

# **HAZARDOUS MATERIALS SURVEY**

for

# **University of Newcastle**

**Project** 

305 Mann Street,

**Gosford NSW 2250** 

**Job Number:** J47098 **Date:** 13/12/2022



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This document must be read in its entirety and in conjunction with the attached reports, measurements, and analytical results where they are provided.

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#### **Executive Summary**

On 16<sup>th</sup> November 2022, ESP – Environmental Safety Professionals (ESP) undertook a Hazardous Materials Survey (HMS) of the unoccupied structures at 305 Mann Street, Gosford NSW 2250 (the site) to determine the presence and condition of hazardous building materials.

The survey was authorised by Bailey Trigg of APP Corporation Pty Ltd (the client) and was conducted by an appropriately qualified ESP consultant.

The site inspection included a visual inspection and sampling of suspected asbestos containing materials (ACM) where practicable.

For the purposes of this report, hazardous materials are limited to Asbestos, Synthetic Mineral Fibre (SMF), Polychlorinated Biphenyls (PCB's), Lead in Paint and Ozone Depleting Substances (ODS) and Dangerous Goods.

#### **Summary of Findings**

A summary of findings is provided in Table 1 below.

Table 1 Summary of Hazardous Materials Survey

HAZARDOUS MATERIALS IDENTIFIED	INTERNAL	EXTERNAL
ACM - Friable Asbestos	No	No
ACM - Bonded Asbestos	Yes	No
SMF - Synthetic Mineral Fibre	Yes	No
LEAD in paint	Yes	Yes
PCB's - Polychlorinated Biphenyls	Yes	No
ODS - Ozone depleting substance	No	No
Dangerous Goods	Yes	No



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#### 1.0 Introduction

ESP – Environmental Safety Professionals was engaged by Bailey Trigg of APP Corporation Pty Ltd (the client) to undertake a Hazardous Materials Survey (HMS) of the unoccupied structures at 305 Mann Street, Gosford NSW 2250 (the site) to determine the presence and condition of hazardous building materials.

Structures on the site are proposed for demolition to make way for a new development for the Central Coast Campus for the University of Newcastle Central. The proposed development (State Significant Development SSD-47749715) involves the demolition of the existing structures and construction of a four-storey educational establishment building on the western portion of the site, retail, on-site parking and publicly accessible open space along the western, southern and eastern parts of the site.

This HMS is a requirement for the development planning process. Information in this HMS to be used as inputs into the demolition phase with results provided in a tabular format which is designed to provide readily available information about the presence of hazardous materials in the premises. To this report, hazardous materials are limited to:

- Asbestos Containing Material (ACM)
- Synthetic Mineral Fibre (SMF)
- Polychlorinated Biphenyls (PCB's)
- Lead Containing Paint (LCB)
- Ozone depleting substance (ODS) within air-conditioning units and chillers
- Dangerous goods, and
- Select soil-borne bacteria (total bacteria count including legionella)
- Treated pine (CCA) logs

This HMS has been developed in accordance with New South Wales (NSW) state legislation, industry standards, codes of practice and guidance documents for the management of hazardous materials in workplaces.

Photographs recorded during the HMS are to be used as reference only.



#### 2.0 Objectives & Scope of Survey

The purpose of the HMS was to identify the presence of hazardous materials in the above-mentioned premises and to prepare a register of hazardous materials identified during the survey.

To accomplish this objective, the HMS specifies work practices and procedures to:

- Identify hazardous materials within the building
- Provide a qualitative risk assessment of the hazardous materials identified
- Provide recommendations on control measures
- Prepare a hazardous material register to address legislative compliance.

The survey work and production of this report have been undertaken with consideration of the requirements of:

- NSW Work Health and Safety Regulation 2017,
- SafeWork NSW Code of Practice: How to Manage and Control Asbestos in The Workplace, 2019,
- SafeWork NSW Code of Practice: How to Safely Remove Asbestos, 2019.

No one section or part of a section of this report is to be taken as giving an overall idea of this report. Each section is to be read in conjunction with the whole of this report, including the appendices and attachments.



#### 3.0 Legislation

The HMS has been developed in accordance with the following legislation, industry standards, codes of practice and guidance documents, other reference documents are stated throughout the HMS.

- NSW Work Health and Safety Act 2011
- NSW Work Health and Safety Regulation 2017
- SafeWork NSW How to Manage Asbestos in the Workplace Code of Practice 2019
- SafeWork NSW How to Safely Remove Asbestos Code of Practice 2019
- Australian Standard (AS) 2601-2001 The demolition of structures
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)]
- AS 4964-2004 Method for the qualitative identification of asbestos in bulk samples
- AS 2985-2009 Workplace atmospheres Method for sampling and gravimetric determination of respirable dust
- AS 3640-2009 Workplace atmospheres Method for sampling and gravimetric determination of inhalable dust
- Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)]
- Polychlorinated Biphenyls Management Plan Revised Edition April 2003, published by the Australian and New Zealand Environment and Conservation Council (ANZECC)
- ANZECC Identification of PCB-containing Capacitor's information booklet 1997
- AS 4361.2 1998 Guide to Lead Paint Management Part 2: Residential and Commercial Buildings
- Code of Practice for the Control and Safe Use of Inorganic Lead at Work [NOHSC:2015(1994)]
- NSW Protection of the Environment Operations Act 1997
- NSW Protection of the Environment Operations (Waste) Regulation 1996
- Commonwealth Ozone Protection and Synthetic Greenhouse Gas Management Regulation 1995
- Australian Chlorofluorocarbon Management Strategy October 2001
- Australia and New Zealand Refrigerant Handling Code of Practice 2007 Part 1 Self-Contained Low Charge System
- Australia New Zealand Refrigerant Handling Code of Practice 2007 Part 2 Systems Other than Self-Contained Low Charge System
- Code of Practice for the Control of Workplace Hazardous Substances 2006
- Australia/New Zealand Standard (A/NZ) 4360:2004 Risk Management
- AS 1319-1994 Safety signs for the Occupational Environment
- AS/NZS 60335.269 2003 Household and similar electrical appliances safety requirements for wet and dry vacuum cleaners, including power brush for industrial and commercial use
- AS 4260 1997 High efficiency particulate air filters (HEPA) classification, construction, and performance
- AS/NZS 1716 2012 Respiratory Protective Devices, and
- AS/NZS 1715 2009 Selection, use and maintenance of respiratory equipment.



