	Chrysotile asbestos detected	N/A	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demoltion
Internal	Ground	Entrance	Brown paint system to shutters	Lead	Throughout	–	-	180 Aldingtonm - PB1	<0.1% w/w (0.01% w/w)	N/A	Accessible	Good	Good	Negligible	Non-lead based paint. No further action required.	N/A

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
External	Ground	Eaves	Fibre cement	Asbestos	22	linear m	5	180 Aldington - ASB5	Chrysotile asbestos detected	N/A	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demoltion
Internal	Ground	Internal	Electrical backing board	Asbestos	1	Units	4	No sample collected due to electrical hazard	Presumed asbestos containing	Non-friable	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demoltion
External	Ground	External wall	Presumed SMF within hot water system	SMF	2	m2	-	Visual inspection	Presumed SMF	Non-friable	Accessible	Good	Good	Low	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.	N/A
Lot 22 - West Building																
External	Ground	Garage	Presumed sarking insulation to ceiling	SMF	60	m2	-	Visual inspection	Presumed SMF	Non-friable	Accessible	Good	Good	Low	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.	N/A
Internal	Ground	Adjoining hallway from main property	FC ceiling lining	Asbestos	10	m^2	-	refer to 180 Aldington - ASB4	Chrysotile asbestos detected	N/A	Accessible	Good	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demoltion

Appendix III – Photographs

Photograph 1. West building, Internal, ground, living room, asbestos containing FC ceiling lining, as observed on 12/01/2022.

Photograph 2. West building, Internal, ground, living room, non-asbestos containing, SMF fibres detected rope seal to furnace door, as observed on 12/01/2022.

Photograph 3. West building, Internal, ground, living room, asbestos containing mastic to furnace flue pipe, as observed on 12/01/2022.

Photograph 4. West building, Internal, ground, presumed asbestos containing electrical backing board, as observed on 12/01/2022.

Photograph 5. West building, external, asbestos containing FC eaves lining, as observed on 12/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;
[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Fife Capital DSI Pty Ltd and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Fife Capital DSI Pty Ltd 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200135

Date Received: 17.01.2022
Date Analysed: 24.01.2022
Report Date: 24.01.2022
Client: ADE Consulting Group
Job Location: Kemps Creek (Fife Capital HMS) - Lot 22
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
180 Aldington Asb1	2022000843	Bituminous Membrane	4.1 x 1.5 x 0.4	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
180 Aldington Asb2	2022000844	Fibrous Mass	2.0 x 1.2 x 0.1	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
180 Aldington Asb3	2022000845	Mastic	1.7 x 1.5 x 0.2	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
180 Aldington Asb4	2022000846	Fibre Cement	3.2 x 2.0 x 0.8	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
180 Aldington Asb5	2022000847	Fibre Cement	4.1 x 2.6 x 0.6	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Suman Sigdel	**Date Reported:**	24/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	1
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	18/01/2022
		Date of Analysis:	18/01/2022

Cust Ref: 21.1994

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022000848
	Sample Name	180 Aldington Pb1

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Lead	mg/kg	10	105
Lead (w/w)	%	0.005	0.010

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

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ADE Consulting Group (VIC) Pty Ltd

Melbourne
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Port Melbourne, VIC 3207, Australia

Predemolition Hazardous Materials Survey Report

Lot 32B Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

21.1994 | HBM7 | Date: 23rd March 2022

Document information

Report title: Predomolition Hazardous Materials Survey Report
Prepared for: Fife Capital DSI Pty Ltd
Project address: Lot 32B Aldington Road, Kemps Creek NSW
File reference: 21.1994
Report reference: HBM7.V1F
Date: 23rd March 2022

Document control

Version	Date	Author	Revision description	Reviewer
V1D	23/02/2022	Sisay Low	Draft for internal review	Sanu Niraula
V1F	23/03/2022	Sisay Low	Final to issue	Charly Golding

For and on behalf of:
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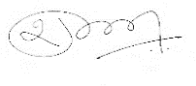
Inspected by:



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Issued and Reviewed by:

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Project Manager
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CONTENTS

Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fife Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Predemolition Hazardous Materials Survey of Lot 32B Aldington Road, Kemps Creek NSW (herein referred to as "the site"). The site included a second building within the south-western portion of the property. No inspection was undertaken for this building due to Covid-19 restrictions and as such, was not accessed or included within the scope of this survey. The site inspection was carried out on the 18th of January 2022.

Summary of results

Asbestos containing material (ACM)

Laboratory analysis confirmed that no asbestos was present within the samples collected.

Synthetic Mineral Fibres (SMF)

Synthetic mineral fibre containing materials (SMFs) were presumed to be present as below:

Location	Material	Risk score	Recommendation
Main building, internal, ceiling, presumed SMF within sarking insulation	SMF	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead based paint

Laboratory analysis confirmed that no lead above 0.1% w/w was present within the sample collected.

Lead containing dust (LCD)

No LCD was identified within the building at the time of the inspection.

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Pre-demolition Hazardous Materials Survey of the property located at the site.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 18th of January 2021 by Suman Sigdel & Kaushik Botta both Occupational Hygienists and SafeWork NSW Licensed Asbestos Assesors representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM)
- Synthetic mineral fibre (SMF)
- Lead-based- paint / dust
- Polychlorinated Biphenyls (PCB) and
- Ozone Depleting Substances (ODSs).

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 32 Aldington Road, Kemps Creek NSW .
Inspected areas/ (interior and exterior)	All internal and external areas at clients request. Excluding building 32A due to Covid-19 restrictions (Refer to Appendix I - Aerial Photographs) .

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).

The site included a second building within the south-western portion of the property. No inspection was undertaken for this building due to Covid-19 restrictions and as such, was not accessed or included within the scope of this survey

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.2.6 Ozone Depleting Substances (ODSs)

The ID number of the refrigerant gases and extinguisher gases are recorded and compared against the United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001[14] and the Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;[11] in agreement with the Australian Government, Department of the Environment and Energy.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation. Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

Ozone Depleting Substances: Chlorofluorocarbons, Hydrochlorofluorocarbons, Hydrofluorocarbons, Fluorinated gases, Halons and Hydrobromofluorocarbons refrigerant and extinguisher gases listed in the United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;[14] and Ozone Protection and

Synthetic Greenhouse Gas (OSGG) Management Act 1989;[11]. Referred by the Australia Government Department of the Environment and Energy.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.5 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

Non ACM was found to be present as below:

Location	Material	Risk score	Recommendation
Main building, eaves	Fibre cement	Negligible	No asbestos detected. No further action required.
Main building, pillars	Fibre cement	Negligible	No asbestos detected. No further action required.

Synthetic Mineral Fibres (SMF)

SMF was presumed to be present as below:

Location	Material	Risk score	Recommendation
Main building, intneral, ceiling, presumed SMF within sarking insulation	SMF	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead based paint

Non lead based paint was found to be present as below:

Location	Material	Risk score	Recommendation
Main building, Pillars and railings	White paint system	Negligible	Non-lead based paint. No further action required.

Lead containing dust (LCD)

No LCD was identified within the building at the time of the inspection.

4 Conclusions and recommendations

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. A hazardous materials removal contractor can perform the removal. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Appendix I – Aerial photographs

Figure 1. Approximate location of the subject area – 32B (outlined red), uninspected building 32A excluded from this survey (outlined orange) located at Lot 32 Aldington Street, Kemps Creek NSW (property boundary outlined blue) (Map adapted from *SixMaps* accessed on 23/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 32 **Site Address:** Lot 32 Aldington Street, Kemps Creek NSW **Circa:**
Occupational Hygienist: Suman Sigdel & Kaushik Botta **Inspection Date:** 18.01.2022 **Res-inspection Date:**

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
External	Ground	Main building - Eaves	Fibre cement	Asbestos	Throughout	–	2	ASB1	No asbestos detected	Non friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No further action required.	N/A
External	Ground	Main building - Pillars	Fibre cement	Asbestos	Throughout	–	3	ASB2	No asbestos detected	Non friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No further action required.	N/A
External	Ground	Main building - Pillars and railings	White paint system	Lead	Throughout	–	4	PB1	<0.1% w/w (0.01% w/w)	Non friable	Accessible	Accessible	Good	Negligible	Non lead based paint. No further action required.	N/A
Internal	Ground	Main building - Ceiling space, sarking insulation	Presumed synthetic mineral fibre (SMF)	SMF	Throughout	–	5	N/A	N/A	Unknown	Accessible	Accessible	Good	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.	N/A

Appendix III – Photographs

Photo 1: Front of property located at Lot 32 Aldington Street, Kemps Creek NSW, as observed on 18/01/2022.

Photo 2: Main building, eaves, non-asbestos containing fibre cement sheeting, as observed on 18/01.2022.

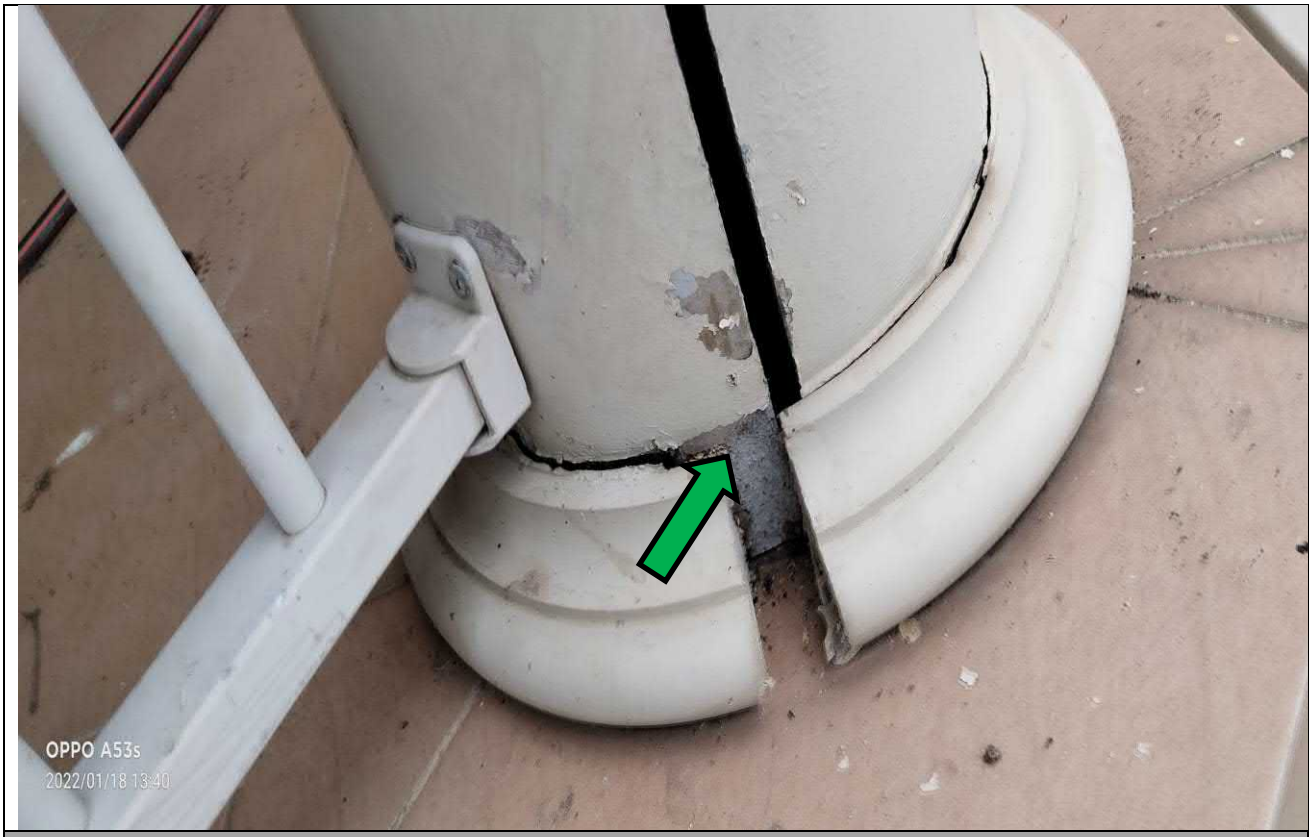

Photo 3: Main building, pillars, non-asbestos containing moulded fibre cement sheeting, as observed on 18/01/2022.

