

HAZARDOUS MATERIALS SURVEY REPORT

136 NEW SOUTH HEAD ROAD
EDGECLIFF NSW, 2027



Status of hazardous materials at 136 New South Head Road



WARNING: Hazardous materials identified at the Site.

Refer to the report in its entirety for details of identified hazardous materials and the associated limitations (e.g. areas unable to be assessed).



Question today *Imagine tomorrow* Create for the future

Hazardous Materials Survey Report
136 New South Head Road Edgecliff NSW, 2027
LENDLEASE DEVELOPMENT

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REV	DATE	DETAILS
A1	26 November 2024	Initial Draft Report Issued to Client
A2	29 November 2024	Final Report Issued to Client

	NAME	DATE	SIGNATURE
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GLOSSARY

Report / Register – Risk Assessment Glossary

Primary Location/Room	The primary location description of the material described in the hazardous materials register (e.g. Main Office).
Secondary Location/Application	Means the use or application of the material described in the asbestos register (e.g. wall lining, floor covering, soffit lining, pipe lagging, etc.).
Material/Product Description	Refers to the type of known/suspected ACM identified (e.g. vinyl tile, fibre cement sheeting, fibrous insulation, etc.). Does not refer to the use or application of the material. This is covered in 'Secondary Location/Application'.
Friable (Asbestos)	Means asbestos-containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.
Non-Friable (Bonded Asbestos)	Material containing asbestos that is not friable asbestos, includes materials containing asbestos fibres reinforced with a bonding compound.
Condition (Good)	Condition of a material where: — The material has no evidence of any significant damage/deterioration. — The material is in, or is close to, 'as new' condition.
Condition (Fair)	Condition of a material where: — There is some minor damage or wear throughout the extent of the material. — There is some obvious damage or significant wear but only in localised areas.
Condition (Poor)	Condition of a material where: — The material exhibits consistent damage or wear throughout the extent of the material. — Major or significant damage is evident, even if only in localised areas. — Any non-fixed material (e.g. debris).
Disturbance (Low)	The potential for disturbance is low when: — Activities in the area where the hazardous material is located are unlikely to result in damage or deterioration of the material. — The material is completely isolated from normal day to day activities. — The material is completely protected from nearby activities by an enclosure or encapsulation.
Disturbance (Medium)	The potential for disturbance is medium when: — Activities in the area have a potential to mildly impact upon the material and the activities are infrequent — The material is protected from activities by an enclosure or encapsulation, however the protection is not comprehensive.
Disturbance (High)	The potential for disturbance is high when: — Activities undertaken in the area are likely to result in immediate damage to identified hazardous materials — Activities in the area, whilst typically of low impact, happen on a regular basis and are likely to result in deterioration or damage to the material in the short to medium term.

Report Glossary

Airborne asbestos	Any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
Asbestos	The asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
Asbestos Cement (AC)	Products consisting of sand aggregate and cement reinforced with asbestos fibres (e.g. asbestos cement pipes and flat or corrugated asbestos cement sheets).
Asbestos containing material (ACM)	Any material, object, product or debris that contains asbestos.
Asbestos contaminated dust or debris (ACD)	Dust or debris that has settled within a workplace and is (or is assumed to be) contaminated with asbestos.
Asbestos removal work	Work involving the removal of asbestos or ACM, friable asbestos removal work or non-friable asbestos removal work.
Asbestos removalist	A person conducting a business or undertaking who carries out asbestos removal work.
Asbestos-related work	Work involving asbestos.
Competent person	A person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work.
Dust and debris	Visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.
Hazard	Anything in the workplace that has the potential to harm people and the environment.
Inaccessible areas	Areas that are difficult to access, such as wall cavities and the interiors of plant and equipment.
In-situ asbestos	Asbestos or ACM fixed or installed in a structure, equipment or plant but does not include naturally occurring asbestos.
NATA-accredited laboratory	A testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.
Person conducting a business or undertaking (PCBU)	A person conducts a business or undertaking is one who meets the definition outlined in Section 5 of the WHS Act.
Person with control	In relation to premises, a person who has control of premises used as a workplace. The person with control may be: — The owner of the premises — A person who has, under any control or lease, an obligation to maintain or repair the premises — A person who is occupying the premises — A person who can make decisions about work undertaken at the premises.
Respirable asbestos	An asbestos fibre that: — Is less than 3 microns (μm) wide — Is more than 5 μm long — Has a length to width ratio of more than 3:1.
Risk	Refers to the level of risk posed by the ACM based on its condition, friability, potential for disturbance (accessibility) and other factors such as proposed demolition/refurbishment works. Refer to the Risk Matrix in Appendix D
Sealed	Refers to whether the ACM is encapsulated with a sealant (such as paint, wall paper, etc.), concealing its exposed surfaces.