#### 4.0 Risk Assessments and Hazard Ratings

#### 4.1 Risk Assessment Factors for ACM

- Demolition/refurbishment works that are likely to disturb the ACMs
- The condition of the ACMs. Materials in a poorer condition will pose a higher risk of generating airborne asbestos fibre. Surface treatment of the materials (i.e. painting) is also considered
- The friability of the ACMs is considered. A material's friability represents how easily it can be pulverized. Asbestos product types are generally classified as friable or non-friable, however, severely deteriorated/weathered non-friable materials may be considered friable under certain circumstances; and
- The accessibility/disturbance potential for each ACM is considered. To determine this potential, the following is considered
- The frequency that the area containing the material is entered
- The height at which the material is located
- Processes that occur in the material's location (i.e. forklift use)
- Maintenance activities (i.e. servicing of plant and equipment, general housekeeping –cleaning or painting of surfaces etc.)
- Barriers that prevent the material from being disturbed (i.e. carpet over asbestos-containing flooring), and
- Airflow within the area containing the material.

These factors, as listed above, are used to determine the risk status for each ACM identified during the assessment.

The purpose of the risk assessment is to establish the relative ability of ACMs at the Site to release asbestos fibres into the atmosphere and the likelihood that this will lead to airborne asbestos fibre exposure.

A simple four parameter algorithm is used to assess the risk the likely magnitude of release from the material, given a standard disturbance. This is evaluated using four categories: high, medium, low, and very low. Where these factors have indicated that there is a possibility of exposure to airborne fibres, appropriate recommendations for sealing, encapsulation or removal of the ACMs are made.

#### 4.1.1 Condition

The condition of ACMs identified during the assessment is reported as being either good, fair, or poor.

- Good refers to material that is in sound condition with no or very minor damage or deterioration.
- Fair refers to a material with some areas of damage or deterioration.
- Poor refers to a material that is extensively damaged or deteriorated.

#### 4.1.2 Friability

The friability of ACMs describes the ease in which the material can be pulverized by hand, which in turn, can increase the likelihood to release airborne asbestos fibres.

- **Friable** asbestos can be crumbled, pulverised, or reduced to powder fibre particles by hand pressure when in a dry state increasing the risk of asbestos fibre release.
- **Non-friable** asbestos, also known as bonded asbestos, is typically comprised of asbestos fibres tightly bound in a non-asbestos matrix.



#### 4.1.3 Accessibility/Disturbance Potential

Accessibility/disturbance potential of ACMs can be classified as being low, medium, or high.

- Low accessibility describes ACMs that have very little, or no activity being conducted in the immediate area with the potential to disturb the materials. Low accessibility is considered as monthly occupancy, or less, of the area containing the materials, or the materials are inaccessible due to its height or are enclosed.
- **Medium** accessibility describes ACMs that have moderate activity being conducted in the immediate area with the potential to disturb the materials. Medium accessibility is considered weekly access or occupancy of the areas containing the materials.
- **High** accessibility describes ACMs that have regular activity in the immediate area with the potential to disturb the materials.

#### 4.1.4 Risk Status

The risk factors described above are used to grade the potential health risk rating posed by the presence of ACMs. These risk ratings are described below:

- A low risk describes an ACMs that poses a negligible or low risk to occupants of the area due to the
  materials being one which doesn't readily release fibres unless significantly disturbed. 'Low risk'
  usually applies to non-friable ACMs in at least average condition, or materials with no or low
  accessibility to the area containing them.
- A medium risk describes ACMs that pose a moderate risk due to the materials' condition or composition and the activity conducted in the area. 'Medium risk' usually applies to non-friable ACMs in a state of minor deterioration and in moderate to high activity area, or its apples to accessible friable ACMs in good condition.
- A *high* risk describes ACMs that pose a high health risk to personnel or the public in the material. Immediate action is required to restrict access to the areas to reduce the potential of fibre release. Furthermore, a plan for decontamination and remedial works is required to address the high risk of the material. Materials with a high-risk ranking will be given a 'Priority 1' recommendation to manage the ACMs and reduce the risk.

#### 4.1.5 Priority Rating System for Control Recommendations

The following schedule of risk status priority rating is adopted to assist the site controller in the programming of the management, removal, or encapsulation of the ACMs at the Site.

#### Priority 1: Hazard with High-Risk Potential

**Status:** - ACMs that are either damaged or are being exposed to continual disturbance. Due to these conditions there is an increased potential for exposure and/or transfer of asbestos fibre to other parts of the property if unrestricted use of the area containing the material is allowed.

**Recommendation:** - If the ACMs is in a poor/unstable condition and accessible with a risk to health from exposure, then immediate access restrictions to the immediate area should be applied, air monitoring should be considered, and removal is recommended as soon as practicable using an appropriately licenced asbestos removalist.

#### **Priority 2: Hazard with Medium-Risk Potential**

Status: - ACMs with a medium potential for disturbance due to the following conditions:

- Material has been disturbed or damaged and in its current condition, while not posing an immediate risk, is unstable.
- The material is accessible and can, when disturbed, present a short-term exposure risk.
- The material could pose an exposure risk if workers are in proximity.



**Recommendation:** - If the ACMs is easily accessible but in a stable condition, removal is preferred. Nevertheless, if removal is not immediately practicable, short-term control measures (i.e. restrict access, sealing, enclosure etc.) may be employed until removal can be facilitated as soon as is practical (<3 months).

#### **Priority 3: Hazard with Low-Risk Potential**

**Status:** - ACMs with a low potential for disturbance due to the following conditions:

- The condition of any friable asbestos-containing building material is stable and has a low potential for disturbance i.e. is encased in metal cladding.
- The ACM is in a non-friable condition; however, further disturbance or damage is unlikely other than during maintenance or service and the material therefore does not present an exposure risk unless cut, drilled, sanded, or otherwise abraded.