Photo 4: Main building, pillars railings, non-lead containing white paint system, as observed on 18/01/2022.

Photo 5: Main building, ceiling, sarking insulation, presumed SMF, as observed on 18/01/2022.

Photo 6: Building 32A, excluded from survey due to Covid-19 restrictions, as observed on 18/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;
[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Fife Capital DSI and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Fife Capital DSI 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADECONSULTINGGROUP

PROJECT:	Kemps Creek (Fife Capital HMS) - Lot 32
PROJECT NUMBER - INVOICE NUMBER	21.1994
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Kaushik Botta, Suman Sigdel
TURNAROUND:	24h: 48h: 72h: 5 WORKING DAYS: X
SAMPLING DATE:	18.01.2022
AFTER TEST STORAGE:	ROOM TEMP: ☑ FRIDGE: FREEZER: ☑ >>4 WEEKS: ☑ OTHER: ☑
REPORT FORMAT:	HARD COPY: ☑ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: kaushik.botta@ade.group, suman.sigdel@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: Suman.Sigdel@ade.group hayden.nancarrow@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.1994
RECEIVED BY: TREE	SIGNATURE:
SAMPLES: 3 CHILLED: ☐ PRESERVED: ☑	PRESERVATION METHOD: CUSTODY SEAL INTACT: ☐
MINIMAL HEADSPACE : ☑	WITHIN HOLDING TIME: ☐
DATE: 19/01/22 TIME: 4:00pm	TEMPERATURE UPON RECEIPT: °C
LIMS LOT NO. 220186	LIMS/EXCEL SIGNATURE: COMMENTS:

2202001...

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																			NOTES
						Chem Lab											Asbestos						Lead	Mould	
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Lead Paint	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	PFAS	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring			POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☑ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
154	32B Aldington Asb1	FC	18.01.2022	Plastic Bag	1												X							Mould	LAB PLEASE *EMAIL COC RECEIPT: ☑
155	32B Aldington Asb2	FC	18.01.2022	Plastic Bag	2												X								Sample Comments
156	32B Aldington Pb1	Cream Paint	18.01.2022	Plastic Bag	3	X																			

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

27/01/22

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200186

Date Received: 19.01.2022
Date Analysed: 27.01.2022
Report Date: 27.01.2022
Client: ADE Consulting Group
Job Location: Kemps Creek (Fife Capital HMS) - Lot 32
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
32B Aldington Asb1	2022001154	Fibre Cement	2.7 x 2.0 x 0.4	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
32B Aldington Asb2	2022001155	Mastic	4.0 x 1.5 x 0.5	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Suman Sigdel	**Date Reported:**	27/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	1
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	20/01/2022
		Date of Analysis:	20/01/2022

Cust Ref: 21.1994

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022001156
	Sample Name	32B Aldington PB1

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Lead	mg/kg	10	98
Lead (w/w)	%	0.005	0.010

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

ADECONSULTINGGROUP
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Predemolition Hazardous Materials Survey Report

Lot 23 - 162 Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

21.1994 | HBM1 | Date: 23rd March 2022

Document information

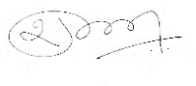
Report title: Predomolition Hazardous Materials Survey Report
Prepared for: Fife Capital DSI Pty Ltd
Project address: Lot 23 - 162 Aldington Road, Kemps Creek NSW
File reference: 21.1994
Report reference: HBM1.V1F
Date: 23rd March 2022

Document control

Version	Date	Author	Revision description	Reviewer
V1D	23/02/2022	Sisay Low	Draft for internal review	Sanu Niraula
V1F	23/03/2022	Sisay Low	Final to issue	Sanu Niraula

For and on behalf of:
ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater NSW 2128
ABN: 14 617 358 808

Inspected by:



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Issued and Reviewed by:

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SafeWork NSW LAA001354

CONTENTS

Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fife Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Predemolition Hazardous Materials Survey of Lot 23 - 162 Aldington Road, Kemps Creek NSW (herein referred to as "the site"). The site included a modern constructed building at the rear of the property. It was deemed that no inspection was required for this building and as such, was not accessed or included within the scope of this survey. The site inspection was carried out on the 18th of January 2022.

Summary of results

Asbestos containing material (ACM)

Laboratory analysis confirmed that no asbestos was present within the samples collected.

Synthetic Mineral Fibres (SMF)

No synthetic mineral fibre containing materials (SMFs) were presumed to be present as below:

Location	Material	Risk score	Recommendation
Main building, intneral, ground floor, presumed SMF within water heater	SMF	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead based paint

Laboratory analysis confirmed that no lead above 0.1% w/w was present within the sample collected.

Lead containing dust (LCD)

No LCD was identified within the building at the time of the inspection.

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Predemolition Hazardous Materials Survey of the property located at the site.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 18th of January 2021 by Suman Sigdel & Saurabh Aher both Occupational Hygienists and SafeWork NSW Licensed Asbestos Assesors representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM)
- Synthetic mineral fibre (SMF)
- Lead-based- paint / dust
- Polychlorinated Biphenyls (PCB) and
- Ozone Depleting Substances (ODSs).

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 23, 162 Aldington Road, Kemps Creek NSW .
Inspected areas/ (interior and exterior)	All internal and external areas at clients request. Excluding modern constructed building to the rear on main property.

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).

The site included a modern constructed building at the rear of the property. It was deemed that no inspection was required for this building and as such, was not accessed or included within the scope of this survey.

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.2.6 Ozone Depleting Substances (ODSs)

The ID number of the refrigerant gases and extinguisher gases are recorded and compared against the United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001[14] and the Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;[11] in agreement with the Australian Government, Department of the Environment and Energy.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation. Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

Ozone Depleting Substances: Chlorofluorocarbons, Hydrochlorofluorocarbons, Hydrofluorocarbons, Fluorinated gases, Halons and Hydrobromofluorocarbons refrigerant and extinguisher gases listed in the United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical

Product Containing Ozone Depleting Substances, and their Alternatives, 2001;[14] and Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;[11]. Referred by the Australia Government Department of the Environment and Energy.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.5 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

No ACM was found to be present as below:

Location	Material	Risk score	Recommendation
Main building, ceiling space, dust	Dust	Negligible	No asbestos detected. No further action required.
Main building, eaves and awnings	Fibre cement	Negligible	No asbestos detected. No further action required.
Main building, expansion joints	Mastic	Negligible	No asbestos detected. No further action required.

Synthetic Mineral Fibres (SMF)

SMF was presumed to be present as below:

Location	Material	Risk score	Recommendation
Main building, intneral, ground floor, presumed SMF within water heater	SMF	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

Lead based paint

No lead based paint was found to be present as below:

Location	Material	Risk score	Recommendation
Main building, railings and fences	White paint system	Negligible	Non-lead based paint. No further action required.

Lead containing dust (LCD)

No LCD was identified within the building at the time of the inspection.

4 Conclusions and recommendations

Recommendations for Lead

Risk score	Hazmat material	Recommended Action
Low	Lead Based Paint System	Paint removal is not required. Maintain in current condition if to remain in situ, otherwise it is recommended to stabilise the surfaces by overpainting with a lead-free product prior to demolition or refurbishment. Visual inspection following the stabilisation and prior to demolition is recommended. It is suggested to engage hazardous materials removalist or contractor who comply with the requirements for paint stabilisation described in the AS4361.2.2017. SafeWork Australia does not need to be notified. Air monitoring is not required for the overpainting operation. However, Monitoring for airborne lead should be carried out during demolition. As waste containing lead-based paint is pre-classified as per the EPA guidelines as hazardous waste, dispose of as a hazardous waste at an appropriate NSW EPA licensed landfill. If removal of lead-based paint system is considered please contact an occupational hygienist.

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. A hazardous materials removal contractor can perform the removal. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Appendix I – Aerial photographs

Figure 1. Approximate location of the subject area (outlined red) located at Lot 23 - 162 Aldington Street, Kemps Creek NSW (Map adapted from *SixMaps* accessed on 23/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 23 **Site Address:** Lot 23 - 162 Aldington Street, Kemps Creek NSW **Circa:**
Occupational Hygienist: Suman Sigdel & Saurabh Aher **Inspection Date:** 18.01.2022 **Res-inspection Date:**

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Internal	1	Main building - Ceiling space, dust	Dust	Asbestos	Throughout	–	2	ASB1	No asbestos detected	Friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No further action required.	N/A
External	1	Main building - Eaves and awnings	Fibre cement	Asbestos	Throughout	–	3	ASB2	No asbestos detected	Non friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No further action required.	N/A
External	Ground & 1	Main building - Railings and fences	White paint system	Lead	Throughout	–	4	PB1	<0.1% w/w (0.081% w/w)	Non friable	Accessible	Accessible	Good	Negligible	Non-lead based paint. No further action required.	N/A
External	Ground	Main building - Expansion joints	Mastic	Asbestos	Throughout	–	5	ASB3	No asbestos detected	Non friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No further action required.	N/A
Internal	Ground	Main building - Water heater	Presumed synthetic mineral fibre (SMF)	SMF	1	Unit	6	N/A	N/A	Unknown	Accessible	Accessible	Good	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works.	N/A

Appendix III – Photographs

Photo 1: Front of property located at Lot 23, 162 Aldington Street, Kemps Creek NSW, as observed on 18/01/2022.