Airborne asbestos	Means any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
Asbestos	Means the asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
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Asbestos Cement (AC)	Means products consisting of sand aggregate and cement reinforced with asbestos fibres (e.g. asbestos cement pipes and flat or corrugated asbestos cement sheets).
Asbestos containing material (ACM)	Means any material, object, product or debris that contains asbestos.
Asbestos contaminated dust or debris (ACD)	Means dust or debris that has settled within a workplace and is (or assumed to be) contaminated with asbestos.
Asbestos removal work	Means work involving the removal of asbestos or ACM, friable asbestos removal work or non-friable asbestos removal work.
Asbestos removalist	Means a person conducting a business or undertaking who carries out asbestos removal work.
Asbestos-related work	Means work involving asbestos.
Competent person	Means a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work.
Condition (Fair)	Means: — There is some minor damage or wear throughout the extent of the material — There is some obvious damage or significant wear but only in localised areas.
Condition (Good)	Means: — The material has no evidence of any significant damage/deterioration — The material is in, or is close to, 'as new' condition.
Condition (Poor)	Means: — The material exhibits consistent damage or wear throughout the extent of the material — Major or significant damage is evident, even if only in localised areas — Any non-fixed material (e.g. debris).
Disturbance (High)	Means: — Activities undertaken in the area are likely to result in immediate damage to identified hazardous materials — Activities in the area, whilst typically of low impact, happen on a regular basis and are likely to result in deterioration or damage to the material in the short to medium term.

Disturbance (Low)	Means: — Activities in the area where the hazardous material is located is unlikely to result in damage or deterioration of the material — The material is completely isolated from normal day to day activities — The material is completely protected from nearby activities by an enclosure or encapsulation.
Disturbance (Medium)	Means: — Activities in the area have a potential to mildly impact upon the material and the activities are infrequent — The material is protected from activities by an enclosure or encapsulation, however the protection is not comprehensive.
Dust and debris	Means visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.
Friable (Asbestos)	Means asbestos-containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.
Hazard	Anything in the workplace that has the potential to harm people.
Inaccessible areas	Means areas which are difficult to access, such as wall cavities and the interiors of plant and equipment.
In-situ asbestos	Means asbestos or ACM fixed or installed in a structure, equipment or plant but does not include naturally occurring asbestos.
Material/Product Description	Refers to the type of known/suspected ACM identified (e.g. vinyl tile, fibre cement sheeting, fibrous insulation, etc). Does not refer to the use or application of the material. This is covered in 'Application (secondary location)'.
NATA-accredited laboratory	Means a testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.
Non-Friable (Bonded Asbestos)	Means material containing asbestos that is not friable asbestos, includes materials containing asbestos fibres reinforced with a bonding compound.
Person conducting a business or undertaking (PCBU)	A person conducts a business or undertaking is one who meets with the definition outlined in Section 5 of the WHS Act.
Person with control	Means, in relation to premises, a person who has control of premises used as a workplace. The person with control may be: — The owner of the premises — A person who has, under any control or lease, an obligation to maintain or repair the premises — A person who is occupying the premises — A person who is able to make decisions about work undertaken at the premises.
Primary Location/Room	Means the primary location description of the material described in the hazardous materials register (e.g. Main Office).

Respirable asbestos	Means an asbestos fibre that: — Is less than 3 microns (µm) wide — Is more than 5 microns (µm) long — Has a length to width ratio of more than 3:1.
Risk	Refers to the level of risk posed by the ACM based on its condition, friability, potential for disturbance (accessibility) and other factors such as proposed demolition/refurbishment works. Refer to the Risk Matrix in Appendix A .
Sealed	Refers to whether or not the ACM is encapsulated with a sealant such as paint, wall paper, etc. concealing its exposed surfaces.
Secondary Location/Application	Means the use or application of the material described in the asbestos register (e.g. wall lining, floor covering, soffit lining, pipe lagging, etc).

ABBREVIATIONS

A	Amosite Asbestos (brown Asbestos)
AC	Asbestos cement (Asbestos-containing fibrous cement material)
ACD	Asbestos contaminated dust or debris
ACM	Asbestos containing material
AMP	Asbestos management plan
ARCP	Asbestos removal control plan
ASCC	Australian Safety & Compensation Council
C	Crocidolite Asbestos (blue Asbestos)
CH	Chrysotile Asbestos (white Asbestos)
EPA	Environment Protection Authority
FC	Fibre cement (usually sheeting)
Fibres/mL	Countable fibres per millilitre of air sampled
L/min	Litres per minute of air
LAA	Licensed asbestos assessor
NAD	No Asbestos Detected
NATA	National Association of Testing Authorities, Australia
NOHSC	National Occupational Health and Safety Commission
ODS	Ozone Depleting Substance
OH&S	Occupational health and safety (also, refer to WH&S)
PAM	Presumed Asbestos material
PCB	Polychlorinated biphenyls
PCBU	Person conducting a business or undertaking
PPE	Personal protective equipment
RPE	Respiratory protective equipment
SMF	Synthetic Mineral Fibre
SWMS	Safe work method statement
WH&S	Workplace health and safety

EXECUTIVE SUMMARY

WSP Australia Pty Ltd (WSP) was engaged by Lendlease Development (referred to as the 'Client') to undertake a hazardous building materials survey of 136 New South Head Road, located at Edgecliff, NSW 2027 (referred to as the 'Site'). The area is to undergo major redevelopment, and the existing building is to be retained with only localised demolition works internally due to the building being heritage listed.