**Recommendation:** - Minor health risks if the material is left undisturbed under the control of an asbestos management plan. The site controller should consider organising the removal or encapsulation of the damaged non-friable ACM within a practically achievable scheduled timeframe.

These ACMs should be left in present condition, with ongoing maintenance and periodic inspection if they are to remain in-situ.

#### Priority 4: Hazard with Negligible (very low) Risk Potential

**Status:** - ACMs of a non-friable form and in good condition. It is highly unlikely that the materials can be disturbed under normal circumstances, even if they were subjected to minor disturbance, they pose a minor health risk.

**Recommendation:** - These ACMs should be left in a good and stable condition, with ongoing maintenance and periodic inspection. It is advisable that any remaining ACMs or presumptions should be labelled (with a warning against disturbing the materials), and regularly inspected to ensure they are not deteriorating resulting in a potential risk to health.

ACM is stable and effectively sealed against fibre dispersion to the atmosphere. LOW (1-3) Health risk is negligible if left undisturbed and under the control of an asbestos management plan. ACMs have a low potential for secondary contamination. ACM is identified, whilst not seen at present as a substantial risk. Materials are located in areas that are subject to potential deterioration or disturbance and **MEDIUM** possible future risk. Appropriate abatement measures should be taken as soon as (4-6)possible. Until then, appropriate labelling and effective use of an asbestos management plan is seen, as necessary. ACMs have a moderate potential for secondary contamination. ACM is in a damaged/poor condition or friable and exposed state, such that asbestos fibres are being or are likely to be released to the atmosphere. Potential health risk. The immediate removal of this asbestos containing material is **HIGH (>6)** recommended with isolation by signage, barriers and management control until removal is completed. ACMs have a high potential for secondary contamination, or secondary contamination may have already occurred.



#### 4.2 Risk Assessment Factors for LCP

In accordance with AS/NZS 4361.2:2017 *Guide to hazardous paint management,* lead containing paint is defined as "a paint film that contains greater than 0.1% lead by mass in the dry film". Paints manufactured in Australia after 1997 contain 0.1% lead by mass or less.

Lead presents a serious risk to human health if inhaled, ingested or dermally absorbed, especially in children. As stated by SafeWork NSW "exposure to lead can cause headaches, stomach pains and anaemia – or worse, damage to the kidneys, nerves or brain, and even infertility". Exposure to lead should be minimised as far as reasonably practicable.

Environmental considerations for lead include soil, water (including groundwater), and atmospheric contamination. Lead containing paint in poor condition has been shown to leach soluble lead into surrounding soils and groundwater via aqueous pathways, and the atmosphere causing secondary contamination.

The consideration of risk for human exposure and environmental contamination has been determined based upon the preceding information. Table 4.2.1 below summarises risk ratings for LCP.

Table 4.2.1: Risk ratings for LCP

LOW	LCP is stable and effectively sealed against dispersion to the atmosphere. Health risk is negligible if left undisturbed and under the control of a Hazardous Material Management Plan (HMMP). LCP has a low potential for secondary contamination.
MEDIUM	LCP is identified, whilst not seen at present as a substantial risk. Materials are located in areas that are subject to potential deterioration or disturbance and possible future risk. Appropriate abatement measures should be taken as soon as possible. Until then, effective use of a HMMP is seen as necessary. LCP has a moderate potential for secondary contamination.
нідн	LCP is in a damaged/poor condition or flaking and exposed state, such that lead is likely to be released to the surrounding environment. Potential health risk. The immediate removal of this lead containing material is recommended with isolation by signage, barriers and management control until removal is completed. LCP's have a high potential for secondary contamination, or secondary contamination may have already occurred.

J47098 305 Mann St Gosford HMS

<sup>&</sup>lt;sup>1</sup> https://www.safework.nsw.gov.au/hazards-a-z/hazardous-chemical/lead-work



#### 5.0 Limitations

This HMS is intended for the use of the client only and should not be used in isolation for tender response purposes or as a substitute for a Safe Work Method Statement for Demolition Work.

ESP *note* that this HMS is not to be used as a hazardous materials management plan (HMMP) as it would require additional information such as intrusive sampling of all materials, risk assessment, training, consultation, risk control measures and documented safe working practices and procedures [refer to relevant Safe Work Australia (SWA) formerly NOHSC codes of practice and guidance materials on asbestos and Australian Standard AS 2601 - 2001: Demolition of Structures].

ESP *note* that no inspection can be regarded as absolute and that partial or total demolition/refurbishment of structures may reveal instances of ACM in – situ, which were not discovered during this initial inspection, including beneath existing floor coverings, behind ceiling and wall linings, areas like ceiling spaces where access was inaccessible, not available, or not provided at time of inspection. Refer to <u>recommendations</u> regarding a destructive audit prior to demolition works.

This HMS does not report on the presence or otherwise of deleterious dust, debris, and crumbling's within the building/structures (i.e., ceiling spaces, exposed roof structure, duct, and wall cavities etc.). All dust, debris and crumbling's in this environment have the potential to contain asbestos and other particulates such as lead and should be considered in a HMMP when impacting on the building elements/surfaces.

This HMS was undertaken only in those areas where access was available and does not generally include sub floor areas where access is typically restricted or not practicably available. Where observation would necessitate demolition or damage to wall cladding, floor covering, coatings and plant etc., only limited inspection was made.

Some areas of the building may contain concealed pipework that may be lagged in asbestos containing material which could not be accessed or sampled at the time of this inspection.

Materials, which are also not generally accessed for reasons of safety or because of difficulty of access, include light fittings and electrical backing boards.

Limitations apply to the analytical methods used when identifying asbestos fibres in samples. NATA supports this claim by stating that in materials such as vinyl floor tiles, mastics, sealants, putties, and epoxy resins it is extremely difficult to detect the presence of asbestos. This is due to the low grade, small amount, small length and/or diameter of asbestos fibres present in the material.

Measurements/ and quantities mentioned in this report are approximate only.

This survey does not report on potential underground or in - ground/soil hazards or potentially hazardous substances arising from or used in the workplace at the premises.