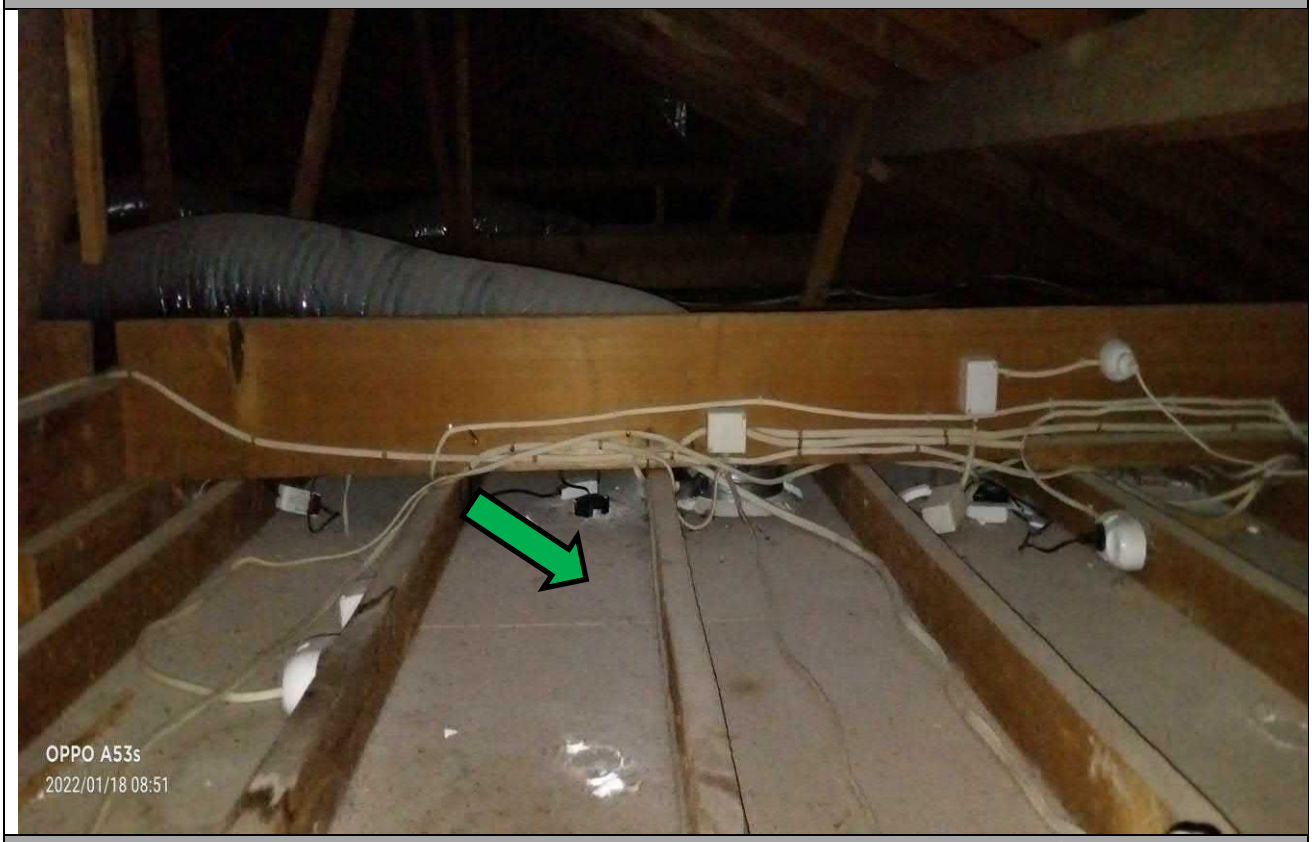

Photo 2: Main building, ceiling space, non-asbestos containing dust, as observed on 18/01.2022.

Photo 3: Main building, eaves and awnings, non-asbestos containing fibre cement sheeting, as observed on 18/01/2022.

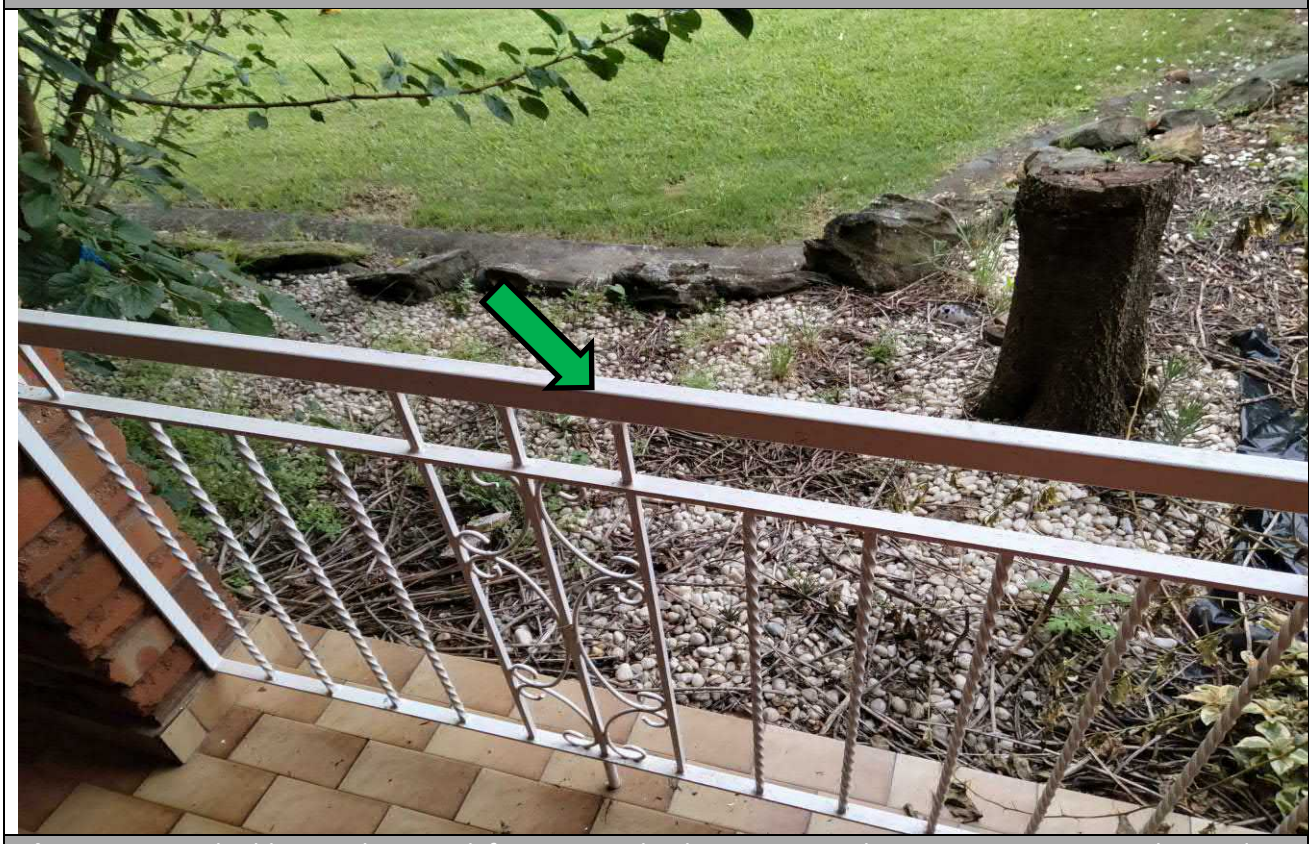

Photo 4: Main building, railings and fences, non-lead containing white paint system, as observed on 18/01/2022.

Photo 5: Modern building, expansion joints, non-asbestos containing mastic, as observed on 18/01/2022.

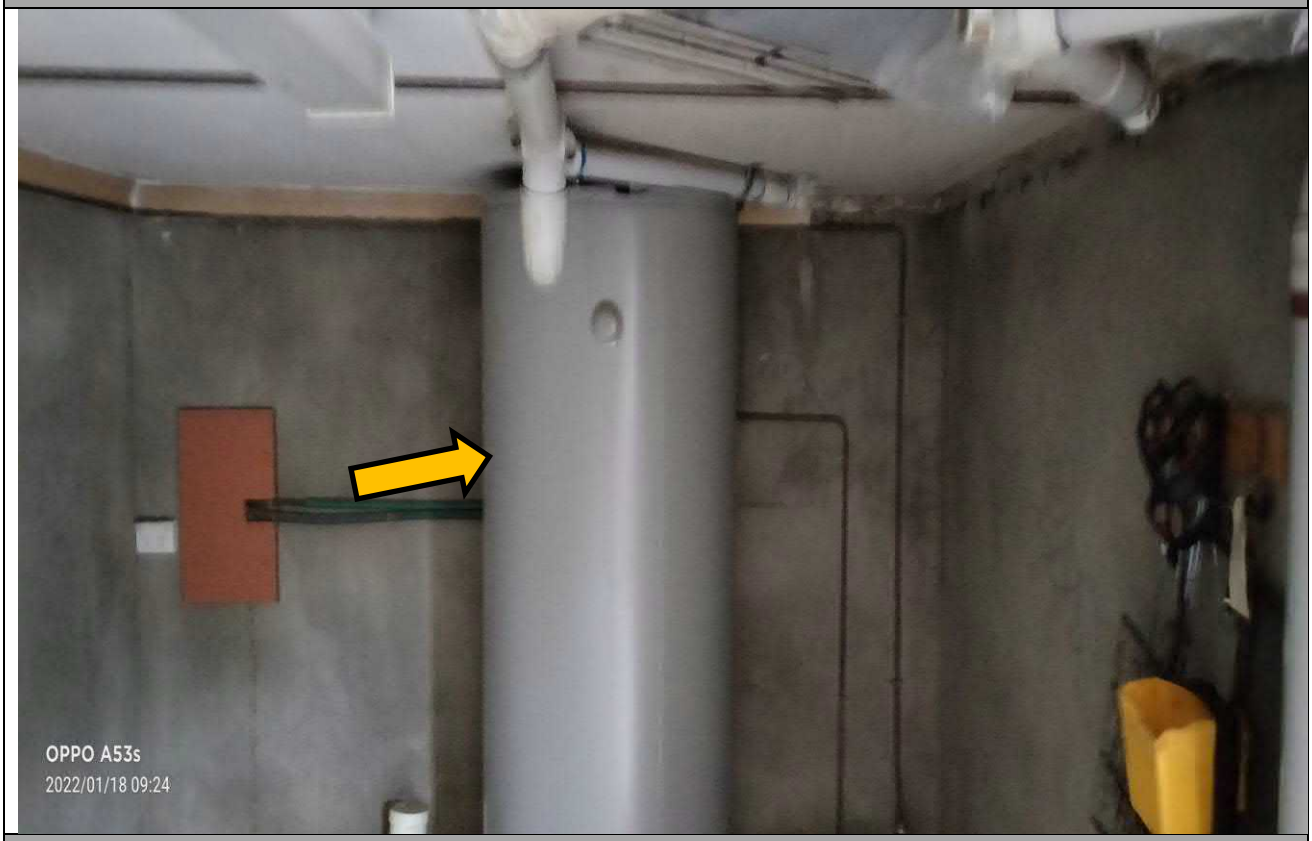

Photo 6: Main building, water heater, presumed SMF, as observed on 18/01/2022.