SITE NAME	136 New South Head Road
SITE ADDRESS	Edgecliff NSW 2027
SURVEYOR NAME	Kaushik Botta and Leigh Rampley
SURVEY DATE	15 November 2024 and 18 November 2024

The Client's objective is to comply with applicable legislative and the State Significant Development Guidelines - Safety Environmental Assessment Requirements (SSD – SEAR's) clause requirement by providing a hazardous materials survey of a building proposed to be demolished or altered so that they can be safely removed and lawfully disposed of, as required. The hazardous materials targeted as part of the survey were:

- Asbestos-Containing Materials (ACM)
- Lead-based paints (LBP)
- Lead in dust
- Synthetic mineral fibres (SMF)
- Polychlorinated biphenyl (PCB)
- Other, as sighted only

The scope of services for this inspection comprised a detailed visual inspection of all accessible areas on the Site (buildings, structures and plant). Representative samples were collected from materials suspected of being ACM or lead containing. All data generated from the survey was used to create an hazardous materials register (Appendix A) and assesses the risk associated with identified hazardous material (refer to risk matrix in Appendix D).

FINDINGS

The following table summarises asbestos/hazardous materials identified or presumed (assumed) during the Site inspections. Refer to Section 6 for recommendations.

MATERIAL	IDENTIFIED/PRESUMED	RISK RANGE*		
136 New South Head Road				
Friable ACM	Yes	Low	to	Low
Non-friable ACM	Yes	Low	to	Medium
Synthetic Mineral Fibres	Yes	Low	to	Low
Lead Based Paints	Yes	Low	to	High
Lead in Dust	Yes	High	to	High
PCBs	Yes	Low	to	Low

*No high-risk asbestos materials were identified during the Site inspection. The risk arising from potential exposure to hazardous materials must be managed in accordance with the *NSW WHS Regulation clause 49* during demolition works.

1 INTRODUCTION

WSP Australia Pty Ltd (WSP) was engaged by Lendlease Development (referred to as the 'Client') to undertake a hazardous building materials survey of 136 New South Head Road, located at Edgecliff, NSW 2027 (referred to as the 'Site'). The area is to undergo major redevelopment, and the existing building is to be retained with only localised demolition works internally due to the building being heritage listed.

This report presents the findings of the inspection conducted on 15 November 2024 and 18 November 2024.

No one section or part of a section of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including the asbestos register and sample results.

1.1 OBJECTIVE

The Client's objective is to comply with applicable legislative and the State Significant Development Guidelines - Safety Environmental Assessment Requirements (SSD – SEAR's) clause requirement by providing a hazardous materials survey of a building proposed to be demolished or altered so that the materials can be safely removed and lawfully disposed of, as required.

1.2 SCOPE OF WORK

WSP's completed scope of work is summarised below:

- Attended Site to undertake building (structure and plant) survey inspections in safely accessible areas while the building was still operational
- Collected representative asbestos and lead samples, where safe to do so, to:
 - Confirm the presence/absence of asbestos or lead materials
 - Assess the condition and potential for disturbance of hazardous materials encountered; and
 - Determine the approximate extent and quantities of hazardous materials
- Hazardous materials were photographed
- The Site survey encompassed all accessible Site buildings, features, services, ceilings, roofing and areas of the Site. Where areas were inaccessible or samples could not be collected, this was noted.

1.3 SURVEY TYPE

The demolition and refurbishment survey was undertaken by visual inspection and through intrusive investigations and destructive sampling, where safe to do so, and analysis of those areas of the site accessible at the time of the survey. Intrusive/Destructive Survey Inspections are normally undertaken at the time of (or immediately prior to) the refurbishment or demolition works being undertaken. This type of survey is fully intrusive using destructive investigation techniques and sampling regimes, therefore as a consequence, the potential exists for the disturbance for any asbestos and other hazardous materials present. This type of survey requires more personal protection measures being undertaken for the surveyor. However, as stated previously the building and services are presumed to be live and occupied, therefore the intrusiveness of the survey will be restricted as to not impact services, operations or occupants.