#### 6.0 Hazardous Materials Information

#### 6.1 Asbestos and its Uses

Asbestos is defined as the fibrous form of mineral silicates. There are two major groups of asbestos:

- Serpentine group of minerals: chrysotile (white asbestos) &
- Amphibole group of minerals: amosite (brown asbestos), crocidolite (blue asbestos) and within, less commercially used forms including actinolite, tremolite and anthophyllite.

Asbestos minerals can be split into elongated long fibres that are strong, flexible and heat resistant. Because of these characteristics, asbestos has been historically used for a wide range of manufactured goods, mostly in building materials, friction products, heat-resistant fabrics, gaskets, and coatings.

#### 6.2 Types of Asbestos Containing Materials

ACMs can be classified into two main groups, friable and non-friable.

ACMs considered to be **friable** can be crumbled, pulverised, or reduced to powder by hand pressure when dry. Friable ACMs are considered higher risk materials as they are more readily damaged, and thus have a greater potential to release fibres into the air.

All other ACM are **non-friable** and are generally considered to be 'low' risk if properly handled. Non-friable ACM are bound in a matrix such as cement (e.g. cement sheeting) or various resin/binders (e.g. vinyl floor tiles).

The following table details the common materials found in the two groups:

Table 3: Types of Asbestos Containing Materials											
Friable	Non-Friable (bonded)										
Sprayed or trowelled materials applied to ceilings, walls, and other surfaces for firerating purposes. This material is often referred to as 'limpet asbestos'.	<ul> <li>Cementitious products, i.e. cement-like or concrete-like products (e.g. 'fibro' and 'Super Six roofing' – see description below).</li> <li>Vinyl tiles, vinyl flooring mastic and associated adhesives. Compounds, gaskets,</li> </ul>										
<ul> <li>Insulation on pipes, boilers, tanks, ducts which is often referred to as asbestos lagging.</li> </ul>	<ul> <li>and mastic from mechanical fittings.</li> <li>Electrical switchboards containing compressed tar mounting boards, cement</li> </ul>										
<ul> <li>Paper products, millboard in electrical switchboards or underlying lining for linoleum or vinyl floor coverings.</li> </ul>	<ul><li>sheeting.</li><li>Roofing sealants, bituminous membranes, tar composites and similar materials.</li></ul>										
Textiles, braided asbestos, rope, tape.											
Millboard from inside auxiliary switchboxes/fuse boards or air-conditioning reheat boxes.											



### 7.0 Hazardous Materials Personal Protective Equipment (PPE)

During hazardous materials abatement works, PPE must be worn by the licenced contractor, the hygienist and other personnel who are required to enter the hazardous material removal area.

The following PPE must be used, as a minimum:

Table 5: Types of Hazardous Materials PPE											
PPE	Picture										
Half faced respirator with a P2 particulate filter cartridge to be used for non-friable/bonded asbestos removal works.  Respirators must comply with AS/NZS 1715 – 2009 Selection, use and maintenance of respiratory equipment.	Sundstr										
Full faced respirator with a P2/P3 particulate filter cartridge to be used for friable asbestos removal works.  Respirators must comply with AS/NZS 1715 – 2009 Selection, use and maintenance of respiratory equipment.											
Disposable coveralls rated Type 5 or equivalent e.g. Tyvek											
Disposable Gloves											
Disposable Booties											

It is important to note that the disposable coveralls, booties, and gloves are one use only and must be disposed of as hazardous waste after each use. Respirators need to be decontaminated. Cartridge should be inspected and replaced as required dependent upon type and duration of usage.



# 8.0 Uncovering of Suspected Hazardous Materials

It is possible that hazardous materials, which may be concealed within inaccessible areas/voids, may not have been located during previous surveys. Such inaccessible areas fall into several categories as outlined in **Table 6** below.

#### Table 6: Examples of inaccessible areas

Underneath the concrete slab of all building structures at the Site.

Exposed soils surrounding the building structures of the Site.

Energised services, gas, electrical, pressurised vessel, and chemical lines.

Height restricted areas above 2.7m or any area deemed inaccessible without the use of specialised access equipment.

Within cavities that cannot be accessed by the means of a manhole or inspection hatch.

Within voids or internal areas of plant, equipment, air-conditioning ducts etc.

Within service shafts, ducts etc., concealed within the building structure.

Within those areas accessible only by dismantling equipment.

Within totally inaccessible areas such as voids and cavities present but intimately concealed within

the building structure.

All areas outside the Scope of Work.

Without substantial demolition of a building, it is not possible to guarantee that every hazardous material has been identified.

If the sample returns a positive result, then the material should be removed by an appropriately licenced removal contractor. If the material is to remain in situ, the hazardous materials register, and report should be updated to reflect the new findings.

If the sample returns a negative result, the hazardous materials register, and report should be updated to reflect the new findings and works can continue as normal.



#### 9.0 Abbreviations & Glossary

**ACM:** Asbestos Containing Material.

**Assumed to Contain:** Item not tested but based upon materials properties, age or dynamics It is presumed to contain asbestos.

**Asbestos:** The fibrous form of the mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals and includes actinolite, amosite (brown asbestos), anthophyllite, crocidolite (blue asbestos), chrysotile (white asbestos), tremolite, or any material containing one or more of the mineral silicates belonging to the serpentine and amphibole groups.

**CFCS:** Corrugated Fibrous Cement Sheeting.

**Class A asbestos removal licence:** A licence issued by SafeWork NSW which allows the holder to remove friable ACM and non-friable ACM as specified in the licence.

**Class B asbestos removal licence:** A licence issued by SafeWork NSW which allows the holder to remove non-friable ACM as specified in the licence.

**Consultation:** Means the sharing of information and exchange of views between managers, workers and/or their representative(s) on health and safety issues. It includes the opportunity to contribute to decision making in a timely fashion to resolve hazardous substance risks.

**Dust and Debris:** Means visible particles, fragments, or chunks of material, large and heavy enough to have settled in the work area.

**External:** Refers to the top or outside of roof sheeting or the outside of building/wall sheeting.

**Exposure:** Means contact that may occur between a hazardous substance and an individual. Exposure commonly occurs through 3 main routes – ingestion, inhalation, and skin contact. Routes of entry may include through the eyes, ears or other body cavities and surfaces.

