HAZARDOUS MATERIALS MANAGEMENT REGISTER

Shine Motor Corp Pty.Ltd

8 Noonan Road Ingleburn

NSW 2565

ISSUED ON: 09/05/2022

PREPARED FOR: Smart Planning and Design

REPORT NO: J220192030520 22HMMR

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EXECUTIVE SUMMARY

JMB Environmental Consulting were commissioned by Smart Planning and Design to conduct Hazardous Materials Management Register (HMMR) for the building located at 8 Noonan Road Ingleburn NSW 2565.

The inspection was conducted on 03/05/2022, and the following items were identified:

ASBESTOS

No ASBESTOS materials were identified at this inspection.

LEAD PRODUCTS

No Lead products were identified at this inspection.

LEAD PAINT

Location	Material Description	Risk Rating
External / GF / Perimeter / Reception step and low level stonework	Topcoat - Black	Low
Internal / GF / Warehouse / Staircase and storage containers	Topcoat - Navy blue	Low

SYNTHETIC MINERAL FIBRE PRODUCTS

Location	Material Description	Risk Rating
Internal / GF / Roof void / Ceiling	Sarking Insulation	Very Low
Internal / GF / Roof void / Ductwork insulation	Insulation Material	Very Low

DOCUMENT CONTROL

DOCUMENT NO.	DATA ENTRY		APPROVED & AUTHORISED	
	DATE	PERSONEL	DATE	PERSONEL
J220192030520 22HMMR	03/05/2022	George Barlow	09/05/2022	James Breslin

PREVIOUS DOCUMENTATION: N/A

TABLE OF CONTENTS

TABLES

INTRODUCTION

BUILDING INFORMATION

BUILDING NAME:	Shine Motor Corp Pty.Ltd
BUILDING ADDRESS:	8 Noonan Road
BUILDING DESCRIPTION:	Property is a commercial scrap metal yard, consisting of single brick built offices and steel warehouses. Suspended ceilings throughout the ground floor offices.
APPROXIMATE AGE:	Unknown

SCOPE OF WORKS

REPORT TYPE	HAZARDOUS MATERIALS MANAGEMENT REGISTER
OBJECTIVE	To locate, identify and assess the human exposure risks associated with hazardous materials, and to provide management options to mitigate the risks associated with the material. For the purpose of this report hazardous materials includes: •Asbestos •Lead •SMF •PCB
THE CLIENT	Smart Planning and Design
AREA COVERED BY THE SCOPE	Entire property and external walkways. Survey excluded any scrap metal and containers.
LEAD SURVEYOR	George Barlow
LEAD SURVEYOR LAA NO.	LAA001623
INSPECTION DATE	03/05/2022

SAMPLE METHODOLOGY

Based on the assessor experience, if any suspect asbestos containing materials are encountered, they will be sampled using dust suppression techniques and correct sampling methodology for the material being sampled. JMBECs sampling methodology has been omitted from this report due to file size, but is available on request.

In summary, asbestos containing materials were sampled in accordance with the United Kingdom HSE guidance HSG264 for the most part with guidance also taken from SafeWork Australia's model code of practice(CoP) How to manage and control asbestos in the workplace. Free versions of both these documents are widely available online from the respective publishing institutions. This is with the exception of sampling frequency, which will be reduced for large areas of visually assessed homogenous materials. In these locations representative or composite sampling techniques may be used at the surveyor's discretion after visually inspecting the material in its entirety.

This methodology will be discussed with the client as and when the presence of larger sections of potentially asbestos containing materials are discovered, namely, but not limited to, large sections of insulated pipework, false ceiling tiles and large fiber cement surfaces.

Similarly to the sampling methods described above lead paint and SMF products will be sampled using similar RPE, PPE, dust suppression and decontamination techniques to limit exposure pathways to the surveyor and building occupants and eliminate cross contamination. As previously, limited representative samples of large areas of homogenous materials will be taken. If lead dust is suspected, swab samples were taken in accordance with Section 5.6: Clearance testing and Appendix C: Standard Practice for Determining of Lead in Surface Dust of AS / NZS - 4361.2 - 2017 Guide to lead paint management Residential and commercial buildings.

The majority of SMF products will be visually assessed only. All sampled asbestos and SMF materials are double bagged, and lead materials single bagged, and transported under strict chain of custody to National Australian Testing Authority(NATA) accredited laboratories for analysis.

Where possible a representative number of fluorescent light fittings were assessed for the likely presence of capacitors that may contain PCB oils. Where suspect capacitors were identified, the details of the capacitors were noted and cross referenced with the publication, Identification of PCB - containing Capacitors, ANZECC, 1997.Where the electrical equipment was still live, internal inspection and/or sampling was not possible due to the inherent hazard to safety. Where recorded capacitor details were not identified in the ANZECC publication, potential PCB content was determined based on the electrical component's type, shape, encasing material, age and comparative weight.

ODS are not sampled, but the type and weight of the coolant used will be visually assessed based on the equipment data plate if visible or presumed in other cases. All samples of materials suspected to contain asbestos and lead were collected and analysed at a NATA Accredited Laboratories.

PRESUMED SAMPLES

Where it is unsafe to access a material for close inspection or to sample (E.g. high level eaves, live electrical panels etc.) or access prohibits close inspection but the assessor has encountered materials in a similar area in the past (e.g. textile asbestos flash pads in fuses), the material, or area will be presumed to contain asbestos or other hazardous material until proven otherwise.

Presumed materials are risk assessed and photographed I the same way as sampled materials.

INACCESSIBLE AREAS

While maximum effort was made to inspect all areas, when access was unavailable and where practicable avenues of inspection had been exhausted, a reason was provided and the area deemed to contain ACM HAZARDOUS MATERIALS MANAGEMENT REGISTER/HAZMAT until otherwise determined.

Specific areas of no or limited access, that are not encompassed or detailed in the scope or survey limitations, are detailed within the Register which can be found in Appendix A, and also below:.

Location	Reason
Internal / GF / Kitchen / Behind kitchen unit	Area is outside the current scope of work
Internal / GF / Kitchen & shower room / Behind kitchen unit	Area is outside the current scope of work
Internal / GF / Kitchen & shower room / Beneath the ceramic tiles	Area is outside the current scope of work
Internal / GF / North western office / Beneath the ceramic tiles	Area is outside the current scope of work
Internal / GF / Office/Store room / Beneath the ceramic tiles	Area is outside the current scope of work
Internal / GF / Showeroom / Behind the ceramic tiles to the walls and floor	Area is outside the current scope of work
Internal / GF / Staff changing room / Beneath the ceramic tiles	Area is outside the current scope of work
Internal / GF / Toilet / Beneath the ceramic tiles	Area is outside the current scope of work
Internal / GF / Warehouse / Within storage containers	Area is outside the current scope of work
Internal / L1 / Office / Beneath the laminated timber flooring	Area is outside the current scope of work

Location	Reason
External / GF / Perimeter / External areas	Very limited access to external areas due to stored scrap metal and plant equipment
Internal / GF / Kitchen / Beneath ceramic tiles	Concrete floor is visible beneath, accessed via a small area of damaged tiles. However, a thorough investigation was not conducted as the area is outside the current scope of work

Internal / GF / Kitchen & shower room / Shower area	Limited access due to stored items
Internal / GF / Reception / Beneath ceramic tiles	Concrete floor is visible beneath, accessed via a small area of damaged tiles
Internal / GF / Roof void / Within roof void	Limited access within the void due to fixtures and services.
Internal / GF / Warehouse / Within warehouse due to stored items & scrap metal	Limited access due to stored items-

LEGISLATIVE REQUIREMENTS & GUIDANCE

The following legislation and guidance documents govern the management of hazardous contaminants throughout NSW.

This report was prepared in accordance with the following documents:

ASBESTOS AND OTHER HAZARDOUS MATERIALS

NO.	DOCUMENT NAME
LEGISLATION	
1	Work Health and Safety (WHS) Act NSW (2011 [reviewed 2016]).
2	WHS Regulation NSW 2017
3	Ozone Protection and Synthetic Greenhouse Gas Management Regulations NSW (1996 [amended 2016]).
4	NSW Protection of the Environment Operations Act (1997).
STANDARDS	
5	AS/NZS4361.2 (2017) Guide to Lead Paint Management, Part 2: Residential and Commercial Buildings.
6	National Occupational Health and Safety Commission (NOHSC):1012 (1994), National Standard for the Control of Inorganic Lead at Work.
7	NOHSC: 1004 (1990), National Standard for Synthetic Mineral Fibres.
8	AS 1319 (1994). Safety Signs for the Occupational Environment.
9	AS/New Zealand Standard (NZS) 1716 (2003), Respiratory Protective Devices.
10	AS/NZS 1715 (2009), Selection, Use and Maintenance of Respiratory Protective Devices.
11	The Australian and New Zealand Environment Conservation Council (ANZECC, 1996), Polychlorinated Biphenyls Management Plan.
12	Australian Commonwealth Government. (2015). Standard for the Uniform Scheduling of Medicines and Poisons, Section Seven/Appendix I: Paints or Tinters.
13	AIOH Exposure Standards Committee (2016), Synthetic Mineral Fibres (SMF) and Occupational Hygiene Issues (3rd Edition).
14	Australian Standard (AS) 4964 (2004) Method for the qualitative identification of asbestos in bulk samples.
CODES OF PRACTICE	
15	NOHSC: 2006 (1990), National Code of Practice for the Safe Use of Synthetic Mineral Fibres.
16	ANZECC (1997) Identification of PCB-containing Capacitors: An information booklet for Electricians and Electrical Contractors.