All safely accessible external and internal areas of the Site was inspected. The inspection included general building areas, occupied areas, ceiling spaces, sub floors, roof spaces, plant equipment and platform areas. Where it was not possible to collect a sample of a suspect material, records were included in the hazardous materials register as "assumed/presumed material". All inaccessible areas were noted.

2 SITE INFORMATION

2.1 SITE DETAILS

WSP was engaged to complete an hazardous materials survey of the following Site.

Table 2.1 Site details

SITE NAME	136 New South Head Road
SITE ADDRESS	Edgecliff NSW 2027
MAJOR SITE STRUCTURES	136 New South Head Rd
APPROXIMATE AGE OF SITE	c1940

2.2 SITE DESCRIPTION

Details of the buildings are presented below:

Table 2.2 Building description

BUILDING	BUILDING DESCRIPTION	APPROXIMATE BUILDING AGE
136 New South Head Rd	A two-storey commercial building. Consisting of rendered double brick walls, timber frame and floorboards, on concrete slab with tiled roof construction. Heritage listed. The building was operational with separate tenants on Ground Floor (commercial space) and 1st Floor (residential and commercial space).	c1940

The building was operational and occupied during the site inspections.

The inspection was intrusive, but not destructive, and limited to the building(s) listed above. Hazardous materials located in inaccessible areas, or located in areas that posed an unacceptable risk to health and safety (e.g. live electrical areas, confined spaces, etc.), were not inspected or sampled during the survey.

3 HAZARDOUS MATERIALS RISK ASSESSMENT

To assess the health risk posed by the presence of ACMs, SMF, lead based paint, lead in dust and PCBs while in-situ, the following factors must be considered:

3.1 ACM & SMF RISK ASSESSMENT FACTORS

These factors include:

- Condition of the material. This is described as being either good (not been damaged or have not deteriorated), medium (minor deterioration or damage) or poor (materials which have been extensively damaged, or their condition has deteriorated over time);
- Proximity of air plenums and direct air stream;
- Friability of the material (ease with which the material can be crumbled) listed as either friable or non-friable;
- Requirement for access for building or maintenance operations and accessibility (low, medium or high);
- Likelihood of disturbance of the material;
- Exposed surface areas and;
- Environmental conditions.

These aspects are in turn judged upon; (i) potential for fibre generation; and, (ii) the potential for exposure. When these factors have indicated that there is a possibility of exposure to airborne fibres, appropriate recommendations for repair, maintenance or abatement of the asbestos containing materials are made.

3.2 LEAD BASED PAINT RISK ASSESSMENT FACTORS

Risk assessment factors include:

- Concentration of lead in paint;
- Condition of the paint.
- Deterioration/damage (peeling, flaking);
- Proximity of air plenums, direct air stream and sensitive receptors such as foodstuffs;
- Ease with which the paint can be disturbed/removed;
- Requirement for access for building or maintenance operations and accessibility (low, medium or high); and
- Magnitude of exposed surface areas.

These aspects are in turn judged upon the potential for exposure. When these factors have indicated that there is a possibility of exposure to lead-based paint/dust, appropriate recommendations for the repair, maintenance, abatement and removal of the paint are made.

3.3 POLYCHLORINATED BIPHENYLS (PCBS) RISK ASSESSMENT FACTORS

Risk assessment factors include:

- The manufacture age and location of the capacitor;
- The condition of the capacitor (visible leaks/spills of fluid);
- Potential of exposure to the PCBs from contact with capacitors;
- Ease with which the capacitors can be accessed and;
- The requirement for access to light fittings for building or maintenance operations and accessibility (low, medium or high).

As above, these aspects are in turn judged upon the potential for exposure. When risk factors have indicated a possibility of exposure to PCBs, appropriate recommendations for the removal and disposal of the capacitors are made.

3.4 DUST

Risk assessment factors include:

- Dust loading;
- Surface area/spaces;
- Likelihood of disturbance of the material;
- Environmental conditions; and;
- Inherent risk.

Dust has a high disturbance potential and high risk of exceeding exposure standards as can easily become airborne.

4 SURVEY METHODOLOGY

4.1 SITE INSPECTION

The Site inspection involved a thorough and systematic walkthrough of the buildings and structures. Access was made only where safe access by solid floors, decking, walkways, protected catwalks or ladders was available. Minimal to no disturbance of any equipment was undertaken as part of the survey as all plant, electrical installations, pipe-work and associated equipment were considered live at the time of the survey.

The identification of hazardous materials involved a combination of visual inspection of the accessible areas of the building/structure and the collection of small representative samples (where required as sample collection is not always a requirement during asbestos surveys) of the suspect materials for analytical confirmation. Where identical suspect materials were detected at different locations, visual confirmation only may have been made rather than additional sample collection.

Observations recorded for known and suspected hazardous materials included details of the:

- Location
- Condition
- Potential for disturbance/accessibility
- Friability
- Quantity/extent.