Photo 7: Modern building, outside of the scope of this survey, as observed on 18/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;
[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Fife Capital DSI and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Fife Capital DSI 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	Kemps Creek (Fife Capital HMS) - Lot 23	LABORATORY REFERENCE NO. (Lab use ONLY):	21.1994
PROJECT NUMBER - INVOICE NUMBER	21.1994		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY:	SIGNATURE:
SAMPLERS:	Kaushik Botta, Juned Mevawala, Suman Sigdel	SAMPLES: 4 CHILLED: ☒ PRESERVED: ☒	PRESERVATION METHOD: ICE CUSTODY SEAL INTACT: ☒
TURNAROUND:	24h: 48h: 72h: 5 WORKING DAYS: X	MINIMAL HEADSPACE : ☒	WITHIN HOLDING TIME: ☒
SAMPLING DATE:	14.01.2022	DATE: 19.01.22 TIME: 4:00pm	TEMPERATURE UPON RECEIPT: °C
AFTER TEST STORAGE:	ROOM TEMP: ☒ FRIDGE: FREEZER: ☒ >>4 WEEKS: ☒ OTHER: ☒	LIMS LOT NO. 200194	LIMS/EXCEL SIGNATURE: COMMENTS:
REPORT FORMAT:	HARD COPY: ☒ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: kaushik.botta@ade.group, juned.mevawala@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: Suman.Sigdel@ade.group, hayden.nancarrow@ade.group		

2022001...

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																			NOTES
						Chem Lab											Asbestos							Mould	POTENTIAL HAZARDOUS CONTAMINANTS:
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	Lead Paint	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	PFAS	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould		☑ ASBESTOS ☐ HYDROCARBONS ☑ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____
178	162 Aldington Asb1	FC	14.01.2022	Plastic Bag	1												X								LAB PLEASE *EMAIL COC RECEIPT: ☒
179	162 Aldington Asb2	FC	14.01.2022	Plastic Bag	2												X								Sample Comments
180	162 Aldington Asb3	Mastic	14.01.2022	Plastic Bag	3												X								
182	162 Aldington Pb1	White Paint	14.01.2022	Plastic Bag	4	X																			
Comments:																									

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic;
VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle;
E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

27/01/22

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200194

Date Received: 19.01.2022
Date Analysed: 27.01.2022
Report Date: 27.01.2022
Client: ADE Consulting Group
Job Location: Kemps Creek (Fife Capital HMS) - Lot 23
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
162 Aldington Asb1	2022001178	Dust	1.27 grams	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
162 Aldington Asb2	2022001179	Fibre Cement	3.8 x 2.6 x 0.1	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
162 Aldington Asb3	2022001180	Mastic	4.6 x 1.1 x 0.5	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Suman Sigdel	**Date Reported:**	27/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	1
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	20/01/2022
		Date of Analysis:	20/01/2022

Cust Ref: 21.1994

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022001182
	Sample Name	162 Aldington PB1

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Lead	mg/kg	10	808
Lead (w/w)	%	0.005	0.081

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

Further details regarding ADE's Services are available via

info@ade.group www.ade.group

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Melbourne
Unit 4/95 Salmon Street
Port Melbourne, VIC 3207, Australia

Predemolition Hazardous Materials Survey Report

Lot 30, 144 Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

A301021.1994 | HBM6 | Date: 23rd March 2022

Document information

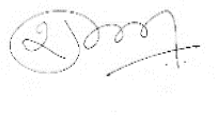
Report title: Predomolition Hazardous Materials Survey Report
Prepared for: Fifa Capital DSI Pty Ltd
Project address: Lot 30, 144 Aldington Road, Kemps Creek NSW
File reference: A21.1994
Report reference: HBM1.V1F
Date: 23rd March 2022

Document control

Version	Date	Author	Revision description	Reviewer
V1D	03/03/2022	Suman Sigdel	Draft for internal review	Charly Golding
V1F	23/03/2022	Suman Sigdel	Final to issue	Charly Golding

For and on behalf of:
ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater NSW 2128
ABN: 14 617 358 808

Inspected and **Prepared by:**



Suman Sigdel
Env. Consultant / Occ. Hygienist
SafeWork NSW LAA001424

Reviewed by:

Charly Golding
Env. Consultant / Occ. Hygienist
SafeWork NSW LAA001354

CONTENTS

Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fifa Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Predemolition Hazardous Materials Survey of 180 Aldington Road, Kemps Creek NSW. (herein referred to as "the site"). The site inspection was carried out on the 14th of January 2022.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
Main building interior, toilet/bathroom ceiling	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Main building interior, laundry ceiling	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External, all around, eaves and awnings	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External, northern and southern side, panel beneath roof	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
Internal Roof space Sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Lead based paint

No lead based paint was found to be present.

Lead containing dust (LCD)

No lead dust paint was found to be present.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Predemolition Hazardous Materials Survey of the property located at the site.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 14th of January 2022 by Suman Sigdel & Kausik Botta both Occupational Hygienists representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM);
- Synthetic mineral fibre (SMF);
- Lead-based- paint / dust; and
- Polychlorinated Biphenyls (PCB)

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 30, 144 Aldington Road, Kemps Creek NSW
Inspected areas/ (interior and exterior)	• Buildings interior; • Buildings exterior; and • Visual inspection of accessible areas of Lot 31.

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation.

Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.5 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
Main building interior, toilet/bathroom ceiling	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
Main building interior, laundry ceiling	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External, all around, eaves and awnings	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
External, northern and southern side, panel beneath roof	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
Internal roof space sarking insulation to ceiling	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Lead based paint

No lead based paint was found to be present.

Lead containing dust (LCD)

No lead dust paint was found to be present.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

4 Conclusions and recommendations

Recommendations for asbestos:

Risk	Type	Recommended Action
High Medium and Low	Non-Friable Asbestos	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square metres (m^2) of non-friable asbestos containing material. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6].
High Medium and Low	Friable Asbestos	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the asbestos removal. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6]. .

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Medium and Low	Friable SMF	Remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not compulsory, but it is recommended during and after the removal. The material can be disposed as a General waste construction. Clearance is not required but a visual inspection prior demolition is recommended. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Appendix I – Aerial photographs

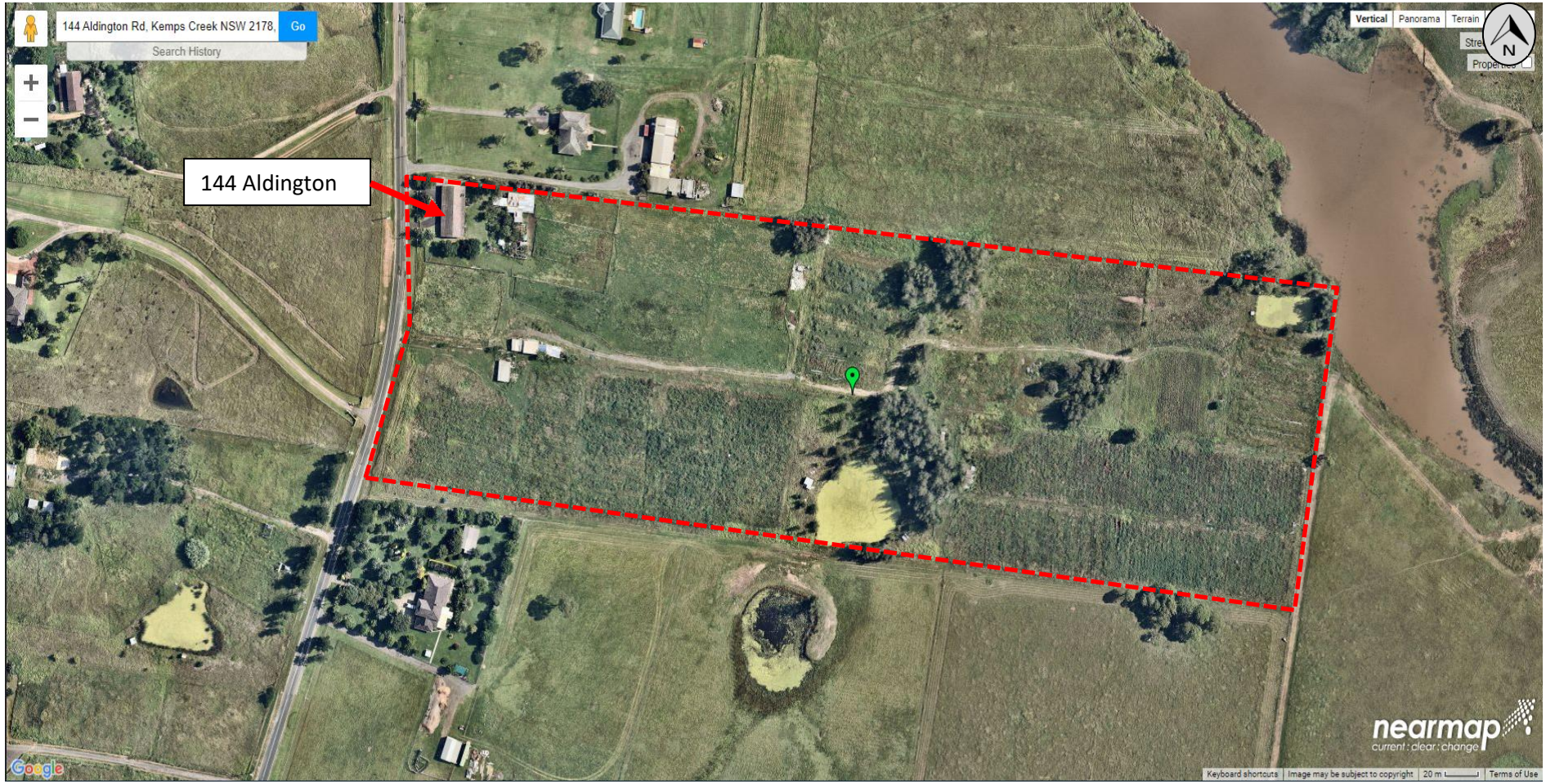


Figure 1. Approximate location of the subject area located at Lot 30, 142 Aldington Road, Kemps Creek NSW (Map adapted from *Nearmap* accessed on 23/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 30 , 144 Aldington Road, Keemps Creek NSW **Site Address:** Keemps Creek NSW **Circa:**
Occupational Hygienist: KB/ SS/ JM **Inspection Date:** 14.01.2022 **Res-inspection Date:**

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
External	Ground	Main building ,western side, concrete joints	Bitumen mastic to concrete floor slabs	Asbestos	20	LM	2	Asb1	No asbestos detected	N/A	Accessible	Good	N/A	N/A	No asbestos detected. No further action required.	N/A
External	Ground	Main building, all around, eaves and awnings	Fibre cement	Asbestos	120	m2	6	Asb5	Chrysotile asbestos found	Non-friable	Accessible	Good	N/A	N/A	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
External	Ground	Main building, northern and southern side , panel beneath the roof	Fibre cement panel	Asbestos	28	LM	7	Asb6	Chrysotile asbestos found	Non-friable	Accessible	Good	N/A	N/A	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
Internal	Ground	Main building, ceiling void	Sarking insulation to ceiling	SMF	200	m3	N/A	Visual inspection	Presumed to contain SMF	Non friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	N/A
Internal	Ground	Main building, toilet / bathroom , ceiling	Fibre cement	Asbestos	20	sq m	3	ASB3	Chrysotile asbestos found	Non friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	Prior to refurbishment or demolition
Internal	Ground	Main building, laundry	Fibre cement	Asbestos	10	sq m	4	Same as ASB3	Chrysotile asbestos found	Non friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	Prior to refurbishment or demolition
Internal	Ground	Main building, ceiling space	Insulation	Asbestos	2	LM	N/A	Asb2	SMF detected	Non friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.	N/A
External	Ground	Main building ,internal, garage, concrete joints	Bitumen mastic to concrete floor slabs	Asbestos	15	LM	8	Asb7	No asbestos detected	N/A	Accessible	Good	N/A	N/A	No asbestos detected. No further action required.	N/A

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
External	Ground	Main building, garage, fibre cement fragment on floor, used as pact to fridge	Fibre cement	Asbestos	<1	sq m	5	Asb4	No asbestos detected	N/A	Accessible	Good	N/A	N/A	No asbestos detected. No further action required.	N/A

Appendix III – Photographs

Photograph 1. Subject area Lot 30, 144 Aldington Road, Kemps Creek NSW, as observed on 18/01/2022.