17	United Kingdom Health & Safety Executive. (2012). Health and Safety Guidance 264, Asbestos: The survey guide.
18	NOHSC:2015 (1994), National Code of Practice for the Control and safe use of Inorganic Lead at Work.
19	SafeWork Australia (2016), How to Manage and Control Asbestos in the Workplace: Code of Practice.
20	SafeWork Australia (2016), How to Safely Remove Asbestos: Code of Practice.
21	National Occupational Health and Safety Commission (NOHSC):3003 (2005), Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres. 2nd Edition
22	Workcover NSW (2008), Your Guide to Working with Asbestos.
23	National Occupational Health and Safety Commission. (1989). 3006: Guidance Note on the Membrane Filter Method for the Estimation of Airborne Synthetic Mineral Fibres.
24	United Kingdom Health & Safety Executive. (2002). Health and Safety Guidance 227, A Comprehensive Guide to Management of Asbestos in Premises.
25	United Nations Environment Program (UNEP, 2001) Inventory of Trade Names of Chemical Products Containing Ozone Depleting Substances and their Alternatives.

HAZARDOUS SUBSTANCE INFORMATION

ASBESTOS

Asbestos is a naturally occurring mineral fibre, consisting of two groups:

- Serpentine Group – comprised of only chrysotile (white asbestos)
- Amphibole Group – comprised of anthophyllite, amosite (brown asbestos or grey asbestos), crocidolite (blue asbestos), tremolite, and actinolite.

Due to its flexibility, tensile strength, insulating properties (both heating and electrical), chemical inertness and affordability, asbestos was widely regarded as one of the most versatile materials during the mid 20th Century.

These properties made asbestos a very popular material, and it was used in many industries and applications worldwide. Australia was one of the highest users per capita in the world up until the mid-1980s. It is approximated that one third of all homes built in Australia contain asbestos products. Raw asbestos was mined extensively throughout Australia until the mid 1980s.

Asbestos containing materials (ACMs) are categorised as friable and non-friable:

- Non-friable asbestos is usually bonded in a matrix after it has been mixed with other materials like cement or plastics. Non friable asbestos is most commonly found in the built environment.
- Friable asbestos is defined as any asbestos material in a powder form or can be crumbled, pulverised or reduced to a powder by hand pressure when dry_ and is much more likely to become airborne.

Both friable and non-friable asbestos pose a significant health risk to all workers and others, and as such are governed by strict regulations and codes of practice. Asbestos containing materials must be identified and then properly managed until a time when they are to be carefully removed.

The Work Health Safety (WHS) Regulations set out the training and competency requirements for asbestos assessors, asbestos removal workers and supervisors. Under the Regulations, two licenses have been established – Class A and Class B. Businesses with a Class A license are permitted to remove all types of asbestos, including both friable and non-friable asbestos. Businesses with a Class B license can only remove non-friable asbestos.

The WHS Regulations have also created a new license for asbestos assessors, whom must be employed to carry out air monitoring and clearance inspections following removal of friable asbestos.

In a special note to asbestos containing dusts (ACD), settled dusts can contain free fibres, in areas adjacent to friable, low density or heavily damaged non-friable products, or even in locations of large quantities of good to moderate condition non-friable products will be considered to be generated from the wear and tear or installation of the non-friable product. The level of risk of requirements for remediation of ACD will

depend on the severity of the damage and the type of product (friable, non-friable or low density) that the dust is identified to have originated from. Dust sampling for asbestos can only be done in a qualitative manner, to establish presence or absence of asbestos.

LEAD BASED PAINTS

Lead-based paint is paint containing lead that was used as pigment. The heavy metal was added to paint to speed drying, increase durability and for moisture resistance.

Like all paint systems, leaded paint will chip, flake and peel over time, leading to contamination of indoor dust and exterior surrounding soils. Lead does not biodegrade, and so lead dust is a long-term exposure problem.

Lead is especially damaging to young children who are still developing, pregnant women and to unborn and new born babies via their pregnant or breast feeding mothers. Lead affects the hematopoietic, neurologic, gastrointestinal, and reproductive systems, but predominantly the nervous system. High levels of exposure can result in miscarriage in women, and may affect fertility in men.

Lead has also been proven to affect a child's mental and physical growth. Unborn children can be exposed through their mothers. Harmful effects include premature birth, smaller babies, decreased mental ability in the infant, learning difficulties and reduced growth in young children.

Lead paint has been used extensively throughout residential and commercial buildings in Australia, and it was only in 1997 that the allowable level of lead in residential and commercial paint in Australia went down to 0.1% which is still higher than the US 1978 standard of less than 0.06% lead.

AS/NZS4361.2-2017 Guide to lead paint management Residential and commercial buildings defines lead paint as paint film or component coat of a paint system in which the lead content (calculated as lead metal) is in excess of 0.1% by weight of the dry film as determined by laboratory testing, thus bringing it in-line with the legislation for paint manufacture. Additionally however, the Work Health and Safety Regulation 2017 Section 7.2 (h) states that 'Lead machine sanding or buffing surfaces coated with paint containing more than 1% by dry weight of lead' constitutes a lead process.

However, research has previously shown that machine sanding or buffing surfaces coated with paint containing more 0.25% by dry weight of lead metal can lead to soil and dust concentrations which exceed the clearance levels given in AS/NZS4361 Guide to Lead Paint Management.

The standard also goes on to say at levels as low as 0.25%, the dust generated by dry sanding and abrasive blast cleaning can have sufficient lead content to produce levels exceeding exposure limits. It is generally accepted within the industry that paints exceeding 0.25% require precautions when working on them.

Finally lead is classified as a reproductive toxicant and as such the GHS and SafeWork Australia HCIS consider any mixture (or alloy) with a reproductive toxicant combined component (such as lead) of greater

than or equal to 0.3% to present a reproductive risk and be labelled and controlled under GHS classifications. Furthermore, the SafeWork Australia HCIS specifically recommends no abrasive blasting be undertaken on any lead products (mixtures and alloys) over 0.1% due to the risk of exceeding exposure standards. As such further restrictions should be considered for these products to limit abrasive treatment and hot works that create excessive contaminated fumes, dust and particulate.

JMBEC acknowledge that outside of occupational exposure, legislated and recommended limits, it is widely accepted that there is no level of lead exposure that can be considered completely risk free particularly to susceptible individuals such as children, pregnant women and breast feeding mothers. We also recognise that other mixture components could also be reproductive toxins.

As such the following applies to the classification of the paints found on site:

- Concentrated Lead paint (> 1.0% w/w Pb)
- Formally First Schedule Paint (≥ 0.25% w/w Pb)
- Lead Paint (≥ 0.1% w/w Pb)
- Considered a negligible risk as a lead mixture (<0.1% w/w Pb)

LEAD DUST

Lead swab samples were taken in accordance with Section 5.6: Clearance testing and Appendix C: Standard Practice for Determining of Lead in Surface Dust of AS/NZS4361.2-2017 Guide to lead paint management Residential and commercial buildings.

This guidance document stipulates the following lead dust loadings for clearance purposes:

- 1mg/m2 for interior floors,
- 5mg/m2 for interior window sills, and
- 8mg/m2 for exterior surfaces

Should the area be due for demolition, other avenues of control and remedition can be considered as part of an overall demolition occupational health and safety management plan to reduce the risk to workers without having to achieve the clearance levels above.

LEAD PRODUCTS

Lead containing products (such as batteries) or Lead containing alloys (such as flashing) will be identified on site visually during the survey.

Products and bulk materials containing lead should be stored and managed as per GHS hazard classification rules and WHS regulations and should be considered and labelled a class 1A reproductive toxin if containing a combined level of lead, and any other class 1 reproductive toxin, to a level greater or equal to 0.3%.

In addition, lead alloys and materials noted to be built into the fabric of the building material, should not be subjected to un controlled abrasive or hot working methods that will give off particulate and fumes. Works of this type on these material should be considered a lead process and be controlled accordingly. In particular no abrasive blasting should be undertaken on any lead mixture with a concentration of lead greater or equal to 0.1% as per SafeWork Australia HCIS guidelines.

SYNTHETIC MINERAL FIBRES (SMF)

Synthetic mineral fibres (SMF) is a term used to describe a number of different fibrous materials made from silica, alumina, rock and glass. These materials have become an important replacement for asbestos within commercial buildings in a variety of products where thermal insulation, or electrical or fire protection is required. SMF is used commercially in construction and residential dwellings as insulation, reinforcement for cement, plaster and plaster materials.

Short-term exposure to SMF can produce skin, eye and upper respiratory tract irritation.

Man made mineral fibres are referred to as MMMF and are also classed as synthetic mineral fibres.

The majority of older SMFs (pre 2000), such as glass wool, rock wool and slag wools, are not currently classified as carcinogens to humans, however refractory ceramic fibre (RCF) products are the only SMF currently classified as being "possibly carcinogenic to humans". As such RCF products maintain an increased risk profile.

Newer "low bio-persistence" SMFs that comply with Note Q from the European Commission Directive 97/69/EC Official Journal (AIOH, 2016), mainly present from the late 1990's onwards, are not classified as carcinogens and are not considered hazardous materials by the SafeWork Australia HCIS or the GHS. The only documented symptoms from exposure to these bio-persistent SMF products remains the irritation to the upper respiratory tract, skin and eyes, common with exposure to all SMF materials.