4.2 ASBESTOS SAMPLE ANALYSIS

Representative samples of materials suspected of containing asbestos were collected and analysed by WSP's in-house NATA accredited laboratory. The identification of asbestos fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. This is detailed in Australian Standard 4964-2004 'Method for the qualitative identification of asbestos in bulk samples'. Asbestos samples were only collected for analysis where the safety of personnel would not be compromised. Sampling was conducted in accordance with WSP's in-house standard operating procedures.

4.3 COLLECTION OF DATA

Following the hazardous materials inspection survey and any subsequent sample analysis, all data collected was tabulated to form a hazardous materials register that includes risk ratings, location, and representative photos.

4.4 INACCESSIBLE AREAS

Hazardous materials located in inaccessible areas, or located in areas that pose an unacceptable risk to health and safety (e.g. live electrical areas), were not inspected or sampled during the survey. Common locations where access may be limited or missing are listed below:

- Inside set ceilings, wall cavities or other voids/areas (e.g. fire doors) concealed within a building structure that cannot be accessed without major dismantling or demolition works.
- Roofs, ceiling spaces and other height restricted areas that cannot be accessed without specialised equipment
- Within confined spaces
- Energised services, including gas and electrical connected to mains
- Areas where access would create an unacceptable risk to building occupants.

The following table summarises inaccessible areas identified during the Site inspection.

Table 4.1 Summary of inaccessible areas at time of inspection

INACCESSIBLE AREAS	DETAILS
External Underground services	No access - below ground
Roof Void Roof void, risers/voids	No access - Enclosed voids
External Exteriors	Heritage listed
External Roof	No access - Height restricted
Level 1 Fireplace	No access - Major demolition, heritage
Roof Void Roof void, stored items	No access - Tenant personal items, out of scope
Level 1 to Roof, chimney shaft	No access - Enclosed void

4.5 IDENTIFICATION OF MATERIAL

4.5.1 ASBESTOS CONTAINING MATERIALS (ACM)

Representative samples of materials suspected to contain asbestos were collected and analysed at WSP Australia's NATA Accredited Laboratory. The identification of asbestos fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. This is detailed in Australian Standard 4964-2004 '*Method for the qualitative identification of asbestos in bulk samples*'. Asbestos samples were only collected for analysis where the safety of personnel would not be compromised. Sampling was conducted in accordance with the WSP Australia's in house survey guide.

4.5.2 LEAD-BASED PAINTS

Representative samples of paint suspected to be lead based were collected and analysed at external NATA Accredited Laboratory. Laboratory analysis of lead based paints is used to achieve a reportable weight by weight percentage of lead throughout the paint layers and is reported against AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings lead containing paint system level of 0.1 per cent (w/w) of the dried film.

The analysis of the physical samples is achieved by digestion of the sample for determination of lead content by one of two methods, atomic absorption spectroscopy (AAS) or inductively coupled plasma emission spectrometry (ICP-AES). Collection of lead based paint samples was only conducted where the safety of personnel would not be compromised. Sampling was conducted in accordance with the WSP Australia's in house survey guide and AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings.

Sampling methodology will consider the various paint coats and record these layers accordingly, these observations will be referred to alongside the analytical sample results to acknowledge that lead paint layers of varying lead content will affect the analytically observed lead weight concentration recorded from the sample. To this end, where multiple lead paint layers have been visually recorded but analytically determined lead percentage of the collective paint layers is below actionable limits, the paint undercoats may still be determined as hazardous due to its dilution in the sample by the non-lead topcoats. Sampling methodology may also consist of the use of a lead paint chemical colorimetric test reagent that can provide an instantaneous result of lead presence within specific layers. This testing will however be used in conjunction with a physical sample to determine the lead concentration as above.

4.5.3 LEAD IN DUST

In the absence of regulatory guidelines, WSP has adopted guidelines from AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings. This has been justified in WSP's technical memo TM01/18 "Lead in Dust Guidance Levels" dated 9th July 2018. The adopted guidelines for commercial facilities are listed in the table below.

Table 4.2 Adopted lead in dust surface loading guidelines for commercial facilities

Commercial Facilities Areas	Concentration
Ceiling dust	8 mg/m ²
Interior surfaces	5 mg/m ²
Floors and eating areas	1 mg/m ²

These surface contamination reference limits should be used as a guideline to assist in the evaluation and control of workplace housekeeping standards and not as defined lines between safe and un-safe levels. Wherever possible, surface dust loading levels should be as low as reasonably achievable (ALARA). The ALARA principal is recommended to keep any potential hazardous material exposures as much below the guidelines as practicable

4.5.4 SYNTHETIC MINERAL FIBRES (SMF) MATERIALS

If representative samples of materials suspected to contain asbestos were collected and analysed at WSP Australia's in-house NATA Accredited Laboratory, SMF can also be identified. The identification of SMF fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. Alternatively, our experienced surveyor visually identified and recorded the presence of synthetic mineral fibre products onsite.