Photograph 2. **B**uilding external, bituminous material between concrete joints, no asbestos detected, as observed on 18/01/2022.

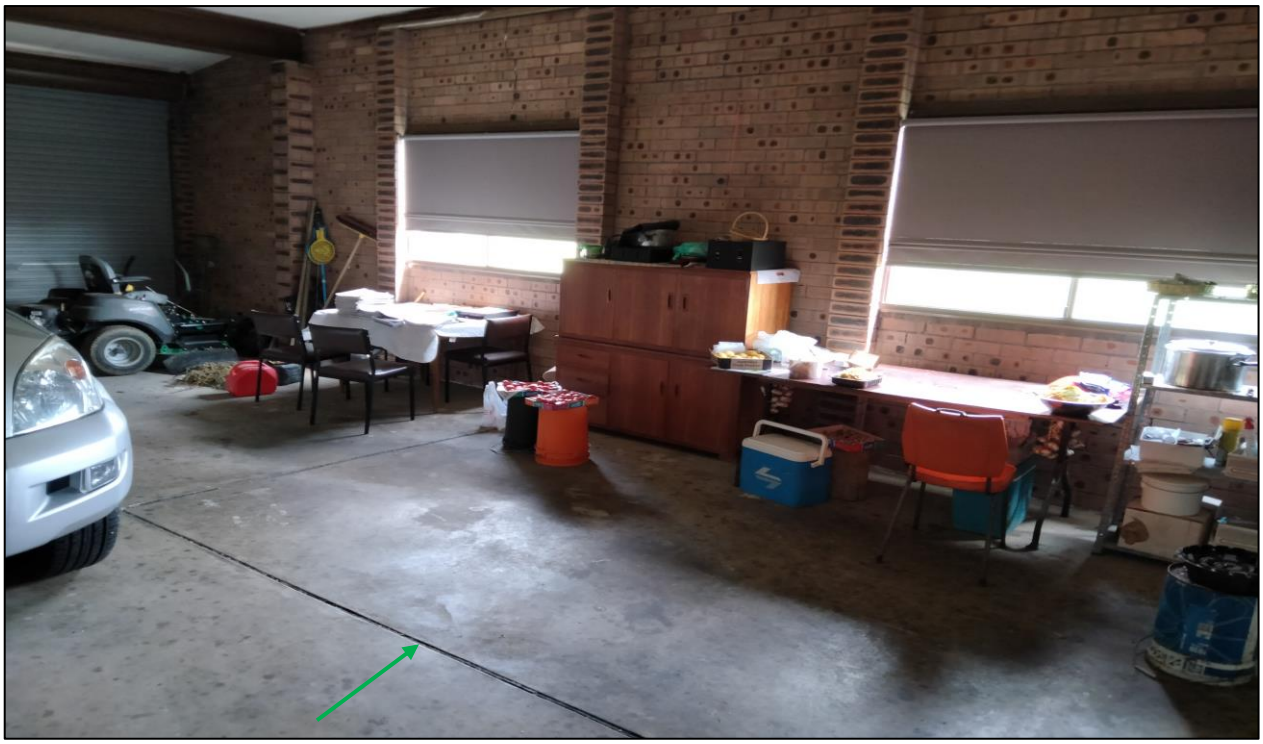
Photograph 3. Building internal, toilet and bathroom, ceiling, chrysotile asbestos containing fibre cement sheeting, as observed on 18/01/2022.

Photograph 4. Building internal, laundry, ceiling, same as toilet and bathroom ceiling, presumed to contain asbestos, as observed on 18/01/2022**.**

Photograph 5. Building internal, garage, non-asbestos containing independent fibre cement fragment used as pact, as observed on 18/01/2022.

Photograph 6. Building erxternal,all around, eaves and awnings, chrysotile asbestos containing fibre cement sheeting, as observed on 18/01/2022.

Photograph 7. Building erxternal, panel beneath roof, Chrysotile asbestos containing fibre cement panel, as observed on 18/01/2022.



Photograph 8. Garage internal, floor, bituminous material, no asbestos detected, as observed on 18/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;
[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Fifa Capital DSI Pty Ltd and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Fifa Capital DSI Pty Ltd 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200136

Date Received: 17.01.2022
Date Analysed: 24.01.2022
Report Date: 24.01.2022
Client: ADE Consulting Group
Job Location: Kemps Creek (Fife Capital HMS) - Lot 30
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
144 Aldington Asb1	2022000849	Bituminous Material	2.9 x 1.5 x 0.5	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
144 Aldington Asb2	2022000850	Fibrous Mass	4.6 x 2.6 x 0.1	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
144 Aldington Asb3	2022000851	Fibre Cement	3.3 x 2.8 x 0.1	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
144 Aldington Asb4	2022000852	Fibre Cement	5.6 x 3.9 x 0.4	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
144 Aldington Asb5	2022000853	Fibre Cement	3.7 x 1.5 x 0.4	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
144 Aldington Asb6	2022000854	Fibre Cement	6.7 x 1.4 x 0.6	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
144 Aldington Asb7	2022000855	Bituminous Material	2.1 x 1.6x 0.4	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

Further details regarding ADE's Services are available via

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Predemolition Hazardous Materials Survey Report

Lot 31, 142 Aldington Road, Kemps Creek NSW

Prepared for: Fife Capital DSI Pty Ltd

A301021.1994 | HBM6 | Date: 23rd March 2022

Document information

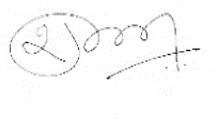
Report title: Predomolition Hazardous Materials Survey Report
Prepared for: Fifa Capital DSI Pty Ltd
Project address: Lot 31, 142 Aldington Road, Kemps Creek NSW
File reference: A21.1994
Report reference: HBM6.V1F
Date: 23rd March 2022

Document control

Version	Date	Author	Revision description	Reviewer
V1D	03/03/2022	Suman Sigdel	Draft for internal review	Charly Golding
V1F	23/03/2022	Suman Sigdel	Final to issue	Charly Golding

For and on behalf of:
ADE Consulting Group Pty Ltd
Unit 6/7 Millennium Court
Silverwater NSW 2128
ABN: 14 617 358 808

Inspected by:



Suman Sigdel
Env. Consultant / Occ. Hygienist
SafeWork NSW LAA001424

Reviewed by:

Charly Golding
Env. Consultant / Occ. Hygienist
SafeWork NSW LAA001354

CONTENTS

Executive summary

ADE Consulting Group Pty Ltd (ADE) were commissioned by Fifa Capital DSI Pty Ltd (herein referred to as "the client") to undertake a Predemolition Hazardous Materials Survey of 180 Aldington Road, Kemps Creek NSW. (herein referred to as "the site"). The site inspection was carried out on the 14th of January 2022.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
31B Main building, external, window putty	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
31B Main building, north western corner, power distribution box, light control panel	Bituminous backing board	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
31A Main building, Sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
31B Main building, Sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Lead containing material

Location	Material	Risk score	Recommendation
31B Main building, Top of the power distribution box	Lead flashing	Low	Maintain in current condition remove prior to demolition or refurbishment, refer to Section 4.

Lead containing dust (LCD)

No lead dust paint was found to be present.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

1 Introduction

1.1 Background

ADE were commissioned by the client to undertake a Predemolition Hazardous Materials Survey of the property located at the site.

The purpose of the survey was to identify and inspect the condition of hazardous materials at the site. The results of the survey and the respective Hazardous Materials Register are provided in this report (Please refer to Appendix II - Hazardous materials register).

The site inspection was carried out on the 18th of January 2022 by Suman Sigdel & Kausik Botta both Occupational Hygienists representing ADE.

For the purpose of this report, hazardous materials are limited to:

- Asbestos containing material (ACM)
- Synthetic mineral fibre (SMF)
- Lead-based- paint / dust and
- Polychlorinated Biphenyls (PCB)

To ensure its contextual integrity, this report must be read in its entirety and should not be copied, distributed or referred to in part only.

1.2 Scope of work

The scope of work included the following:

- develop a site-specific Safety, Health & Environmental Work Method Statement prior to undertaking survey
- inspection of the areas of concern at the site
- inspection of the condition of identified materials suspected of containing asbestos, lead in paint, synthetic mineral fibres and polychlorinated biphenyls in light fittings, and lead-containing dust.
- collect representative samples of the suspected hazardous materials and submit them to be analysed by a testing laboratory which was NATA accredited for the required analyses
- where suspected, the accessible hazardous materials were sampled or presumed to be present in inaccessible areas and / or where other hazards were present (e.g. where electrical hazards were present)
- provide recommendations for the removal of the hazardous materials identified or control measures strategies where the removal of the hazardous materials was not practical and
- prepare an updated Hazardous Materials Register for the site to ensure compliance with the relevant legislation.

No survey can be guaranteed to locate all hazardous materials at a specific site. The demolition or refurbishment of site structures may uncover hazardous materials which were concealed or otherwise impractical to access during this assessment.

Table 1. Summary of site information.

Site details	
Site address:	Lot 31, 142 Aldington Road, Kemps Creek NSW
Inspected areas/ (interior and exterior)	• Buildings interior; • Buildings exterior; and • Visual inspection of accessible areas of Lot 31A and 31B.

1.3 Access restrictions / areas not accessed

Potentially hazardous materials may have been concealed within restricted and or inaccessible areas/voids at the time of this survey. These areas may include:

Restricted areas:

- locations behind locked doors
- inset ceilings or wall cavities
- areas only accessible by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc. concealed within the building structure
- height restricted areas and surfaces greater than three (3) metres (m) in height
- voids or internal areas of the plant, equipment, air-conditioning ducts, etc. and
- inaccessible areas such as voids and cavities created and intimately concealed within the building structure (these voids are only accessible following major demolition works).