Bio-persistence equates to the capacity of fibres to persist and conserve their chemical and physical features over time in the lung (AIOH, 2016).

POLYCHLORINATED BIPHENYLS (PCBs)

PCB is the common name for polychlorinated biphenyls. PCBs range in appearance from colourless, oily liquids to more viscous and increasingly darker liquids, to yellow then black resins, depending on chlorine content of the PCB. These synthetic compounds are chemically stable, have good insulating properties and do not degrade appreciably over time or with exposure to high temperatures. These properties made PCBs very useful in electrical devices such as capacitors.

PCBs can enter the body in three ways:

- absorption through the skin;

- inhalation of PCB vapour (at room temperature, the vapour concentrations of PCBs are not significant); and
- ingestion, if there is contamination of food or drink.

The likelihood of becoming sick from PCB exposure increases with the length of time and the amount of material that a person might come in contact with.

The most commonly observed symptom in people exposed to high levels of PCBs is a condition known as chloracne. It is a severe, persistent acne-like rash due to repeated and prolonged contact of PCBs with skin. This condition has also occurred in people who have accidentally ingested PCBs orally. Very high exposure to PCBs may also cause liver damage and damage to the nervous system, resulting in numbness, weakness and tingling in the arms and legs. There is the possibility that PCBs may cause cancers.

The major use of PCBs in the electrical industry has been as an insulating fluid inside transformers and capacitors. These transformers and capacitors have ranged in size from the very large transformers which contain several thousand litres of PCBs and were typically used by electrical supply businesses and heavy industries, to the small capacitors which may only contain several millilitres of PCBs and were used in farming equipment and on commercial premises. Capacitors containing PCBs were installed in various types of equipment including fluorescent light fittings during the 1950's, 60's and 70's.

PCB-containing equipment within fluorescent light fittings is likely to have one or more of the following characteristics:

- resonant start;
- a capacitor that is cylindrical or rectangular, encased in
- an aluminium container with a weld running all the way
- around the top edge with two terminals with quick
- connect tags;
- a date mark from the 1950s, 1960s or 1970s1;
- a capacitor encased in a rectangular tin container with
- soldered seams;
- slightly heavier than similar types of capacitors manufactured after the 1970s (which do not to contain PCBs).

LIMITATIONS

This Hazmat Register has been prepared in line with an agreement made between JMBEC and Smart Planning and Design, and was developed following a site inspection carried out by an experienced and qualified surveyor or surveying team, who are either BOHS – P402 Surveying and Sampling Strategies for Asbestos in Buildings or Royal Society of Public Health (RSPH) Level 3 Award in Asbestos Surveying qualified, or are licensed asbestos assessors. The methodology used is in accordance with the codes of practice listed in the previous section. As such this report is solely for the use of Smart Planning and Design, and is intended for use by no other person(s) or parties. It should be presented in full, and should not be used to support other objectives or documents without written approval from JMBEC.

To the best of our knowledge, this report is thorough and correct, however JMBEC cannot guarantee complete accurateness. This report relates to the identification of asbestos containing materials and, while every attempt has been made to locate all Hazardous materials, the extent of the site inspection was limited to non-destructive sampling. This restricts any major damage to building materials such as ceilings, walls and partitions, and flooring etc.

In light of this, no guarantees are made that any area of 8 Noonan Road is absolutely free of hazardous materials since future refurbishment or demolition may reveal asbestos containing materials. JMBEC would strongly advise conducting a destructive survey for the presence of asbestos on specific areas of the building before any major works begin.

Specific exclusions are captured within the Register located in Appendix A. Until such a time that these areas can be accessed, the probability of the presence of asbestos containing materials must be assumed until proven otherwise.

JMBEC cannot be accountable for any omissions to this report resulting from information, data, systems or areas of the building not made readily accessible by Smart Planning and Design.

The following areas are not regarded as 'inaccessible areas' and therefore inspected as part of the scope or presumed to contain asbestos subject to safe or reasonable access:

- Locked rooms;
- Crawl Spaces, that are not considered confined space by the surveyor;
- Confined spaces where safe access has been provided by Smart Planning and Design;
- Heights below 3m;
- Heights above 3m, where safe access has been provided by Smart Planning and Design;
- Within electrical equipment, where isolation and safe access has been proven and provided by Smart Planning and Design;
- Basement and cellars;
- Storage areas; and
- Ceiling spaces where safe access has been provided by Smart Planning and Design.

If safe access is not provided by Smart Planning and Design for hazardous areas, these areas will be listed specifically for their limited access with reasons for Smart Planning and Designreference.

Examples of inaccessible areas that may contain asbestos or ACM:

- A cavity in a building that is completely (or almost completely) enclosed and suspected of containing asbestos (based on where asbestos is located elsewhere in the building) and access is only possible through destruction of part of the walls of the cavity;
- The inner lining of an old boiler pressure vessel (information on this type of vessel suggests it contain asbestos) and the inner lining is not accessible due to the design and operation of the boiler and access can only be via partial destruction of the outer layer;
- Vinyl tiles that may contain asbestos, which have had a number of layers of non-ACM placed over them and secured - where the layers above it have been well secured and require some form of destruction in order to access to vinyl that may contain asbestos;
- Enclosed riser shafts in multi-storey buildings containing cables that may be insulated with ACM.
- Air conditioning ducts that may contain asbestos gaskets, linings or insulation panels; and
- Sub-surface soils, concrete encased form work, cable ducts or pipework (beyond survey scope).

Areas not accessed are deemed to contain HAZMATs until such a time that access can be gained and the presence, or otherwise, of HAZMAT can be confirmed.

APPENDICES

APPENDIX A: REGISTER

Photos of identified materials are included in Appendix B, and are listed by their photo reference number in the order listed in the register below.

EXTERNAL - GF - PERIMETER

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Perimeter	Damp proof course to walls and expansion joints	Bitumen	Asbestos	J220192255 A3	150 Linear meters	Non-Friable	NAD,ORG	-	A5	N/A	-	1
Perimeter	Doors and door frames	Topcoat -Blue	Lead Paint	J220192255L P1.7	4 Units	Not Applicable	<0.1%w/w	-	A5	N/A	-	2
Perimeter	External areas	-	Limited access	J220192255L a3	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Very limited access to external areas due to stored scrap metal and plant equipment	3
Perimeter	Walls	Textured Coating	Asbestos	J220192255 A4	400 m²	Non-Friable	NAD,ORG	-	A5	N/A	-	4
Perimeter	Reception step and stonework	Topcoat - Black	Lead Paint	J220192255L P5	. Throughout Framework	Not Applicable	0.14%w/w	Low	A4	5 Yearly Reinspection	-	5

INTERNAL - GF - HANDICAPPED TOILET

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Handicapped toilet	Door and door frame	Topcoat -Blue	Lead Paint	J220192255L P1.8	2 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	6
Handicapped toilet	Walls	Topcoat -Cream	Lead Paint	J220192255L P2.9	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	7

INTERNAL - GF - KITCHEN

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Kitchen	Behind kitchen unit	-	No Access	J220192255 NA2.1	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	8
Kitchen	Beneath ceramic tiles	-	Limited access	J220192255L a1.1	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Concrete floor is visible beneath, accessed via a small area of damaged tiles. However, a thorough investigation was not conducted as the area is outside the current scope of work	9
Kitchen	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2.4	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	10

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Kitchen	Doors leading to the warehouse & outside	Topcoat -White	Lead Paint	J220192255L P3	2 Units	Not Applicable	<0.1%w/w	-	A5	N/A	-	11
Kitchen	Doors, Door frames & Skirting boards	Topcoat -Blue	Lead Paint	J220192255L P1.3	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	12

INTERNAL - GF - KITCHEN & SHOWER ROOM

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Kitchen & shower room	Behind kitchen unit	-	No Access	J220192255 NA2	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	13
Kitchen & shower room	Beneath the ceramic tiles	-	No Access	J220192255 NA1.1	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	14
Kitchen & shower room	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2.2	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	15
Kitchen & shower room	Door & door frame	Topcoat -Blue	Lead Paint	J220192255L P1.1	2 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	16
Kitchen & shower room	Shower area	-	Limited access	J220192255L a2	-	Not Applicable	Presumed to contain	-	NA	Prior to demolition,	Limited access due to stored items	17

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
							asbestos or hazardous materials			refurbishment or operational access		

INTERNAL - GF - NORTH WESTERN OFFICE

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
North western office	Beneath the ceramic tiles	-	No Access	J220192255 NA1	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	18
North western office	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2.1	20 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	19

INTERNAL - GF - OFFICE/STORE ROOM

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Office/Store room	Beneath the carpet	Vinyl Tiles - Beige	Asbestos	J220192255 A2	30 m²	Non-Friable	NAD,ORG	-	A5	N/A	-	20
Office/Store room	Beneath the ceramic tiles	-	No Access	J220192255 NA1.5	-	Not Applicable	Presumed to contain	-	NA	Prior to demolition,	Area is outside the current scope of work	21