FFCS: Flat Fibrous Cement Sheeting.

**Friable asbestos material:** The material contains asbestos and, when dry, the material may be crumbled, pulverised, or reduced to powder by hand pressure, or as a result of a work process becomes such that it may be crumbled, pulverised, or reduced to powder by hand pressure.

**Hazard:** Anything that has the potential to result in harm to a person.

**High risk situation:** Where there is some likelihood of access to hazardous materials, wherein a person may be placed at risk.

**HMMP:** Hazardous Material Management Plan.

**HMS:** Hazardous Material Survey.

Internal: Refers to the underside of roof sheeting, or the inside of building/wall sheeting.

**LCP:** Lead Containing Paint (paint with a lead concentration of >0.1% w/w).

Leave in situ: ACM identified but is in good condition, bonded and poses low risk to human health.

**LP:** Lead Paint.

NAD: No Asbestos Detected.

**NATA:** National Association of Testing Authorities.

**NOHSCH:** National Occupational Health and Safety Commission.

**Non-friable asbestos material:** Means any material (<u>with the exception of friable asbestos material</u>) that contains asbestos.



PCB's: Poly Chlorinated Biphenyls.

**PDS:** Pre-Demolition Survey.

**Practicable:** having regard to:

- The severity of the hazard or risk in question,
- The state of knowledge about the hazard or risk,
- The availability and suitability of ways to remove or mitigate that hazard or risk; and
- The cost of removing or mitigating that hazard or risk.

Risk: is the likelihood that harm will occur.

Material Safety Data Sheet (MSDS): A document which a manufacturer or importer must prepare, amend, provide, and review that describes the properties and uses of chemicals (which may be hazardous substances and/or dangerous goods). An MSDS must state the product name; identify ingredients, chemical and physical properties, health hazard information, precautions for safe use and handling, and the manufacturers or importer's name and Australian contact details.

**SMF:** Synthetic Mineral Fibre.

VFC: Vinyl Floor Covering.

VFT: Vinyl Floor Tiles.

WHS: Work Health and Safety.



# Appendix 1. Register of Hazardous Materials

							HAZARDOL	JS MATERIAL	REGISTER					
Client:	University of	Newcas	tle	Site Address:	305 Mann Stree	et, Gosford N	SW 2250				ESP Job No: J4	17098		Date Surveyed: 16.11.2022
		Location	1	Material Description								Management		
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
	MAIN BUILDING (FORMER MITRE 10)													
-	External	G	Framing	I Beam	White Paint	LP	LP01	<0.1% Lead w/w	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste
4	External / Internal	G / 1 <sup>st</sup>	Throughout	Roof / ceiling	Sarking	SMF	-	Assumed to Contain SMF	-	-	-	Unlikely	LOW	General Waste
-	External	G	Front of building	Brick wall	Paint	LP	LP02	<0.1% Lead w/w	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste
-	External	G	Front of building	Ground	VFT debris	ACM	As ASB02	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	G	Rear dock 1	Ceiling / walls	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
5	Internal	G	Rear Dock 2	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
-	Internal	G`	Garden centre	Floor	Cream VFT	ACM	ASB01	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	G	Garden centre	Floor	Yellow VFT	ACM	ASB02	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	G	Garden centre	Floor	Green VFT	ACM	ASB03	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	G	Garden centre	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
-	Internal	G	Throughout	Walls	Grey paint	LP	LP03	<0.1% Lead w/w	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste

J47098\_305 Mann St Gosford\_HMS Page 18 of 29



							HAZARDOU	JS MATERIAL	REGISTER					PROFESSIONALS
Client:	University o	f Newcas	tle	Site Address:	305 Mann Stree	et, Gosford N	ISW 2250				ESP Job No: J	17098		<b>Date Surveyed:</b> 16.11.2022
		Location	1	Material Description								Management		
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
-	Internal	G	Main shop floor	Floor	Cream / Yellow / Green VFT	ACM	ASB01 / ASB02 / ASB03	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	G	Main shop floor	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
-	Internal	G	Main shop floor	Step	Grey VFC	ACM	ASB04	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	G	Shop floor toilet	Wall	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
5	Internal	G	Shop floor storeroom	Wall	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	-	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
6	Internal	G	Shop floor storeroom	Hot water system	Insulation	SMF	-	Assumed to contain SMF	-	-	-	Unlikely	LOW	General Waste
-	Internal	G	Kitchen adj. stairwell	Wall	Blue paint	LP	LP04	<0.1% Lead w/w	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste
-	Internal	G	Kitchen adj. stairwell	Floor	Cream VFT	ACM	As ASB01	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	G	Kitchen adj. stairwell	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
-	Internal	G	Stairwell	Floor	Cream VFT	ACM	As ASB01	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	G	Stairwell	Walls	Blue / grey paint	LP	As LP03 / LP04	<0.1%	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste
5	Internal	G	Stairwell	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste

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							HAZARDOU	JS MATERIAL	REGISTER					PROFESSIONALS
Client:	University of	Newcas	tle	Site Address:	305 Mann Stree	et, Gosford N	ISW 2250				ESP Job No: J4	17098		<b>Date Surveyed:</b> 16.11.2022
		Location	1	Material Description								Management		
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
-	Internal	1 <sup>st</sup>	Stairwell	Floor	Cream VFC	ACM	ASB05	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	1 <sup>st</sup>	Stairwell	Wall	Blue / grey paint	LP	As LP03 / LP04	<0.1%	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste
7	Internal	1 <sup>st</sup>	Hallway	Electrical switchboard	Bituminous panel	ACM	-	Assumed to contain asbestos	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
5	Internal	1 <sup>st</sup>	Hallway	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
-	Internal	1 <sup>st</sup>	Hallway	Floor	FFCS debris	ACM	As per ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	1 <sup>st</sup>	Kitchen	Wall	FFCS	ACM	ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	1 <sup>st</sup>	Kitchen	Ceiling	FFCS	ACM	As per ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	1 <sup>st</sup>	Kitchen	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
-	Internal	1 <sup>st</sup>	Kitchen	Floor	FFCS debris	ACM	As per ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	1 <sup>st</sup>	Kitchen	Floor	Cream VFC	ACM	ASB07	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	1 <sup>st</sup>	Main room	Floor	FFCS debris	ACM	As per ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	1 <sup>st</sup>	Main room	Shelving	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste

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							HAZARDOL	JS MATERIAL	REGISTER					PROFESSIONALS
Client:	University of	f Newcas	tle	Site Address:	305 Mann Stree	et, Gosford N	ISW 2250				ESP Job No: J	17098		Date Surveyed: 16.11.2022
		Location	1	Material Description								Management		
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
	Internal	1 <sup>st</sup>	Main room	Mezzanine	-	-	-	-	-	-	-	-	-	Unknown - Not inspected or accessed due to WHS risk factors
	Internal	1 <sup>st</sup>	Ceiling spaces		-	-	-	1	-	-	-	-	-	Unknown – Unable to access Not inspected due to WHS factors
-	Internal	1 <sup>st</sup>	Store room adj. main room	Wall	FFCS	ACM	As per ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
-	Internal	1 <sup>st</sup>	Store room adj. main room	Ceiling	FFCS	ACM	As per ASB06	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
5	Internal	1 <sup>st</sup>	Store room adj. main room	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
5	Internal	1 <sup>st</sup>	All meeting rooms	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
12	Internal	1 <sup>st</sup>	All meeting rooms	Walls and Ceiling	Insulation	SMF	-	Assumed to contain SMF	-	-	-	Unlikely	LOW	General Waste
-	Internal	1 <sup>st</sup>	All meeting rooms	Sash Window	Light-blue paint	LP	LP05	<0.1%	-	-	-	-	LOW	Does not constitute Lead Paint – General Waste
8	External	1 <sup>st</sup>	All meeting rooms	Sash Windows and External surrounds	Cream paint	LP	LP06	3% Lead w/w (Lead Paint)	-	-	-	Likely	HIGH	Lead Paint – Remove and Vacuum any paint flakes from surrounding area prior to demolition and dispose of as hazardous waste.
-	External	1 <sup>st</sup>	All meeting rooms	Windows	Window putty	ACM	ASB08	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
10	Internal	1 <sup>st</sup>	SW meeting room	East wall	FFCS	ACM	ASB09	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition

J47098\_305 Mann St Gosford\_HMS Page 21 of 29



	HAZARDOUS MATERIAL REGISTER													
Client:	Jniversity of	f Newcas	tle	Site Address:	305 Mann Stree	et, Gosford N	ISW 2250				ESP Job No: J	17098		<b>Date Surveyed:</b> 16.11.2022
		Location	1	Material Description								Management		
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
9	Internal	1 <sup>st</sup>	SW meeting room	Electrical switchboard	Bituminous panel	ACM	-	Assumed to contain asbestos	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
11	Internal	1 <sup>st</sup>	W meeting room	East wall	FFCS	ACM	As ASB09	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
11	Internal	1 <sup>st</sup>	W meeting room	Ceiling	FFCS	ACM	As ASB09	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
								GARAGE						
5	Internal	G	Main garage	Ceiling	Fluorescent light fittings	РСВ	-	Assumed to contain PCBs	-	-	-	Unlikely	LOW	Remove capacitors prior to demolition and dispose of as hazardous waste
15	Internal	G	Main garage	Infill panels	Cream paint	LP	LP07	0.2% Lead w/w (Lead Paint)	-	-	-	Likely	HIGH	Lead Paint – Remove and Vacuum any paint flakes from surrounding area prior to demolition and dispose of as hazardous waste.
-	Internal	G	Main garage	Bench	Insulation	SMF	-	Assumed SMF	-	-	-	Likely	LOW	General Waste
13	Internal	G	Main garage	Sub-floor	FFCS pier packers	ACM	-	Assumed to contain asbestos	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition

J47098\_305 Mann St Gosford\_HMS Page 22 of 29



							HAZARDOI	JS MATERIAL	REGISTER					PROFESSIONALS
Client:	Jniversity o	f Newcas	stle	Site Address:	305 Mann Stree			33 WATERIAE	NEGISTER		ESP Job No: J4	17098		Date Surveyed: 16.11.2022
		Location	1		Materi	al Description	on		Risk Assessment					Management
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
14	Internal	G	Garage basement	Floor	20L container	Poison	-	Contains dangerous chemical	-	3	2	Unlikely	HIGH	Prior to demolition dispose of as hazardous waste
	OUTBUILDING (ADJACENT MAIN BUILDING)													
16	Internal	G	Main room	Ceiling	FFCS	ACM	ASB10	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
17	Internal	G	Small room	Ceiling	FFCS	АСМ	As ASB10	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
17	Internal	G	Small room	Wall	FFCS	ACM	As ASB10	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
17	Internal	G	Toilet	S wall	FFCS	ACM	As ASB10	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
17	Internal	G	Toilet	Ceiling	FFCS	ACM	As ASB10	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition

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														PROFESSIONALS
	HAZARDOUS MATERIAL REGISTER													
Client: University of Newcastle			Site Address: 305 Mann Street, Gosford NSW 2250						<b>ESP Job No</b> : J47098			Date Surveyed: 16.11.2022		
Location			Material Description					Risk Assessment				Management		
Photo No.	Internal / External	Floor	Location / Room	Surface Description	Material Description	Туре	Sample ID	Result	Friability	Condition	Accessibility	Potential for Secondary Contamination	Risk Rating	Comment
17	Internal	G	Toilet	Infill above door	FFCS	ACM	As ASB10	Chysotile asbestos detected	1	2	2	Unlikely	MED	Engage Licensed Asbestos Removalist to remove in accordance with Code Of Practice How To Safely Remove Asbestos prior to demolition
	REAR CARPARK													
-	External	G	Throughout	Expansion joint between concrete slabs	Caulking	ACM	ASB11	Negative	-	-	-	-	LOW	Does not contain asbestos – General Waste
18	External	G	Raised garden beds	-	Soils	Bacterial	S_01	Negative	-	-	-	-	LOW	Does not contain Legionella
	External	G	Raised garden beds	Garden frames	Treated logs	CCA	-	Assume positive	-	-	-	-	LOW	General Waste