2 Survey methodology

2.1 Sampling strategy

Hazardous Material surveys are performed using a risk assessment approach in agreement with the legal regulations and current Codes of Practice. The hazmat surveys involve the site identification and inspection of Asbestos Containing Materials (ACM), Synthetic Mineral Fibres (SMF), lead-based paint systems, Lead Containing Dust (LCD) and Polychlorinated Biphenyls (PCB),when applicable.

The hazmat consultant performs a visual inspection within all accessible areas to identify the hazardous building materials. When the hazmat consultant suspects a potentially hazardous building material, a sample of the material is collected and send to a NATA accredited laboratory for the required analysis. Where identical suspected hazardous materials were detected at different locations, only visual confirmation is made rather than the collection of additional samples. The following observations are recorded at the time of the inspection:

- Location;
- Description;
- Quantity;
- Condition; and
- Friability (where applicable).

ADE understand that all identified hazardous building materials will be accessible during the demolition or refurbishment works.

2.2 Hazardous building materials identification

2.2.1 Asbestos containing materials

Following the visual inspection, the hazmat consultant collects samples of the typical suspected asbestos-containing materials. These samples are sent to a NATA accredited laboratory for identification analysis. The laboratory certificate of analysis provides the results in regards to the presence or absence of asbestos, the type of asbestos and the presence or absence of Synthetic Mineral Fibres.

Dust samples are to be collected by the hazmat consultant only in those cases where dust is observed near to suspected asbestos-containing material. Where no asbestos source is observed or suspected at the time of the inspection, no dust sample is collected for asbestos identification.

2.2.2 Synthetic mineral fibres (SMF) containing materials

The Code of Practice for Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)], is currently archived. The current guidelines to consult for the management of SMF are:

- NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool and
- NSW SafeWork guide to handle refractory ceramic fibres

Synthetic Mineral Fibres is a term to describe a fibrous product artificially manufactured from mineral raw materials into a fibrous "Woolen" product used for insulation. SMF can be classified into three groups: Glasswool, Rockwool and Refractory Ceramic Fibres (RCF).

Glasswool is manufactured by melting glass into a fibrous "wool", and Rockwool is manufactured by melting volcanic rock into fibrous "wool". Glasswool and rockwool are used as thermal, acoustic and electrical insulation in many materials in buildings.

Refractory ceramic fibres (RCF) are made from Kaolin and are used in industrial sites for high-performance thermal insulation in furnaces, kilns and industrial heaters. RCF is not likely to be present in commercial sites, residential premises or public buildings. Therefore, in this hazmat survey, SMF refers to glasswool and rockwool materials only.

The hazmat consultant visually inspects the suspected SMF containing materials and documented during the inspection and in the report.

No dust samples are collected for SMF identification. However, positive SMF fibres in dust may be revealed from laboratory results for asbestos in dust identification analysis. SMF fibres in dust are understood to be friable SMF.

2.2.3 Lead-based paint

Paint sampling was undertaken as per the methodology described in Appendix A of AS/NZS 4361.2:2017 and submitted to a NATA accredited testing laboratory. AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings; [8] defines lead paint in which the lead content (calculated as lead metal) is greater than 0.1 percent by weight of the dry film.

2.2.4 Lead containing dust (LCD)

Where significant amounts of dust are observed at the time of the inspection, dust samples are collected by the hazmat consultant. For this survey, significant amounts are to be understood as the dust quantity equal to or greater than 1 gram per 0.1 square meters.

Sampling is conducted following the methods outlined with AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans; The collected samples are submitted to a NATA accredited laboratory for lead analysis. As per the [13]National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels[13], for industrial and commercial sites, lead in soil at the concentration greater than 1500mg/kg will require further appropriate health investigation and evaluation assessment.

2.2.5 Polychlorinated biphenyls (PCB)

For de-energised premises, all accessible fluorescent light fittings are visually inspected for the PCB containing capacitors or PCB containing ballasts listed in Scheduled Waste Management: Identification of PCB-Containing Capacitors - [10]*ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*.

For energised premises, capacitors and ballast inspection are not possible due to the electrical hazard. Under these circumstances, all fluorescent light fittings should be treated as potentially containing PCB capacitors until proven otherwise.

2.3 Definitions

Friable asbestos: Asbestos-containing material that breaks and crumbles by hand pressure.

Friable asbestos in good condition: Friable asbestos within a fully sealed enclosure in good condition. For example, asbestos-containing insulation inside a fire door is the fire door in good condition.

Friable asbestos in fair condition: Friable asbestos within an enclosure fair condition or partially sealed. For example, asbestos-containing insulation inside a fire door is the fire door broken in small areas or asbestos-containing fuses being the fuses in good condition.

Friable asbestos in poor condition: Exposed friable asbestos. For example, loose asbestos insulation or loose woven materials, dust containing asbestos fibres, asbestos-containing insulation inside a fire door being the door heavily damaged and exposing the insulation.

Non-friable (bonded) asbestos: Asbestos-containing material that is mixed and bonded within a matrix with other materials.

Non-friable asbestos in good condition: Asbestos-containing materials within a bonded matrix in good condition. For example, unbroken asbestos-containing compressed cement sheeting.

Non-friable asbestos in fair condition: Asbestos-containing materials within a bonded matrix in fair condition. For example, asbestos-containing compressed cement sheeting with cracks and broken edges.

Non-friable asbestos in poor condition: Asbestos-containing materials within a bonded matrix in poor condition. For example, asbestos-containing compressed cement debris.

Friable SMF: Unbonded glasswool and rockwool insulation with no adhesives, loose material packed into a package. Friable SMF can be packed loose and mixed with adhesives during installation. There are three main types of unbonded glasswool and rockwool materials:

- wet spray: Where glasswool and rockwool SMF fibres are mixed with cement and sprayed as fire protection in multi-storey buildings
- loose-fill: Where the glasswool and rockwool SMF material is sprayed into ceiling and cavity spaces of buildings and
- dry spray: When the glasswool and rockwool SMF densely packed material is blown dry into a closed stud cavity. This method should only occur where the target area is enclosed to prevent the release of loose fibres. For example, SMF dry sprayed in wall cavities and loose-fill insulation retrofit.

Friable SMF in good condition: Friable glasswool and rockwool SMF insulation within an enclosure in good condition. For example, SMF insulation pillows being the pillowcases in good condition.

Friable SMF in fair condition: Friable glasswool and rockwool SMF insulation within an enclosure fair condition. For example, SMF insulation pillows being the pillowcases broken in small areas. Also, wet sprayed SMF insulation.

Friable SMF in poor condition: Exposed friable glasswool and rockwool SMF insulation. For example, dust containing SMF fibres, Friable glasswool and rockwool SMF insulation within a heavily damaged enclosure exposing the insulation.

Non-friable SMF: Bonded glasswool and rockwool SMF insulation containing binding agents such adhesives or cement that have been cured in the manufacturing process prior to packaging, delivery and installation.

Bonded glasswool and rockwool SMF insulation have a specific shape such as in a batt or blanket form or as compressed boards. The presence of binding agents is that they significantly reduce fibre release during handling.

Non-friable SMF in good condition: Bonded glasswool and rockwool SMF insulation batts or blankets that keeps its form.

Non-friable SMF in fair condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show some minor deterioration due to age.

Non-friable SMF in poor condition: Bonded glasswool and rockwool SMF insulation batts or blankets that show major deterioration due to age.

Lead-based paint: Lead-based paint defined as paint with >0.1%w/w of lead, as per *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*[8].

Lead-based paint in good condition: Lead-based painted surfaces that show no damage or deterioration signs. Stable paint system.

Lead-based paint in fair condition: Lead-based painted surfaces that show minor damage such as flaking or delamination in small areas.

Lead-based paint in poor condition: Lead-based painted surfaces that shows major damage on most of the surface area.

Lead containing dust: Lead containing dust requiring further health investigation established as lead with >1500 mg/kg, as per the National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;

Polychlorinated biphenyls (PCB) containing capacitors: PCB containing capacitors listed in the *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*[10]. Also, capacitors with the year of manufacture (YOM) before 1986 without sticker for PCB status as per described in Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016[15]

Polychlorinated biphenyls in good condition: PCB containing capacitors showing no leaks of the oil content.

Polychlorinated biphenyls in poor condition: Leaking PCB containing capacitors.

2.4 Risk descriptors and priority rating

The descriptors listed below were used to calculate the risk to human health for the suspected asbestos-containing materials observed during the survey.

2.4.1 Asbestos

Table 2. Asbestos risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable asbestos	Low	Medium	High	Low	Medium	High
Non-friable asbestos (bonded)	Low	Medium	High	Low	Medium	Medium
No asbestos detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.2 Synthetic mineral fibres

Table 3. SMF risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Friable SMF	Low	Low	Medium	Low	Low	Low
Non-friable SMF (bonded)	Low	Low	Low	Low	Low	Low
No SMF detected NAD	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.3 Lead-based paint

Table 4. Lead-based paint risk descriptors

Type	Accessible			Inaccessible		
	Condition			Condition		
	Good	Fair	Poor	Good	Fair	Poor
Lead-based paint (>0.1%w/w of lead)	Low	Medium	High	Low	Low	Medium
Non-Lead based paint (=<0.1%w/w of lead)	Negligible	Negligible	Negligible	Negligible	Negligible	Negligible

2.4.4 Lead containing dust

Table 5. Lead containing dust risk descriptors

Lead concentration	Accessible	Inaccessible
Dust with >1500 mg/kg of lead	Medium	Low
Dust with =<1500 mg/kg of lead	Low	Low

2.4.1 Polychlorinated biphenyls

Table 6. Polychlorinated biphenyls risk descriptors

Capacitor type	Accessible		Inaccessible	
	Condition			
	Good	Poor	Good	Poor
PCB containing capacitors within the list ANZECC 1997	Low	High	Low	Medium
Capacitor manufactured before 1986 without a sticker	Low	High	Low	Medium
Non-PCB capacitors or Capacitors manufactured after 1986	Negligible	Negligible	Negligible	Negligible

3 Results table

Table 7. The following table lists the hazardous materials were identified or presumed to be present and the recommendation.

Summary of results

Asbestos containing material (ACM)

ACM was presumed / found to be present as below:

Location	Material	Risk score	Recommendation
31B Main building, external, window putty	Fibre cement	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.
31B Main building, north western corner, power distribution box, light control panel	Bituminous backing board	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. For further information refer to section 4.

Synthetic Mineral Fibres (SMF)

Location	Material	Risk score	Recommendation
31A Main building, Sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.
31B Main building, Sarking insulation to skylight surround	Insulation	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. For further information, refer to Section 4.

Lead containing material

Location	Material	Risk score	Recommendation
31B Main building, Top of the power distribution box	Lead flashing	Low	Maintain in current condition remove prior to demolition and dispose as a hazardous waste. For further information, refer to Section 4.