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
							asbestos or hazardous materials			refurbishment or operational access		
Office/Store room	Ceiling above staircase	Topcoat -Cream	Lead Paint	J220192255L P2.7	3 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	22
Office/Store room	Concrete wall	Textured Coating	Asbestos	J220192255 A1	25 m²	Non-Friable	NAD,ORG	-	A5	N/A	-	23
Office/Store room	Staircase	Topcoat -Blue	Lead Paint	J220192255L P1.6	. Throughout staircase	Not Applicable	<0.1%w/w	-	A5	N/A	-	24

INTERNAL - GF - RECEPTION

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Reception	Beneath ceramic tiles	-	Limited access	J220192255L a1	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Concrete floor is visible beneath, accessed via a small area of damaged tiles	25
Reception	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2	8 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	26
Reception	Doors, Door frames & Skirting boards	Topcoat -Blue	Lead Paint	J220192255L P1	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	27

INTERNAL - GF - ROOF VOID

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Roof void	Ceiling	Sarking Insulation	SMF	J220192255 S1	. Throughout Room	Not Applicable	-	Very Low	A4	5 Yearly Reinspection	-	28
Roof void	Ductwork insulation	Insulation Material	SMF	J220192255 S2	. Throughout ductwork	Not Applicable	-	Very Low	A4	5 Yearly Reinspection	-	29
Roof void	Within roof void	-	Limited access	J220192255La5	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Limited access within the void due to fixtures.	30

INTERNAL - GF - SHOWEROOM

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Showeroom	Behind the ceramic tiles to the walls and floor	-	No Access	J220192255 NA1.4	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	31
Showeroom	Concrete walls	Topcoat -Cream	Lead Paint	J220192255LP2.6	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	32

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Showeroom	Door and door frame	Topcoat -Blue	Lead Paint	J220192255L P1.5	2 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	33

INTERNAL - GF - STAFF CHANGING ROOM

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Staff changing room	Beneath the ceramic tiles	-	No Access	J220192255 NA1.3	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	34
Staff changing room	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2.5	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	-	35
Staff changing room	Door and door frame	Topcoat -Blue	Lead Paint	J220192255L P1.4	2 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	36

INTERNAL - GF - TOILET

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Toilet	Beneath the ceramic tiles	-	No Access	J220192255 NA1.2	-	Not Applicable	Presumed to contain asbestos or	-	NA	Prior to demolition, refurbishment or	Area is outside the current scope of work	37

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
							hazardous materials			operational access		
Toilet	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2.3	. Throughout Room	Not Applicable	<0.1%w/w	-	A5	N/A	Slight damage to the area above the window	38
Toilet	Door and door frame	Topcoat -Blue	Lead Paint	J220192255L P1.2	2 m²	Not Applicable	<0.1%w/w	-	A5	N/A	-	39

INTERNAL - GF - WAREHOUSE

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Warehouse	Concrete walls	Topcoat -Cream	Lead Paint	J220192255L P2.8	. Throughout Warehouse	Not Applicable	<0.1%w/w	-	A5	N/A	-	40
Warehouse	Expansion joints within concrete	Bitumen	Asbestos	J220192255 A3.1	100 Linear metres	Non-Friable	NAD,ORG	-	A5	N/A	-	41
Warehouse	Staircase and storage containers	Topcoat - Navy blue	Lead Paint	J220192255L P4	. Throughout	Not Applicable	0.3%w/w	Low	A4	5 Yearly Reinspection	-	42
Warehouse	Within storage containers	-	No Access	J220192255 NA4	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	43
Warehouse	Within warehouse due to stored items & scrap metal	-	Limited access	J220192255L a4	-	Not Applicable	Presumed to contain asbestos or	-	NA	Prior to demolition, refurbishmen	-	44

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
							hazardous materials			t or operational access		

INTERNAL - L1 - OFFICE

AREA / Room	SPECIFIC LOCATION	MATERIAL	HAZARD	REF #	EXTENT	FRIABLE?	RESULT	OVERALL RISK[1]	ACTION CODE	TIME FRAME	COMMENTS	PHOTO #
Office	Beneath the laminated timber flooring	-	No Access	J220192255 NA3	-	Not Applicable	Presumed to contain asbestos or hazardous materials	-	NA	Prior to demolition, refurbishment or operational access	Area is outside the current scope of work	45
Office	Concrete wall	Textured Coating	Asbestos	J220192255 A1.1	25 m²	Non-Friable	NAD,ORG	-	A5	N/A	-	46

APPENDIX B: PHOTOGRAPHS

1 - External / GF / Perimeter / Damp proof course to walls and expansion joints / Bitumen (J220192255A3) - NAD,ORG

1.1 - External / GF / Perimeter / Damp proof course to walls and expansion joints / Bitumen (J220192255A3) - NAD,ORG

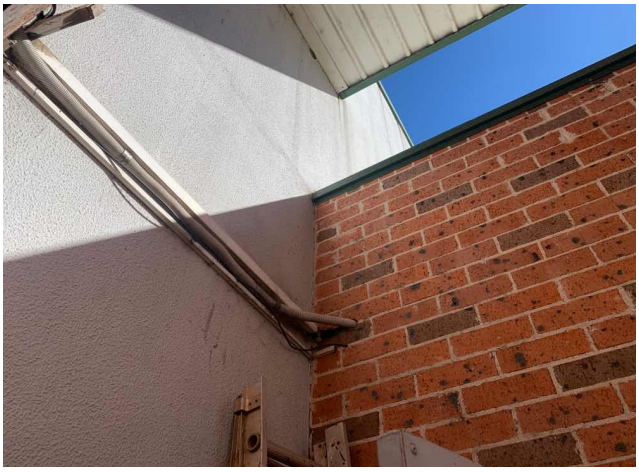
2 - External / GF / Perimeter / Doors and door frames / Topcoat -Blue (J220192255LP1.7) - <0.1%w/w

2.1 - External / GF / Perimeter / Doors and door frames / Topcoat -Blue (J220192255LP1.7) - <0.1%w/w

3 - External / GF / Perimeter / External areas / (J220192255La3) - Presumed to contain asbestos or hazardous materials

3.1 - External / GF / Perimeter / External areas / (J220192255La3) - Presumed to contain asbestos or hazardous materials

3.2 - External / GF / Perimeter / External areas / (J220192255La3) - Presumed to contain asbestos or hazardous materials



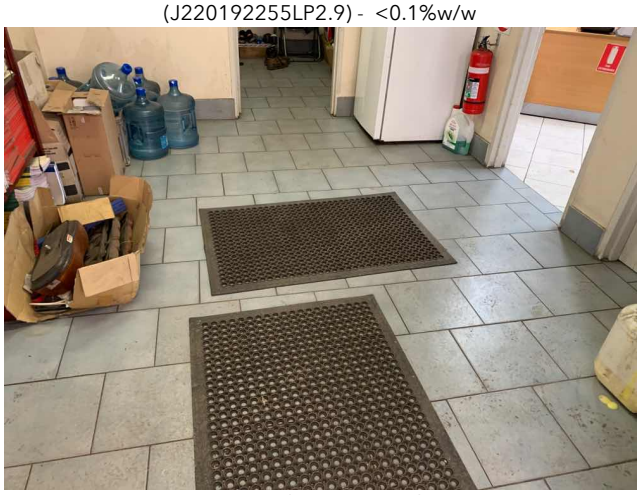
4 - External / GF / Perimeter / Walls / Textured Coating (J220192255A4) - NAD,ORG

4.1 - External / GF / Perimeter / Walls / Textured Coating (J220192255A4) - NAD,ORG

5.1 - External / GF / Perimeter / Reception step and stonework / Topcoat - Black (J220192255LP5) - 0.14%w/w

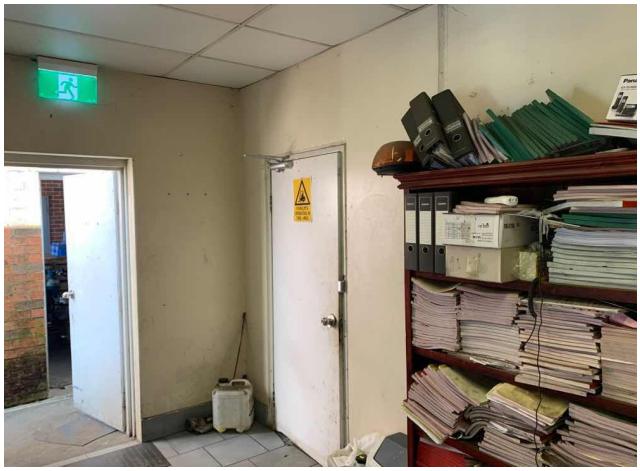
6 - Internal / GF / Handicapped toilet / Door and door frame / Topcoat -Blue (J220192255LP1.8) - <0.1%w/w

7 - Internal / GF / Handicapped toilet / Walls / Topcoat -Cream (J220192255LP2.9) - <0.1%w/w



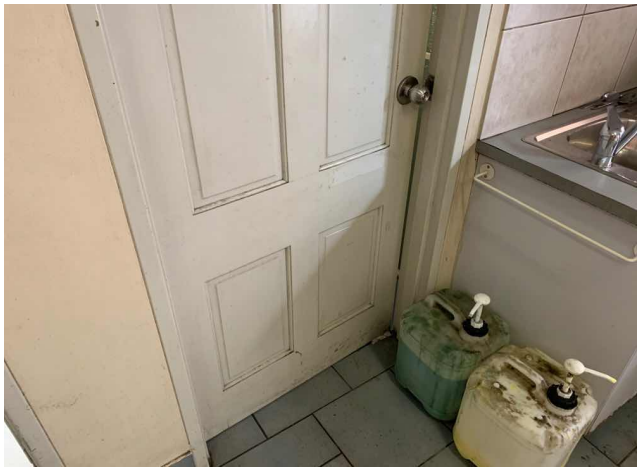
8 - Internal / GF / Kitchen / Behind kitchen unit / (J220192255NA2.1) - Presumed to contain asbestos or hazardous materials