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Appendix 2. NATA Laboratory Results



# **CERTIFICATE OF ANALYSIS**

Work Order : ES2241621

ESP - ENVIRONMENTAL & SAFETY PROFESSIONALS

Contact : Geoff Howard

Address : 5 Newton St

Broadmeadow 2292

Telephone : ---

Client

Project : 305 Mann St, Gosford NSW

Order number : J47098

C-O-C number : ----

Sampler : Geoff Howard, Tom Weingarth

Site : ---

Quote number : EN/222 - PRIMARY WORK ONLY

No. of samples received : 7
No. of samples analysed : 7

Page : 1 of 4

Laboratory : Environmental Division Sydney

Contact : Customer Services ES

Address : 277-289 Woodpark Road Smithfield NSW Australia 2164

Telephone : +61-2-8784 8555

Date Samples Received : 17-Nov-2022 11:09

Date Analysis Commenced : 18-Nov-2022

Issue Date : 18-Nov-2022 18:23



ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

#### Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories Position Accreditation Category

Ivan Taylor Analyst Sydney Inorganics, Smithfield, NSW

Page : 2 of 4
Work Order : ES2241621

Client : ESP - ENVIRONMENTAL & SAFETY PROFESSIONALS

Project : 305 Mann St, Gosford NSW

# ALS

#### **General Comments**

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

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

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

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

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key: CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

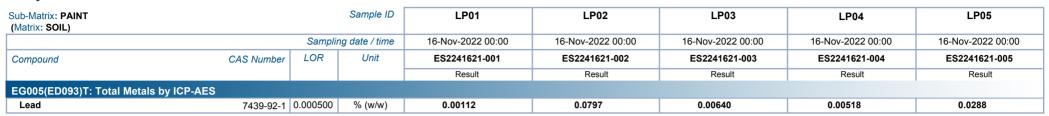
- ^ = This result is computed from individual analyte detections at or above the level of reporting
- ø = ALS is not NATA accredited for these tests.
- ~ = Indicates an estimated value.

Page : 3 of 4
Work Order : ES2241621

Client : ESP - ENVIRONMENTAL & SAFETY PROFESSIONALS

Project : 305 Mann St, Gosford NSW

# Analytical Results



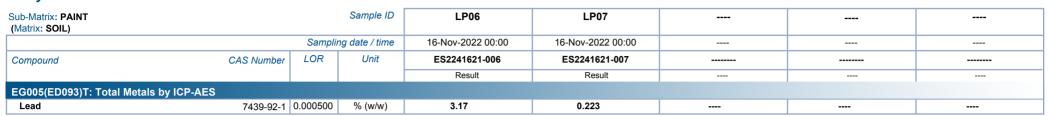


Page : 4 of 4
Work Order : ES2241621

Client : ESP - ENVIRONMENTAL & SAFETY PROFESSIONALS

Project : 305 Mann St, Gosford NSW

# Analytical Results







Melbourne Laboratory Unit 2/2B Parker Street Footscray, Victoria 3011 Ph: (03) 9688 8000

#### ASBESTOS IDENTIFICATION REPORT

Date: 21 November 2022

ESP Job Number: J47098

**Customer:** University of Newcastle

Address: University Drive, Callaghan, NSW

Attention: David Quayle

Reference: HMS Gosford

Site Address: 305 Mann St, Gosford NSW

Sampled By: ESP – Thomas Weingarth

Date Sampled: 16 November 2022

Date Analysed: 21 November 2022

Test Method: Qualitative identification of asbestos types in bulk samples by polarised light microscopy, including

dispersion staining and trace analysis, with a calculated practical detection limit of 0.01 %, using

methodology in accordance with AS 4964 and ESP in-house Method No. 2.

ESP Lab No.	Sample location (if provided) and sample description	Result	Notes
E82314	1: ASB01 - Cream vinyl floor tile - Garden centre – Vinyl material (60 x 45 x 3 mm)	No asbestos detected	~
E82315	2: ASB02 - Yellow vinyl floor tile - Garden centre – Vinyl material (90 x 30 x 3 mm)	No asbestos detected	~
E82316	3: ASB03 - Green vinyl floor tile - Garden centre – Vinyl material (100 x 35 x 3 mm)	No asbestos detected	~
E82317	4: ASB04 - Grey vinyl lining - South end of main shop floor – Vinyl material (85 x 40 x 2 mm)	No asbestos detected	~
E82318	5: ASB05 - Stairwell vinyl floor covering - cream – Vinyl material (25 x 20 x 2 mm)	No asbestos detected	~
E82319	6: ASB06 - Upstairs kitchen - wall flat fibro cement sheet – Fibro cement material (115 x 45 x 2 mm)	No asbestos detected Organic fibre detected	





ESP Lab No.	Sample location (if provided) and sample description	Result	Notes
E82320	7: ASB07 - Upstairs kitchen - vinyl floor covering – Vinyl material (35 x 30 x 2 mm)	No asbestos detected Synthetic mineral fibre detected	~
E82321	8: ASB08 - Upstairs external window putty – Mastic (85 x 25 x 10 mm)	No asbestos detected	~
E82322	9: ASB09 - Upstairs internal South-West room - wall flat fibro cement sheet – Fibro cement material (45 x 25 x 5 mm)	Chrysotile asbestos detected	-
E82323	10: ASB10 - Outbuilding - main room ceiling - flat fibro cement sheet – Fibro cement material (80 x 35 x 6 mm)	Chrysotile asbestos detected	-
E82324	11: ASB11 - External rear carpark - expansion joint membrane – Bituminous material (50 x 20 x 10 mm)	No asbestos detected Organic fibre detected	-

The results contained in this report relate only to the sample(s) submitted for testing.

#### Notes:

Approved Identifier: Ross Cooper Approved Signatory: Ross Cooper

<sup>~</sup> As noted in AS 4964, as bestos may be difficult to detect in materials of this type. Therefore, confirmation by another analytical technique is a dvised.