4.5.5 POLYCHLORINATED BIPHENYLS (PCBS)

Where access was available, and power was isolated representative examples of each major type of fluorescent light fittings were examined to determine which lights were fitted with PCB containing ballast capacitors. The details of the brand, model of each capacitor and capacity were recorded and checked against with the ANZECC database of known PCB capacitors and PCB free capacitors.

The Australian and New Zealand Environment Conservation Council 'Polychlorinated Biphenyls Management Plan, November 1996' outlines the National Strategy for the management of PCBs.

The document defines PCB materials and wastes as follows:

Table 4.3 PCB Concentration Classification

PCB CONCENTRATION	WASTE CLASSIFICATION
<2 mg/kg	PCB free
2 mg/kg to <50 mg/kg	Non-scheduled PCB material or waste
>50 mg/kg	Scheduled PCB material or waste
>100,000 (10%)	Concentrated PCB material

5 RESULTS / FINDINGS

All data generated from the survey was used to create an hazardous materials register (Appendix A) with photographs of site structures (Appendix B) and documented materials. A risk assessment was completed for known and suspected hazardous materials using the risk matrix presented in Appendix D.

This section summarises findings from the survey.

Table 5.1 Summary of identified or presumed (presumed) asbestos or hazardous containing materials

MATERIAL	IDENTIFIED/PRESUMED	RISK RANGE*		
136 New South Head Road				
Friable ACM	Yes	Low	to	Low
Non-friable ACM	Yes	Low	to	Medium
Synthetic Mineral Fibres	Yes	Low	to	Low
Lead Based Paints	Yes	Low	to	High
Lead in Dust	Yes	High	to	High
PCBs	Yes	Low	to	Low

*No high-risk asbestos materials were identified during the Site inspection. The risk arising from potential exposure to hazardous materials must be managed in accordance with the *NSW WHS Regulation clause 49* during demolition works.

6 RECOMMENDATIONS

6.1 GENERAL RECOMMENDATIONS

To ensure that identified hazardous materials are appropriately managed, WSP recommends the following:

- Refer to the hazardous materials register and specific management actions to remove/maintain identified hazardous materials to ensure that health and environmental risks are appropriately managed.
- Inaccessible areas should be assumed to contain hazardous materials and managed accordingly until such time that this can be assessed by a competent person.
- All Assumed Positive ACM should be treated as asbestos and all requirements for removal asbestos must be followed, until such time as proven otherwise with testing has confirmed that it is not or does not contain asbestos.
- All Safe Work Method Statements (SWMS) must identify hazardous materials on site as part of demolition works and any safe systems of work put into place to manage the risk.
- The survey was undertaken using limited destructive methods and intrusive methods. There may remain a potential for hazardous materials to be concealed within the building structure(s) where it would only be possible to locate during controlled demolition or dismantling. Accordingly, caution should be exercised where subsequent demolition or dismantling of the structure(s) is required.
- If Unexpected finds and/or any suspected materials are identified during works, stop work, restrict area, engage a qualified hygienist (Such as WSP) to sample materials and test in a NATA registered laboratory for the presence of hazardous materials.
- Activities near hazardous materials should be restricted to minimise the potential for damaging hazardous materials.
- Ensure a current copy of the hazardous materials register is kept on Site, and readily available to personnel, employees and any contractors likely to encounter hazardous materials.
- Implement control measures to minimise dust disturbance and ingestion/inhalation pathways for dust containing lead.
- Further investigation is required for the items where limited access was available and the extent of the hazard was not determined (e.g. subfloor areas). Sampling and analysis of these areas is required to remedial plan (technical specification for removal).
- Prior to works that may disturb accumulated dust a risk assessment should be undertaken and at a minimum housekeeping and hygiene controls should be implemented such as dust suppression, use of PPE including nitrile gloves and suitable decontamination such as hand washing.

6.2 REMOVAL RECOMMENDATIONS:

- A technical specification for removal of hazardous materials should be developed to form a scope of work, and to provide guidance on the remediation/removal works to be undertaken and clearance to be achieved in a safe manner, as well as to set legislative requirements for stakeholders.
- Remove all identified and presumed hazardous materials that will be disturbed by the scheduled demolition works (as far as reasonably practical) by an appropriately licensed/experienced abatement contractor prior, where required.
- Disposal receipts should be obtained from the removal contractor as evidence that the waste has been taken to an appropriate landfill facility and disposed of lawfully.