9 - Internal / GF / Kitchen / Beneath ceramic tiles / (J220192255La1.1) - Presumed to contain asbestos or hazardous materials



9.1 - Internal / GF / Kitchen / Beneath ceramic tiles / (J220192255La1.1) - Presumed to contain asbestos or hazardous materials

10 - Internal / GF / Kitchen / Concrete walls / Topcoat -Cream (J220192255LP2.4) - <0.1%w/w

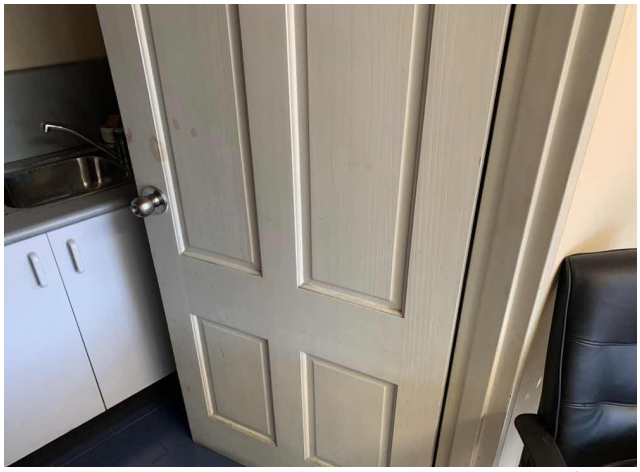


11 - Internal / GF / Kitchen / Doors leading to the warehouse & outside / Topcoat -White (J220192255LP3) - <0.1%w/w

12 - Internal / GF / Kitchen / Doors, Door frames & Skirting boards / Topcoat -Blue (J220192255LP1.3) - <0.1%w/w

13 - Internal / GF / Kitchen & shower room / Behind kitchen unit / (J220192255NA2) - Presumed to contain asbestos or hazardous materials

14 - Internal / GF / Kitchen & shower room / Beneath the ceramic tiles / (J220192255NA1.1) - Presumed to contain asbestos or hazardous materials



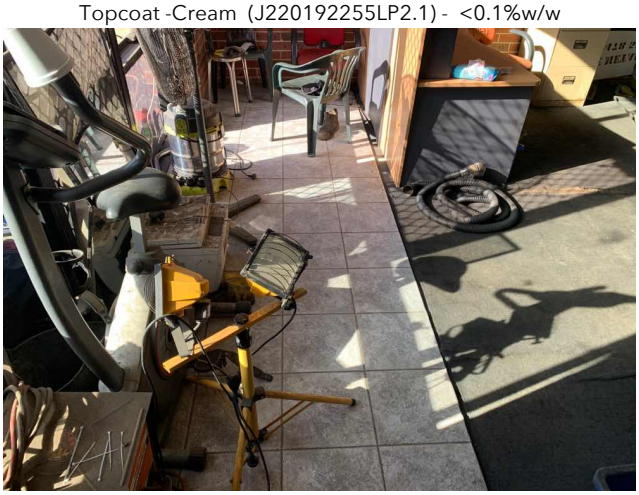
15 - Internal / GF / Kitchen & shower room / Concrete walls / Topcoat -Cream (J220192255LP2.2) - <0.1%w/w

16 - Internal / GF / Kitchen & shower room / Door & door frame / Topcoat -Blue (J220192255LP1.1) - <0.1%w/w

17 - Internal / GF / Kitchen & shower room / Shower area / (J220192255La2) - Presumed to contain asbestos or hazardous materials

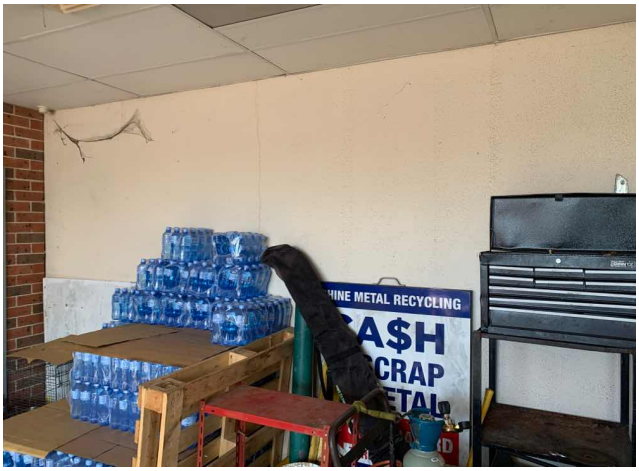
18 - Internal / GF / North western office / Beneath the ceramic tiles / (J220192255NA1) - Presumed to contain asbestos or hazardous materials

19 - Internal / GF / North western office / Concrete walls / Topcoat -Cream (J220192255LP2.1) - <0.1%w/w

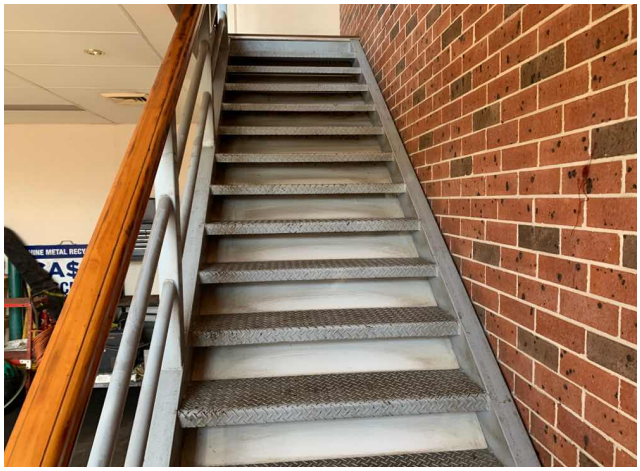


20 - Internal / GF / Office/Store room / Beneath the carpet / Vinyl Tiles - Beige (J220192255A2) - NAD,ORG

21 - Internal / GF / Office/Store room / Beneath the ceramic tiles / (J220192255NA1.5) - Presumed to contain asbestos or hazardous materials

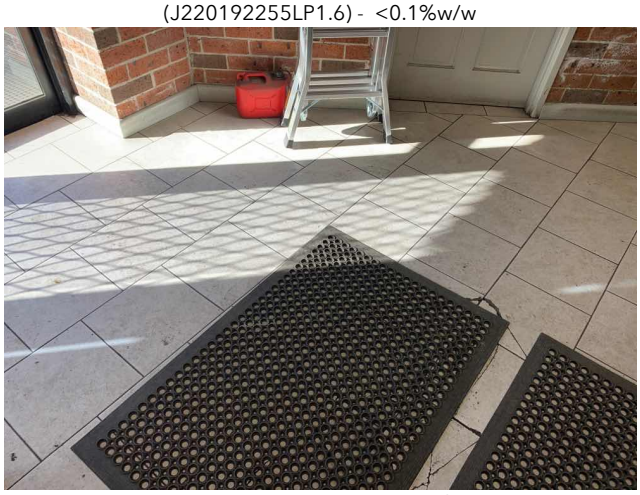


22 - Internal / GF / Office/Store room / Ceiling above staircase / Topcoat -Cream (J220192255LP2.7) - <0.1%w/w

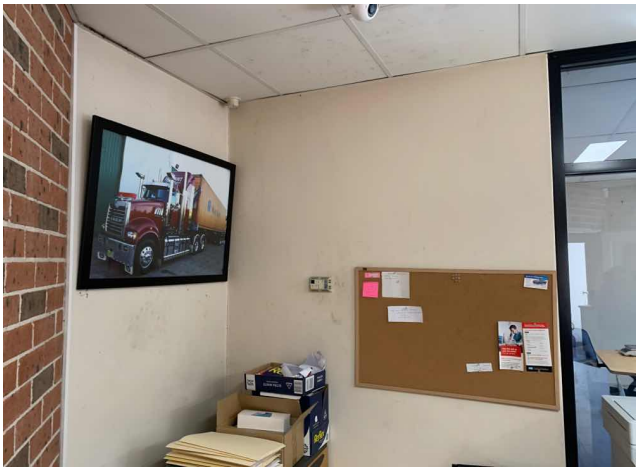


23 - Internal / GF / Office/Store room / Concrete wall / Textured Coating (J220192255A1) - NAD,ORG

24 - Internal / GF / Office/Store room / Staircase / Topcoat -Blue (J220192255LP1.6) - <0.1%w/w



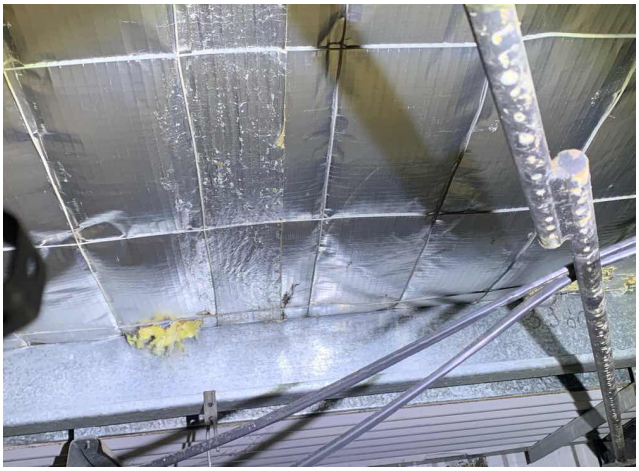
25 - Internal / GF / Reception / Beneath ceramic tiles / (J220192255La1) - Presumed to contain asbestos or hazardous materials