<sup>^</sup> Soil samples exceeding 100 g are examined for fibrous material, and sub-sampled to approximately 40 g using an approved sub-sampling technique (ISO 23909). Sub-sampling may limit the likelihood of detection of asbestos in the sample.

<sup>#</sup> Mineral fibres of unknown type were detected using polarized light microscopy including dispersion staining. The fibres detected may or may not be asbestos fibres. To confirm the identities of the fibres, another independent analytical technique is required.

<sup>+</sup> Dimensions in the 'Result' column indicate the approximate total dimensions of the asbestos fibres/bundles of the preceding type of asbestos.



# **ANALYTICAL REPORT**

REPORT CODE AR-22-NV-016006-01

29/11/2022 REPORT DATE

Eurofins Environment Testing Australia Pty Ltd

For the attention of **Analytical Reports** 

6 Monterey Road **Dandenong South** 3175 Melbourne **AUSTRALIA** 

Phone

Email EnviroReportsau@eurofins.com

Contact for your orders:

**Submission Reference:** 

Ruvini Herath Merged from order Order code: **Purchase Order Number:** 

EUAUTWU-00025215

942895

cau001-order-942895-221122.xml

**SAMPLE CODE** 726-2022-00042435

22-No0048545 **Client Reference:** 

Sample described as: S-01 22/11/2022 **Reception Date: Analysis Starting Date:** 22/11/2022

Sampled Date & Time: 16/11/2022 12:00:00 **Analysis Ending Date:** 29/11/2022

**RESULTS** LOQ

♦ VQ243 Heterotrophic Colony Count

Analysis Starting Date: 22/11/2022 11:00

Heterotrophic Plate Count cfu/ml 100 5.80x10<sup>5</sup>

VQ248 Total Legionella

Analysis Starting Date: 22/11/2022 11:00

Total Legionella cfu/ml <10 10

**LIST OF METHODS** 

Di Shen

VQ243 **Heterotrophic Colony Count:** Internal Method VQ248 Total Legionella: AS 3896

**Signature** 

Scientist

**Eurofins Food Testing Australia Pty Ltd** 

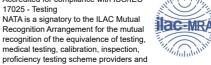
6 Monterey Road **Dandenong South** Melbourne VIC 3175 **AUSTRALIA** 

Phone +61385645000

https://www.eurofins.com.au/food-testing

Accredited for compliance with ISO/IEC

Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates. Accreditation Number 20293







#### **EXPLANATORY NOTE**

- Test is not accredited
- Test is subcontracted within Eurofins group and is accredited 0
- Test is subcontracted within Eurofins group and is not accredited
- Test is subcontracted outside Eurofins group and is accredited
- Test is subcontracted outside Eurofins group and is not accredited

#### N/A means Not applicable

Not Detected means not detected at or above the Limit of Quantification (LOQ)

LOQ Limit of Quantification

**U** Measurement Uncertainty

- < Less than, ≤ Less than or equal to
- > Greater than, ≥ Greater than or equal to

The tests are identified by a 5 digit code, full details can be provided on request.

Information supplied by the client. This information can have an impact on the validity of results.

Samples are tested as received and the results relate only to the sample tested.

Analysis date is reported as the start date of extraction for a method.

The results may not be reproduced except in full, without a written approval from the laboratory.

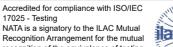
Eurofins General Terms and Conditions apply.

#### **END OF REPORT**

**Eurofins Food Testing Australia Pty Ltd** 

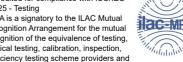
6 Monterey Road **Dandenong South** Melbourne VIC 3175 **AUSTRALIA** 

Phone +61385645000 https://www.eurofins.com.au/food-testing



Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Accreditation Number 20293









# Appendix 3. Photographs



<u>Photo 1</u> North side of site



Photo 2
East side of site



Photo 3
South side of site



<u>Photo 4</u> SMF in sarking throughout



<u>Photo 5</u> PCBs in fluoro light capacitors



<u>Photo 6</u> SMF in HWC ground floor store room





Photo 7

ACM (assume pos) in bitumous panel electrical backing board level 1 hallway



Photo 8

Lead in paint (3% w/w sample LP06) External window frames and surrounds 1<sup>st</sup> floor

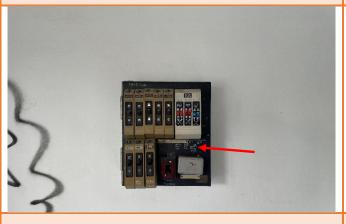


Photo 9

ACM (assume pos) in bitumous panel electrical backing board level 1 SW corner meeting room



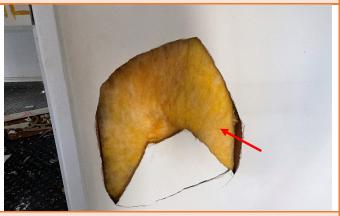
Photo 10

ACM (Chrysotile asbestos sample ASB09 ) in cement sheet of East wall level 1 SW corner meeting room



Photo 11

ACM (Chrysotile asbestos sample as per ASB09 ) in cement sheet of East wall and ceiling level 1 west meeting room



 $\frac{\text{Photo 12}}{\text{1}^{\text{st}}} \text{floor thoughout SMF in wall and ceiling insulation}$ 





Photo 13
Garage subfloor - Cement sheet (assumed ACM) stump packing



<u>Photo 14</u> Garage basement – tin of hazardous chemical



 $\frac{\text{Photo 15}}{\text{Garage wall - Lead in paint (0.2% w/w sample LP07) board}}$  east wall



 $\frac{\text{Photo 16}}{\text{Outbuilding - ACM (Chrysotile asbestos sample ASB10 ) in }}$  cement sheet ceiling throughout



Photo 17
Outbuilding toilet - ACM (Chrysotile asbestos as per sample ASB10 ) in cement sheet ceiling and walls



Photo 18 S\_01 soil from rear garden area

Appendix 4







TITLE: Satellite Map

SITE: 305 Mann St, Gosford NSW 2250

**CLIENT**: APP

Job Number: J47098

Re-Survey Date: N/A

**LEGEND** 

**Survey Area** 

North

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