Lead containing dust (LCD)

No lead dust paint was found to be present.

Polychlorinated Biphenyls (PCB)

No electrical capacitors suspected to contain polychlorinated biphenyls (PCBs) were identified in the fluorescent light fittings within the building at the time of the inspection.

4 Conclusions and recommendations

Recommendations for Asbestos

Risk	Type	Recommended Action
High Medium and Low	Friable Asbestos	Remove prior to refurbishment or demolition by a Class A licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring must be performed during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the asbestos removal. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6]. .
High Medium and Low	Non-Friable Asbestos	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m^2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended during and after the removal. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. Clearance is required following the removal of greater than 10 square metres (m^2) of non-friable asbestos containing material. For further information refer to the *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*[6].

Recommendations for SMF

Risk score	Hazmat material	Recommended Action
Medium and Low	Friable SMF	Remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not compulsory, but it is recommended during and after the removal. The material can be disposed as a General waste construction. Clearance is not required but a visual inspection prior demolition is recommended. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool
Low	Non-Friable SMF	Maintain in current condition if to remain in situ, otherwise remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works. Removal can be performed by a hazardous materials removal contractor. SafeWork Australia does not need to be notified. Air monitoring is not necessary. The material can be disposed as a General waste construction. Clearance is not required. For further information refer to the NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool

Recommendations for Lead Flashing

Risk score	Hazmat material	Recommended Action
Low	Lead containing flashing	Remove prior to refurbishment or demolition.

Appendix I – Aerial photographs

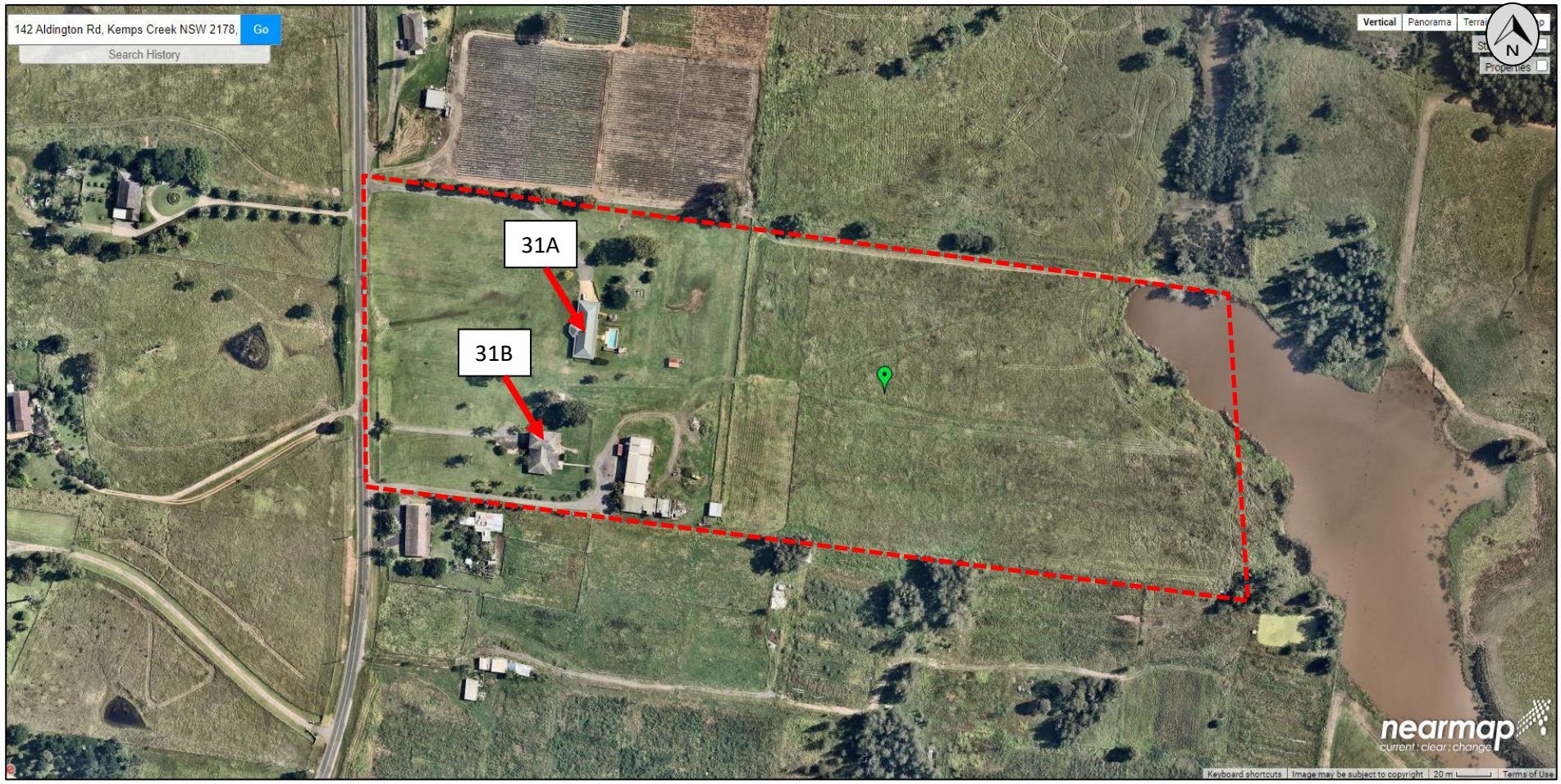


Figure 1. Approximate location of the subject area located at Lot 31, 142 Aldington Road, Kemps Creek NSW (Map adapted from *Nearmap* accessed on 23/03/2022).

Appendix II – Hazardous materials register

Property name: Lot 31 , 142 Aldington Road, Keemps Creek NSW **Site Address:** Keemps Creek NSW **Circa: 1978**
Occupational Hygienist: KB and SS **Inspection Date:** 12.01.2022 (198B Aldington) and 13.01.2022 (198A Aldington)) **Res-inspection Date:**

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contactors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Building 31A, 142 Aldington Road, Keemps Creek NSW																
Internal	Ground	Main building, ceiling void	Sarking insulation to ceiling	SMF	2	m3	2	Visual inspection	Presumed to contain SMF	Non friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	N/A
Internal	Ceiling	Main building , ceiling void, insulation	Insulation material	Asbestos	200	m2	2	31A-Asb3	SMF detected	N/A	N/A	N/A	N/A	N/A	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	N/A
Internal	Ground	Main building, north eastern side , bathroom walls	Fibre cement	Asbestos	18	sq m	3	31A-Asb1	No asbestos detected	N/A	Accessible	Good	N/A	N/A	No asbestos detected. No further action required.	N/A
Internal	Ground	Main building, north eastern side , laundry wall	Fibre cement	Asbestos	4	sq m	3	Same as 31A-Asb1	No asbestos detected	N/A	Accessible	Good	N/A	N/A	No asbestos detected. No further action required.	N/A
External	Ground	Main building, northern and eastern side, beams supporting eaves	Support beam, green paint system	Lead paint	50	Linear m	4	31A-Pb1	Negative Pb: 0.014 % w/w of lead	N/A	N/A	N/A	N/A	Negligble	Non lead containing paint system identified. No further action required.	N/A
External	Ground	Main building, northern and eastern side, beams to gutter lining and walls	Cream paint system	Lead paint	30	Linear m	5	31A-Pb2	Negative Pb: 0.010% w/w of lead	N/A	N/A	N/A	N/A	Negligble	Non lead containing paint system identified. No further action required.	N/A
External	Ground	Main building ,northern side, concrete joints	Bitumen mastic to concrete floor slabs	Asbestos	20	LM	4	31A-Asb3	No asbestos detected	N/A	N/A	N/A	N/A	N/A	No asbestos detected. No further action required.	N/A

Location				Material	Material Identification					Risk Assessment				Risk Management		
Internal / External	Level	Room	Material Type Description	Type of Hazmat	Quantity	Units	Photo Number	Sample Number	Analytical Results	Friability	Accessibility for public	Accessibility to contractors	Condition	Risk Score	Control Recommendations / Comments	Review Date
Building 31B, 142 Aldington Road, Keemps Creek NSW																
External	Ground	Main building , all around, ground floor and eaves and awnings	Eaves lining	Asbestos	10	m2	10	31B-Asb2	No asbestos detected	Non-friable	Accessible	Accessible	Good	Negligible	No asbestos detected. No action required.	N/A
Internal	Ceiling	Ceiling void	Sarking insulation to ceiling	SMF	36	m2	9	Visual inspection	Presumed SMF	non-friable	Accessible	Good	Low	Low	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	N/A
Internal	Ceiling	Main building , ceiling space, setelled dust,	Dust	Asbestos	200	m2	8	31B-Asb1	No asbestos detected , presume to contain SMF	N/A	N/A	N/A	N/A	N/A	Maintain in current condition if to remain in situ, otherwise, remove prior to refurbishment or demolition as a preventive action to minimise the generation of fibres and dust during refurbishment or demolition works, for further information refer to section 4.	Prior to refurbishment or demolition
External	Ground	Main building ,northern side, concrete joints	Bitumen mastic to concrete floor slabs	Asbestos	120	LM	11	31B-Asb3	No asbestos detected	N/A	N/A	N/A	N/A	N/A	No asbestos detected. No further action required.	N/A
External	Ground	Main building, western side window, glass joints	Mastic	Asbestos	10	unit	12	31B-Asb4	Chrysotile asbestos detected	Friable	Accessible	Good	Low	Low	Remove prior to refurbishment or demolition. The removal should be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Air monitoring is not compulsory, but it is recommended. Asbestos waste must be disposed as hazardous special asbestos waste to an authorized asbestos waste facility. For further information refer to the SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2016).	Prior to refurbishment or demolition
External	Ground	Main building, north western corner, power distribution box, light control panel	Bituminious electrical backing board	Asbestos	<1	m2	14	No Sample taken due to electrical hazard	Presumed positive	Non-friable	Accessible	Accessible	Good	Low	Remove prior to refurbishment or demolition. If the amount of non-friable asbestos containing material is greater than 10 square metres (m2), removal must be performed by a Class A or Class B licensed asbestos removal contractor who must notify SafeWork Australia. Refer to section 4 for further information.	Prior to refurbishment or demolition
External	Ground	Top of the power distribution box,	Lead flashing	Lead	<2	m3	15	Visual inspection	Presumed Lead containing	N/A	Accessible	Accessible	Good	Negligible	Maintain in current condition remove prior to demolition and dispose as a hazardous waste. For further information refer to section 4.	Prior to refurbishment or demolition
External	Ground	Main building, western side, porch railing	Railings, white paint system	Lead paint	30	Linear m	13	31B-Pb1	Negative Pb: 0.050% w/w of lead	N/A	N/A	N/A	N/A	Negligble	Non lead containing paint system identified. No further action required.	N/A

Appendix III – Photographs

Photograph 1. Subject area 31A, located at 142 Aldington Road, Kemps Creek NSW, as observed on 18/01/2022.