25.1 - Internal / GF / Reception / Beneath ceramic tiles / (J220192255La1) - Presumed to contain asbestos or hazardous materials

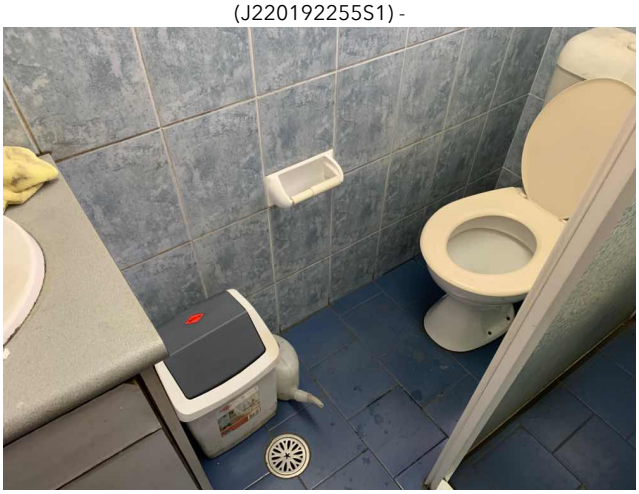
26 - Internal / GF / Reception / Concrete walls / Topcoat - Cream (J220192255LP2) - <0.1%w/w

27 - Internal / GF / Reception / Doors, Door frames & Skirting boards / Topcoat -Blue (J220192255LP1) - <0.1%w/w



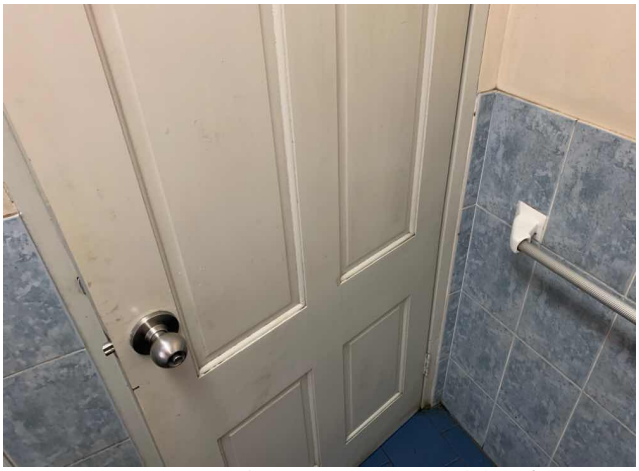
28 - Internal / GF / Roof void / Ceiling / Sarking Insulation (J220192255S1) -

29 - Internal / GF / Roof void / Ductwork insulation / Insulation Material (J220192255S2) -



31 - Internal / GF / Showeroom / Behind the ceramic tiles to the walls and floor / (J220192255NA1.4) - Presumed to contain asbestos or hazardous materials

32 - Internal / GF / Showeroom / Concrete walls / Topcoat - Cream (J220192255LP2.6) - <0.1%w/w

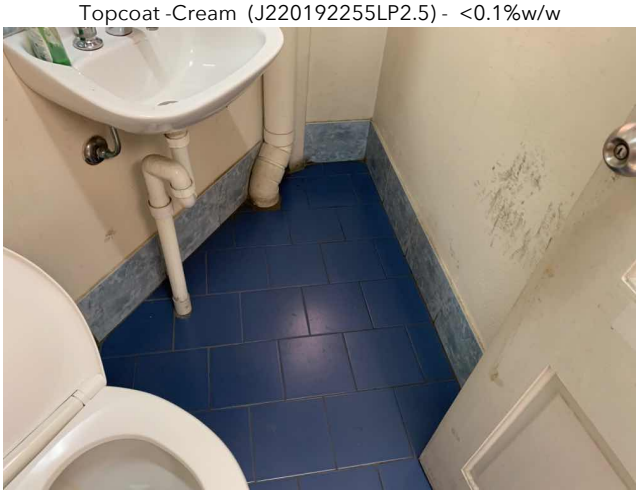


33 - Internal / GF / Showeroom / Door and door frame / Topcoat -Blue (J220192255LP1.5) - <0.1%w/w

34 - Internal / GF / Staff changing room / Beneath the ceramic tiles / (J220192255NA1.3) - Presumed to contain asbestos or hazardous materials

35 - Internal / GF / Staff changing room / Concrete walls / Topcoat -Cream (J220192255LP2.5) - <0.1%w/w

36 - Internal / GF / Staff changing room / Door and door frame / Topcoat -Blue (J220192255LP1.4) - <0.1%w/w



37 - Internal / GF / Toilet / Beneath the ceramic tiles / (J220192255NA1.2) - Presumed to contain asbestos or hazardous materials

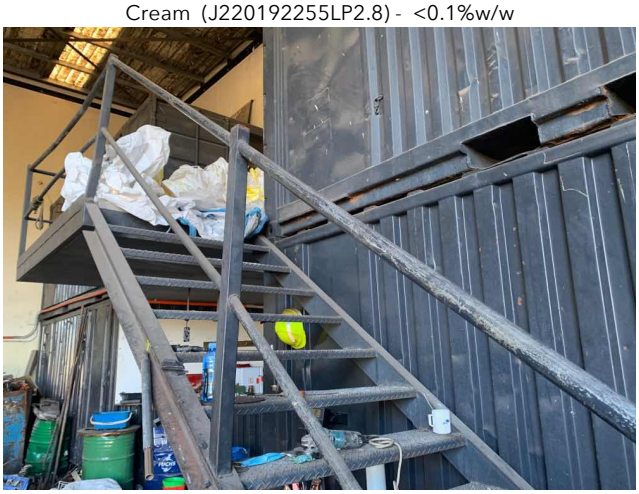
38 - Internal / GF / Toilet / Concrete walls / Topcoat -Cream (J220192255LP2.3) - <0.1%w/w

38.1 - Internal / GF / Toilet / Concrete walls / Topcoat - Cream (J220192255LP2.3) - <0.1%w/w

39 - Internal / GF / Toilet / Door and door frame / Topcoat -Blue (J220192255LP1.2) - <0.1%w/w

40 - Internal / GF / Warehouse / Concrete walls / Topcoat - Cream (J220192255LP2.8) - <0.1%w/w

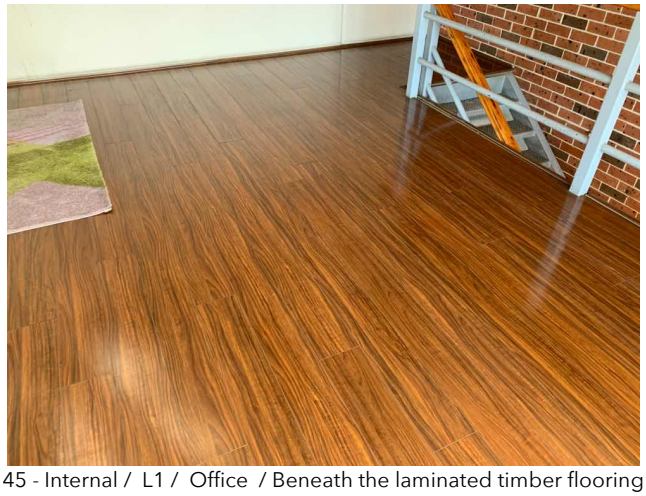
41 - Internal / GF / Warehouse / Expansion joints within concrete / Bitumen (J220192255A3.1) - NAD,ORG



42 - Internal / GF / Warehouse / Staircase and storage containers / Topcoat - Navy blue (J220192255LP4) - 0.3%w/w

43 - Internal / GF / Warehouse / Within storage containers / (J220192255NA4) - Presumed to contain asbestos or hazardous materials

44 - Internal / GF / Warehouse / Within warehouse due to stored items & scrap metal / (J220192255La4) - Presumed to contain asbestos or hazardous materials



45 - Internal / L1 / Office / Beneath the laminated timber flooring / (J220192255NA3) - Presumed to contain asbestos or hazardous materials

46 - Internal / L1 / Office / Concrete wall / Textured Coating (J220192255A1.1) - NAD,ORG

APPENDIX C: RISK ASSESSMENT AND RECOMMENDATION ACTION CODES

RISK ASSESSMENT

Docsies risk assessment is explained, in tables 2 and 3. Our semi-quantitative risk assessment borrows elements from the materials risk assessment documented in HSG264: Asbestos: The survey guide – HSE and the priority risk assessment documented in HSG 227: A comprehensive guide to Managing Asbestos in premises – HSE, providing an element of quantification to the qualitative nature of site risk assessment.

Some of the elements of these well documented risk assessments have been omitted. Most notably the asbestos type from the materials risk assessment, as all types of asbestos are listed by the International Agency for Research on Cancer (IARC) as Type 1 Carcinogens. In addition we have omitted the maintenance activity from HSG 277. The reason being that human risk factors associated with maintenance activities are often difficult to assess in-situ, and require detailed input from the Person in Control of a Business of Undertaking (PCBU).