6.2.1 ASBESTOS:

- Engage a licensed asbestos removal contractor (LARC) to undertake removal/remediation works of any ACMs that will be disturbed by the proposed works under controlled conditions prior to refurbishment or demolition works. A Class A (friable) LARC must be engaged for friable asbestos removal works.
- All removal works must be undertaken in accordance with *NSW WHS Regulations* and the *Code of Practice How to safely remove asbestos*.
- Engage an independent asbestos hygienist (competent person or licensed asbestos assessor) to undertake asbestos fibre air monitoring during and after the remedial/removal works and a visual inspection at the completion of the removal works, where required. Following the clearance inspection a clearance certificate must be issued prior to the area being reoccupied for demolition or other work. A LAA must be engaged for asbestos hygiene works associated with Class A (friable) LARC works.
- All licensed asbestos removal work must be notified to the state regulator in writing at least five days before licensed asbestos removal work commences as stated in the *NSW WHS Regulations*.
- The Licensed Asbestos removalist must obtain the asbestos register of the workplace before commencing licensed asbestos removal work. The register must be reviewed and if necessary revised if asbestos removal work is being conducted to be sufficient for asbestos remediation/removal to be undertaken.
- All associated asbestos waste must be disposed of lawfully in accordance with the waste disposal procedures and personal decontamination must be carried out in accordance with *NSW WHS Regulations*, *Code of Practice How to safely remove asbestos* and the *Environmental Protection guidelines*.

6.2.2 HAZMAT:

- Removal of contaminated dust and lead based paint may be undertaken by an appropriately experienced lead abatement contractor, WSP recommend a Class A (LARC) for such works, however, using suitable controls and PPE in accordance with *AS/NZS 4361.2:2017 Guide to hazardous materials paint management – Part 2: Lead paint in residential, public or commercial buildings*.
- The contractor should assess if “Lead Risk Work” is to be undertaken and whether the work is likely to cause lead levels in the worker’s blood to exceed healthy levels. Lead Risk Work must be notified to the state regulator in writing at least seven days before the work commences as stated in the *NSW WHS Regulations*.
- Lead waste must be handled appropriately and disposed of according to the relevant state or territory waste regulations.
- Remove under controlled conditions all items identified as containing Polychlorinated Biphenyls. Capacitors and electrical components items must be de-energised by a licensed electrician. Appropriately experienced contractors should use appropriate Personal Protective Equipment (PPE) including face shield, gloves, skin and eye protection.
- Appropriately dispose of items identified as containing Polychlorinated Biphenyls in accordance with waste and environmental protection guidelines.
- Remove SMF under controlled conditions, by an appropriately experienced contractor in accordance with the requirements of the *Code of Practice for the Safe Use of Synthetic Mineral Fibres NOHSC:2006(1990)*. Contractors should use appropriate Personal Protective Equipment (PPE) including skin, eye and respiratory protection.
- Control measures for the exposure and safe disposal of chemicals must be followed as per Chemicals SDS or label on each container.
- Gas cylinders should be handled and disposed of safely.

WSP may assist with the implementation of any of the above recommendations.

7 GENERAL MANAGEMENT GUIDELINES

7.1 HAZARDOUS BUILDING MATERIALS MANAGEMENT PLAN

To assist in the management of hazardous materials and to ensure compliance with relevant regulations, it is recommended that a separate Hazardous Materials Management Plan be prepared, which should include information regarding:

- Roles and responsibilities
- Prohibitions
- Management plan and register reviews
- Labelling
- Demolition and refurbishment works
- Remediation works
- Incidents and emergencies
- Record keepings

Hazardous materials outlined in this report are not to be disturbed (e.g. brushed, sanded or tooled in any way) to prevent the generation of dust and minimise the potential health risks.

7.2 ASBESTOS GENERAL MANAGEMENT GUIDELINES

WSP Australia has provided the following recommendations as a general guide for the safe removal of asbestos containing materials in accordance with the requirements of *NSW WHS Regulations and SafeWork NSW How to Safely Remove Asbestos, Code of Practice 2022*.

If friable asbestos is identified the following is recommended:

- Access be restricted to areas where friable asbestos is present, and a management plan be implemented to control the risk of human exposure. Where practicable, positively identified asbestos containing materials should be labelled to indicate the presence of asbestos.
- Any persons wishing to access areas where presumed friable asbestos exists are to undertake a suitable and sufficient Risk Assessment prior to doing so, the results of which may include the use of appropriate Personal Protective Equipment (PPE) such as disposable coveralls and respiratory protection.
- Consideration should be given to engaging a qualified and experienced asbestos consultant to conduct a program of asbestos air monitoring in/around area containing friable asbestos to document airborne asbestos levels and help assess the exposure risk to occupants.
- Consideration should be given to engaging a qualified and experienced asbestos consultant to conduct a program of settled dust sampling/analysis to more accurately assess the extent of asbestos contamination that may be present.