Photograph 2. 31A Main building internal, ceiling space, insulation, no asbestos detected, SMF detected, as observed on 18/01/2022.

Photograph 3. 31A Main building internal, northeaster bathroom, walls, non-asbestos fibre cement sheeting, as observed on 18/01/2022.

Photograph 4. 31A Main building, northern and eastern side, beams supporting eaves and awnings, non-lead containing green paint system, as observed on 18/01/2022.

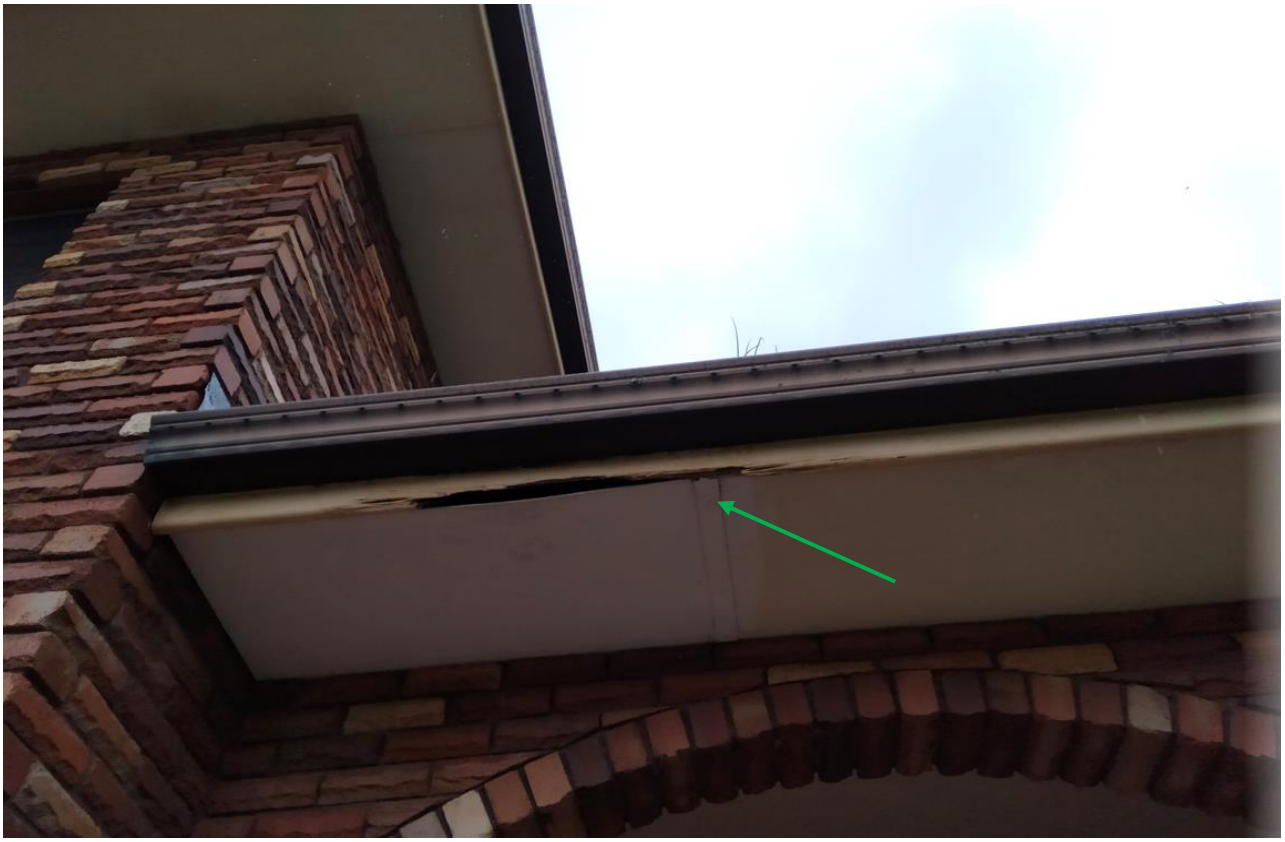
Photograph 5. 31A Main building, northern and eastern side, beams to gutter lining and walls, non-lead containing cream paint system, as observed on 18/01/2022.

Photograph 6. Rear of 31A main building, as observed on 18/01/2022.

Photograph 7. Subject area 31B, located at 142 Aldington Road, Kemps Creek NSW, as observed on 18/01/2022.

Photograph 8. Internal, Main building , ceiling space, setelled dust, no asbestos detected, as observed on 18/01/2022.

Photograph 9. 31B main building Internal, ceiling void – presumed SMF sarking, as observed 18/01/2022.



Photograph 10. 31B main building external, eaves and awnings, no asbestos detected, as observed on 18/01/2022.

Photograph 11. 31B main building external, bituminous membrane between concrete joints, no asbestos detected, as observed on 18/01/2022.

Photograph 12. 31B main building external, asbestos containing window putty, as observed on 18/01/2022.

Photograph 13. 31B main building external, white paint system , non lead based paint, as observed on 18/01/2022.

Photograph 14. 31B main building external, north western side, electrical backing panel, presumed to contain asbestos, as observed on 18/01/2022.

Photograph 15. 31B main building external, north western side, above electrical backing panel, lead flashing, as observed on 18/01/2022.

Appendix IV – References

The survey works and production of this report have been undertaken in accordance with the requirements of:

[1] *Workplace Health and Safety (WHS) Act 2011;*
[2] *Workplace Health and Safety (WHS) Regulation 2017;*
[3] *SafeWork NSW Code of Practice: Demolition Work (2019);*
[4] *AS2601 (2001) The Demolition of Structures;*
[5] *SafeWork NSW Code of Practice: How to Manage and Control Asbestos in the Workplace (2019);*
[6] *SafeWork NSW Code of Practice: How to Safely Remove Asbestos (2019);*
[7] *AS4361.1 (2017) Guide to Lead Paint Management. Part 1: Industrial Applications;*
[8] *AS 4361.2 (2017) Guide to Hazardous Paint Management, Part 2: Lead Paint in Residential, Public and Commercial Buildings;*
[9] *AS4874 – 2000 Guide to the Investigation of Potentially Contaminated Soil and Deposited Dust as a Source of Lead Available to Humans;*
[10] *ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors;*
[11] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Act 1989;
[12] Ozone Protection and Synthetic Greenhouse Gas (OSGG) Management Regulations 1995;
[13] National Environment Protection Measure Schedule B7, Derivation of Health Based Investigation Levels;
[14] United Nations Environment Programmer's Division of Technology, Inventory of Trade Names of Chemical Product Containing Ozone Depleting Substances, and their Alternatives, 2001;
[15] Queensland Department of Environmental and Heritage Protection, Guideline Waste Management, Managing Polychlorinated biphenyl 2016;
[16] NSW SafeWork information guide on the safe management of synthetic mineral fibres (SMF) – glasswool and rockwool;
[17] NSW SafeWork guide to handle refractory ceramic fibres;
[18] Code of Practice for the Safe Handling of Equipment Containing Polychlorinated Biphenyls, Electrical Contractor's Associations of Australia 1993;
[19] EPA Polychlorinated Biphenyl (PCB) chemical control order 1997; and
[20] EPA Waste Classification Guidelines Part 1.

Appendix V – Statement of limitations

This report has been prepared in accordance with the agreement between Fife Capital and ADE Consulting Group Pty Ltd. 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 is expressed, implied, made or intended.

This report is solely for the use of Fife Capital 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 is provided by ADE Consulting Group Pty Ltd.

The following should also be noted:

While the survey has attempted to locate all the hazardous materials, the survey was a visual inspection and sampling process. Only those hazardous materials that were physically accessible could be located and identified. Therefore it is possible that materials, which may be concealed within inaccessible areas/voids, may not have been located during the survey. Such inaccessible areas fall into a number of categories:

- locations behind locked doors
- in set ceilings or wall cavities
- those areas accessible only by dismantling equipment or performing minor localised demolition works
- service shafts, ducts etc., concealed within the building structure
- voids or internal areas of plant, equipment, air-conditioning ducts, etc.
- 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) and
- height restricted areas.

Destructive surveying and sampling techniques were not employed to gain access to those areas listed above. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of asbestos has been detected.

Therefore prior to any refurbishment works, further investigations should be performed using destructive survey sampling techniques. During the course of normal site works care should be exercised when entering any previously inaccessible areas and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. 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.

This report excludes radioactive and chemicals (it is limited to the hazardous materials identified in section 1).

Appendix VI – Laboratory certificates of analysis

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200180

Date Received:	19.01.2022
Date Analysed:	27.01.2022
Report Date:	27.01.2022
Client:	ADE Consulting Group
Job Location:	Kemps Creek (Fife Capital HMS) - Lot 31
Analytical method:	AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
31A AldingtonAsb1	2022001130	Fibre Cement	3.6 x 1.8 x 0.3	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
31A AldingtonAsb2	2022001131	Mastic	1.8 x 1.4 x 0.4	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
31A AldingtonAsb3	2022001132	Insulation	6.0 x 5.8 x 1.0	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

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A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

A.B.N. 52 093 452 950

Analysis report: 21.1994
Laboratory LOT NO: 2200191

Date Received:	19.01.2022
Date Analysed:	27.01.2022
Report Date:	27.01.2022
Client:	ADE Consulting Group
Job Location:	Kemps Creek (Fife Capital HMS) - Lot 31
Analytical method:	AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

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Sample analysed as received.
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Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
31B AldingtonAsb1	2022001169	Dust	6.40 grams	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
31B AldingtonAsb2	2022001170	Fibre Cement	5.0 x 3.0 x 0.8	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
31B AldingtonAsb3	2022001171	Mastic	5.1 x 2.5 x 0.9	No Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
31B AldingtonAsb4	2022001172	Window Putty	2.2 x 2.0 x 0.2	Chrysotile asbestos found	Nil
				No Amosite asbestos found	Nil
				No Crocidolite asbestos found	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Suman Sigdel	**Date Reported:**	27/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	1
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	20/01/2022
		Date of Analysis:	20/01/2022

Cust Ref: 21.1994

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022001173
	Sample Name	31B Aldington PB1

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Lead	mg/kg	10	499
Lead (w/w)	%	0.005	0.050

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Accreditation No.14664
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This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

Where moisture determination has been performed, results are reported on dry weight basis.

Where the PQL of reported result differs from standard PQL, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Suman Sigdel	**Date Reported:**	27/01/2022
Customer:	ADE Consulting Group	**No. of Samples:**	2
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	20/01/2022
		Date of Analysis:	20/01/2022

Cust Ref: 21.1994

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022001135	2022001136
	Sample Name	31A Aldington PB1	31A Aldington PB2
Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Lead	mg/kg	10	140	97
Lead (w/w)	%	0.005	0.014	0.010

Sydney Laboratory Services
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Silverwater 2128
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ADECONSULTINGGROUP
SOLUTIONS THROUGH INNOVATION

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