The risk assessment then takes into account all other Hazardous materials, and utilizes the similar algorithms to create a risk assessment for those materials.

The asbestos containing material risk score is a quantitative assessment determined by the sum of the scores based on the material assessment and the likelihood of exposure; i.e. Risk score = Material Score + Location Score (out of as possible 18).

An explanation of the material assessment and likelihood of exposure scores can be found in the further below.

OVERALL RISK ASSESSMENT SCORE	OVERALL RISK RATING
0 - 4	Very Low
5-8	Low
9-13	Moderate
14-18	High

Table 1 - Risk Scores

RECOMMENDATION ACTION CODES

Following the risk assessment of building materials for asbestos containing an action score is assigned for recommended best practice to control the risk presented by the material. The action score will be assigned according to the surveyor's assessment of the situation at the time of the survey.

ACTION CODE	RISK CONTROL RECOMMENDED ACTIONS
A1	Restrict Access and remove under controlled conditions with licensed contractors
A2	Remove, enclose, encapsulate or seal by licensed contractors followed by a re-inspection and maintenance schedule under a management plan. Remove prior to refurbishment or Demolition by licensed contractors
A3	Enclose, encapsulate or seal by appropriately trained general maintenance or licensed contractors. Implement re-inspection, maintenance and demolition schedule under a management plan. Remove or protect prior to refurbishment or demolition by licensed contractors or competent individuals as required.
A4	No remedial action required. Implement re-inspection and maintenance schedule under a management plan.
A5	No further action required
NA	Access to survey to be gained prior to refurbishment, demolition or modification of building materials in the area of limited or no access. In some situations access should be provided to survey prior to occupancy if a room is inaccessible.

Table 2 - Overarching Recommended Risk Control Actions

Further interpretation of the recommended risk control actions can be found in Appendix E.

EXAMPLES OF MATERIALS – ASBESTOS	EXAMPLES OF MATERIALS - HAZMAT	SCORE
Asbestos reinforced composites (plastics, resins, mastics, roofing felts, vinyl floor tiles, semi-rigid paints or decorative finishes, asbestos cement etc)	SMF composite products / insulation batts / woven products, Lead paint, Lead Compounds/Alloys/Products, Small PCB containing electrical capacitors	1
Asbestos insulating board, mill boards, other low density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt	RCF woven/treated products, Lead paint flakes, Industrial PCB containing industrial transformers	2
Thermal insulation (eg pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing	RCF loose fill products, Lead dust, PCB containing oils in bulk storage, or uncontained spills.	3

Table 3 - Product Type (or debris)

EXAMPLES OF MATERIALS - ASBESTOS	EXAMPLES OF MATERIALS - HAZMAT	SCORE
Good condition: no visible damage	Good condition: no visible damage	0
Low damage: a few scratches or surface marks; broken edges on boards, tiles etc	Low damage: a few scratches or surface marks; Pealing paint, Large paint flakes, Redundant PCB container in accessible area out of electrical product	1
Medium damage: significant breakage of materials or several small areas where material has been damaged revealing loose asbestos fibres	Medium damage: significant breakage of materials or several small areas where material has been damaged, good condition sprays and insulation, large amounts of fine flaking paint and debris, Leaking PCB containing electrical equipment	2
High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris	High damage or delamination of materials. Visible debris, Lead dust, Pooling PCB oils, leaking oil bulk containers	3

Table 4 - Extent of the Damage or Deterioration

EXAMPLES OF MATERIALS - ASBESTOS	EXAMPLES OF MATERIALS - HAZMAT	SCORE
Composite materials containing asbestos: reinforced plastics, resins, vinyl tiles	SMF/RCF composite products, insulation products sealed behind a non friable barrier, Lead paints <0.1%w/w, lead, compounds/alloys/products <0.1%w/w lead, PCB oils <2mg/kg	0
Enclosed sprays and lagging, asbestos insulating board (with exposed face painted or encapsulated), asbestos cement sheets etc	SMF/RCF woven and insulation products, Lead paints ≥0.1%w/w and <0.25%w/w, PCB ≥2mg/kg and <50mg/kg in oil	1
Unsealed asbestos insulating board, or encapsulated lagging and sprays	SMF/RCF heat-treated insulation products, Lead paints ≥0.25%w/w and <1.0%w/w, Lead dusts above recommended clearance indicator based on AS/NZS4361.2 PCB ≥50mg/kg and <10,000mg/kg in oil	2
Unsealed laggings and sprayed asbestos	Lead dusts a multiple of at least 5 times above recommended clearance indicator based on AS/NZS4361.2, Lead paint >1.0%, ≥10,000mg/kg in oil (10%w/w)	3

Table 5 - Surface type or treatment

[2] Lead and PCB refers specifically to the analysis result

LIKELIHOOD OF EXPOSURE

Occupant Activity

EXAMPLE OF OCCUPANT ACTIVITY	SCORE
Rare disturbance activity (eg little used store room)	0
Low disturbance activities (eg office type activity)	1
Moderate disturbance activity (eg industrial or vehicular activity which may cause contact with ACMs)	2
High levels of disturbance, (eg fire door with asbestos insulating board sheet in constant use)	3

Table 6 - Occupant Activity

LIKELIHOOD OF DISTURBANCE

FREQUENCY OF DISTURBANCE	SCORE
Usually inaccessible or unlikely to be disturbed	0
Minimal likelihood for disturbance	1
Likely disturbance	2
Frequent disturbance	3

Table 7 - Likelihood of Disturbance

HUMAN EXPOSURE POTENTIAL

FREQUENCY OF HUMAN EXPOSURE POTENTIAL	SCORE
Infrequent	0
Monthly	1
Weekly	2
Daily	3

Table 8 - Human Exposure Potential

APPENDIX D: LABORATORY CERTIFICATES

Hazmat Labs

Certificate of analysis – asbestos identification : J220192052022AID

Hazmat Labs
Sydney Site Number 22690
15/77-79 Bourke Road Alexandria NSW 2015
P 02 8339 0312 | E lab@hazmatlabs.com.au | W hazmatlabs.com.au
ABN 92 168 286 600

CLIENT	Hussain Muhhamed	**JOB NUMBER**	J220192
CLIENT CONTACT	Hussain Muhhamed	**DATE RECIEVED**	03/05/2022
CLIENT REFERENCE	J220192	**DATE ANALYSED**	05/05/2022
CLIENT EMAIL	george@jmbec.com.au	**SAMPLE DATE**	03/05/2022
CLIENT TELEPHONE	0413222171	**REPORT DATE**	05/05/2022

TEST METHOD:

Asbestos fibre qualitative determination in bulk & soil samples at Hazmat Labs laboratory, is conducted by polarised light microscopy, in conjunction with the dispersion staining technique. The strategies and methods used are as per AS4964(2004) and in-house SOP JMBEC D123. NATA accreditation number 19564.

SAMPLE REFERENCE	LABORATORY REFERENCE	SAMPLE INFORMATION	SAMPLE DIMENSIONS (mm)/WEIGHT(g)	ANALYTICAL RESULT
J220192255A1	J220192-J220192255A1	Textured Coating	1.70 g	NAD, ORG
J220192255A2	J220192-J220192255A2	Vinyl Tiles - Beige	63.90 g	NAD, ORG
J220192255A3	J220192-J220192255A3	Bitumen	3.50 g	NAD, ORG
J220192255A4	J220192-J220192255A4	Textured Coating	4.20 g	NAD, ORG

NAD	No Asbestos Detected
NADRL	No asbestos found at the reporting limit (0.1g/kg / 0.01%w/w)
CHR	Chrysotile asbestos detected
AMO	Amosite asbestos detected
CRO	Crocidolite asbestos detected
ORG	Organic fibres detected
SMF	Synthetic Mineral Fibre detected
UMF	Unidentified Mineral Fibre detected

NATA
WORLD RECOGNISED ACCREDITATION

APPROVED ANALYST

Name: Vanessa Riley **Signature:**

APPROVED SIGNATORY

Name: Lili Shi **Signature:**

Glossary and notes:

- *AS4964 recommends minimum sample sizes for all materials. In particular, soil sample volume is 60-100ml (approximately 50 to 250g), floor tiles require a recommended minimum of approximately 100cm², general samples should include a full cross section or be thick enough to represent the larger sampled material. It is the sampling party's responsibility to meet these sampling recommendations and others listed in AS4964, as such sample results apply only to the samples as received.*
- *Samples collected and analysed according to National Environment Protection (Assessment of Site Contamination) Measure (NEPM) or WA Department of health (DoH) are not cover by NATA accreditation.*
- *Hazmat Labs require receipt of all samples under a chain of custody, however Hazmat Labs accept no responsibility for the sampling method/location/transportation or packaging of samples from external sources. Please note these results apply only to the samples as received.*
- *"No asbestos detected by Polarized Light Microscopy in conjunction with Dispersion staining techniques. The client is advised to obtain a further result from an independent confirmatory analytical technique due to the nature of sample matrix, e.g. scanning or transmission electron microscopy (SEM/TEM).*

JMBEC D129 / Revision 12 / January 2022

Page 1 of 1

SGS

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	George Barlow	Manager	Huong Crawford
Client	JMB ENVIRONMENTAL CONSULTING PTY LTD	Laboratory	SGS Alexandria Environmental
Address	UNIT 15 77-79 BOURKE ROAD ALEXANDRIA NSW 2015	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	0477 009 396	Telephone	+61 2 8594 0400
Facsimile	(Not specified)	Facsimile	+61 2 8594 0499
Email	george@jmbec.com.au	Email	au.environmental.sydney@sgs.com
Project	**J.220192**	SGS Reference	**SE231546 R0**
Order Number	**J.220192**	Date Received	3/5/2022
Samples	5	Date Reported	6/5/2022

SGS

ANALYTICAL RESULTS SE231546 R0

Metals in Paint by ICPOES [AN065/AN320] Tested: 5/5/2022

PARAMETER	UOM	LOR	J.220192 LP1 PAINT - 3/5/2022 SE231546.001	J.220192 LP2 PAINT - 3/5/2022 SE231546.002	J.220192 LP3 PAINT - 3/5/2022 SE231546.003	J.220192 LP4 PAINT - 3/5/2022 SE231546.004	J.220192 LP5 PAINT - 3/5/2022 SE231546.005
Lead, Pb	%w/w	0.001	**0.009**	**0.029**	**0.022**	**0.30**	**0.14**

APPENDIX E: FURTHER INTERPRETATION OF RECOMMENDED RISK CONTROL ACTIONS

The following details are designed to provide with Smart Planning and Design guidance on recommended practices, summarized from established code of practices and standards, that designed to meet legislation and help implement actionable items identified within this report. This also provides the client with other options available to control risk presented by hazardous materials, that may not have been recommended as best practice, but due to budget and time constraints, are available to reduce the risk presented by a hazardous material.

	ASBESTOS	LEAD	OTHER HAZMAT
CODES OF PRACTICE & STANDARDS	• WHS Regulations 2017 • Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)] • SafeWork Australia How to safely remove asbestos (2016) • SafeWork Australia – How to manage and control asbestos in the workplace (2016) • Australian Standards AS-1715(9) and AS-1716(10)	• WHS Regulations 2017 • National Code of Practice for the Safe Use of Inorganic Lead at Work [NOHSC: 2015(1994)] • AS/NZS4361 (Parts 1 and 2 [2017 & 2017]) Guide to lead paint management	• WHS Regulations 2017 • NSW EPA Polychlorinated Biphenyl (PCB) Chemical Control Order 1997 • Ozone protection and synthetic greenhouse gas management regulations 1996 (amended 2016)
REMOVAL	• Friable - Class A Licensed Asbestos removalist required. Independent LAA to carry out air monitoring and final clearance. • Non-Friable - Minimum Class B Licensed Asbestos removalist required. Independent hazardous	• Lead abatement contractor to remove lead dust or excessive paint debris as per recommendations in the guidance and code of practice. • Removal of paint recommended prior to	• Remove products under controlled conditions. • RCF respirable Synthetic mineral fibres are a category 2 Carcinogen and irritant to the eyes, throat and skin. Disturbance, handling and removal of friable RCF Synthetic Mineral Fibre

	ASBESTOS	LEAD	OTHER HAZMAT
	materials consultant/competent hygienist to carry out final clearance. Air monitoring recommended, especially in sensitive areas such as schools, hospitals, residential areas etc. • All licensable asbestos removal work must be notified to work cover by the licensed removal contractor prior to works undertaken. This process may take up to 5 working days. • Removal of <10m2 of non-friable asbestos can be undertaken without notification, by non-licensed individuals. However it is recommended that this is still conducted by skilled and trained contractors that are aware of the risks and control measures required to safely remove asbestos in accordance with the above codes of practice. • General Notes - Inspect and update register following completion of removal work.	demolition in areas that require hot works or abrasive techniques to prevent airborne lead concentrations exceeding exposure limits. • Lead paint certified contractor required to remove under controlled lead abatement methods with an appropriate SWMS as per AS/NZS4361.2. Uncontrolled removals could cause personal exposure levels in excess of the national exposure limit • Undertake lead air control monitoring during removal works if there are neighboring sensitive receptors such as schools, residential areas, hospitals, offices, parks and playgrounds etc. • Undertake clearance surface lead loading testing in area of removal to ensure satisfactory clean for re-occupation and unrestricted use as per ASNZS4361.2. • Undertake personal exposure monitoring of similar exposure groups (SEGs) to assess occupant exposure against national exposure limits where a lead process is being undertaken. • Inspect and update register following completion of removal work.	product should be undertaken with PPE, RPE and dust suppression. • Airborne fibre monitoring is recommended during the removal of RCF SMF, to maintain respirable fibre levels below 0.5 fibres/ml of air. • Engage a hazardous chemical remediation contractor to design a remedial action plan and safely remediate, spill and contaminated material (including contaminated soil) under controlled conditions ith PPE and RPE fit for task. • Transport and dispose of PCB ballast containing transformers and electrical capacitors at a licensed disposal facility as per the EPA guidelines. • Refrigeration and Air Conditioning equipment (RAC) should be worked on and decommissioned, as per the ozone protection and synthetic greenhouse gas management regulations 1996 (amended 2016). • Inspect and update register following completion of removal work.

	ASBESTOS	LEAD	OTHER HAZMAT
ISOLATION	• Prevent uncontrolled access to contaminated area. Conduct reassurance or background asbestos air monitoring depending on situation of access and/or disturbance. • Access only permitted with preferable face fitted, P2 half face mask, PPE (that includes CE marked Cat3, type 5/6 coveralls, boot covers, disposable gloves) and decontamination procedure in place. • Consider implementation of permit to work system to monitor access. • Consider personal exposure air monitoring during access.	• Prevent uncontrolled access to contaminated area. • Access only permitted with preferable face fitted, P2 half face mask, PPE (that includes CE marked Cat3, type 5/6 coveralls, boot covers, disposable gloves) and decontamination procedure in place. • Consider implementation of permit to work system to monitor access. • Consider personal exposure air monitoring during access.	• Isolate PCB Spill to prevent uncontrolled access. • Use spill kit to contain spill, and sand bags/drainage barriers to prevent run off, further leaching and/or contamination of soil, watercourses, service lines and ground water.
ENCLOSE / SEAL / ENCAPSULATE / REPAIR	• Construct solid sealed enclosure around product and label. Manage friable and badly damaged non-friable materials in situ. • Repair/patch material with non-abrasive or penetrative methods if damage is not significant and access for further damage is limited. • Consider encapsulation of product with general purpose paint as a minimum. • Encapsulate with industrial barrier paint such as Emer-clad or Bostik ET-150, if damage is not significant and access for further damage is limited. • Consider either personal exposure air monitoring or control air	• Enclose contamination permanently behind physical barrier and label product as per AS1319. • Remove paint flakes and associated debris and repaint painted surface to encapsulate lead paint layer. • Maintain condition and inspect annually due to high risk receptors. • Maintain condition and inspect at a minimum interval of 5 years or in line with other hazardous materials. Do not perform abrasive or hot works that create dust, fumes or particulates from product in uncontrolled conditions.	• Consider encapsulation or enclosing SMF insulations to prevent accidental disturbance and irritation of occupants from airborne fibres.

	ASBESTOS	LEAD	OTHER HAZMAT
	• Monitoring during work around material. • Maintain condition and re-inspect in accordance with management plan. Label as per AS1319 • Inspections may be required more regularly depending on condition and location of material.		
ADDITIONAL DEMOLITION / REFURBISHMENT INFORMATION	• Removal of all asbestos products is required prior to any demolition/refurbishment works which may damage or impact the material.	• Although lead content as a %w/w component of demolition waste will be relatively minimal, lead in demolition waste may affect the classification or recyclability of the waste and should be assessed and potentially removed prior to demolition to avoid additional contaminated waste disposal costs. • Lead particulates and debris from uncontrolled demolition may cause personal exposure levels in excess of the national exposure limit.	• PCBs and ODS products remove and dispose of appropriately prior to demolition via use of a qualified contractor, to prevent uncontrolled exposure to the environment (ODS and PCBs) in addition to human exposure for (PCBs only) • SMF products to be appropriately handled with dust suppression to prevent excessive respirable fibre levels during demolition. Preferably soft stripped prior to uncontrolled demolition.
MAINTENANCE SCHEDULE AND MANAGEMENT PLAN	• Asbestos containing materials should be re-inspected for changes in material condition and risk assessed a minimum of every 5 years as per the WHS regulations. However materials in locations likely to be disturbed or in damaged condition may need to be inspected more frequently. Re-inspection and maintenance schedule should be detailed in an asbestos management plan. • Label Product as per AS1319	• Lead containing paints should be repainted as necessary to maintain condition and inspect at a minimum interval of 5 years or in line with other hazardous materials. Do not perform abrasive or hot works that create dust, fumes or particulates from product in uncontrolled conditions. • Where multiple paint layers are present, individual layers may	• Re-inspected as necessary to ensure maintenance of condition. • Risk management program for the systematic removal and disposal of PCB containing capacitors stored on the facility. • Put into place a plan to recover and dispose of ozone depleting refrigerants appropriately at the end of the equipment life prior to disposal of the air conditioning equipment. Refrigeration and Air

	ASBESTOS	LEAD	OTHER HAZMAT
		actually contain lead to a higher concentration.	Conditioning equipment (RAC) should be worked on and decommissioned, as per the ozone protection and synthetic greenhouse gas management regulations 1996 (amended 2016). • Label product as per AS1319.