If non-friable asbestos such as fibre cement sheeting (flat and corrugated), pipes and visually identified electrical distribution boards are identified, the following is recommended:

- All damaged / poor condition ACM should have access restricted and make safe works conducted to seal exposed damaged areas. A management plan is to be implemented to control the risk of human exposure to damaged asbestos materials. Where practicable, positively identified asbestos containing materials should be labelled to indicate the presence of asbestos.
- All non-friable ACM in an in-tact condition may remain in-situ provided they are not drilled, ground or otherwise disturbed. If damaged, broken pieces are to be removed as soon as practicable. As part of good ongoing management we recommend regular inspections of ACM left in-situ to check the condition of these materials.
- Any areas of the workplace that contain ACM including plant, equipment and components should be signposted with appropriate warning signs to ensure that asbestos is not unknowingly disturbed without the correct precautions being taken. These signs should be placed at all the main entrances to the work areas where asbestos is present and should conform with *Australian Standard 1319-1994 Safety Signs for the Occupational Environment*.
- This document should be held as an Asbestos Register of the areas inspected and updated as indicated in Section 2.1 or earlier where ACM have been disturbed or a risk assessment indicates the need for re-assessment. All occupiers of the workplace are to be provided with a copy of this register and all updates to it.
- In order to comply with the applicable legislation (Appendix H), implement a hazardous materials management plan. A suitably qualified and experienced consultant can advise and assist in developing an appropriate management plan.
- Prior to the commencement of any specific asbestos removal works, a site and material specific asbestos removal control plan must be developed by a competent person such as a licenced asbestos assessor or licensed asbestos removal contractor.
- All persons engaged in asbestos removal work should wear appropriate PPE including respiratory protective equipment (RPE) conforming with the requirements of AS/NZS 1716:2012, *Respiratory Protective Devices* and AS/NZS 1715:2009, *Selection, Use and Maintenance of Respiratory Protective Equipment*. Protective disposable coveralls must be chosen that provide particle-tight protection (Type 5) and limited splash-tight protection (Type 6). Disposable coveralls should not have external pockets or Velcro fastenings.
- All removal work and asbestos disposal should be carried out in accordance with the applicable legislation (Appendix H).
- All fibre air monitoring shall be carried out by a competent person or licenced asbestos assessor with NATA accreditation in accordance with National Occupational Health and Safety Commission (NOHSC), Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)], NOHSC, Australia.
- Personal decontamination must be undertaken each time workers leave the asbestos work area and at the completion of the asbestos removal work. Personal decontamination should be undertaken within the nominated decontamination area. The extent of decontamination required is dependent upon the type of asbestos being removed. If friable asbestos is being removed, then a three-stage wet decontamination unit shall be required. If it is noted that non-friable ACM is being removed this may be undertaken in a nominated dry decontamination area.
- A clearance inspection of the work area shall be undertaken at the completion of the asbestos removal works by a licenced asbestos assessor.

7.3 GENERAL LEAD PAINT / DUST MANAGEMENT

If lead containing paints and / or lead in dust are identified the following management controls are recommended:

- Lead paint in poor, flaking condition must be remediated as soon as reasonably practicable.
- Paint in good condition may remain in situ provided it is not disturbed and maintained in a good condition.

All lead paint removal/stabilisation must be undertaken in accordance with AS/NZS 4361.2:2017, *Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings*. It should be noted that this

document does not replace AS/NZS 4361.2:2017. Rather it provides general advice to assist with the creation of a site-specific document to facilitate the safe removal/stabilisation of lead paint works.

This document provides general guidance for the removal of lead based paint systems via various methods commonly employed such as the use of a chemical strippers and the stabilisation of flaking lead based paints via scraping and wet sanding. Reference is made to a particular brand name of chemical stripper; however, this advice does not replace information provided by the manufacturer and one should always refer to the products guidance and relevant Australian legislation, standards, MSDS and guidance material.

In addition, it provides guidance for decontamination procedures. Disposal requirements and provisions for lead air monitoring and clearance inspections.

While it may not be practicable to remove lead based paints, it is important to ensure they are appropriately managed to minimise risks. To achieve this WSP recommends the following management measures be implemented in relation to the handling of any suspected lead based paints:

- Do not disturb lead based paints. If activities are likely to disturb lead based paints, their use should only be permitted with appropriate controls in place.
- Keep children and pets away from lead based paints and make sure they don't eat or play with paint debris.
- Do not burn lead paint or timber that is coated with paint containing lead.
- Ensure demolition staff are aware of the safety issues associated with lead and encourage good hygiene practices, with facilities to be available for hand washing before eating.
- Air monitoring can be considered to provide assurance to regulators and personnel that activities are not generating airborne lead dust.
- Should any lead exposure be suspected, health surveillance monitoring can be undertaken. If this is necessary, having baseline health surveillance results (blood lead testing) for comparison purposes would be beneficial and this should be considered in consultation with the occupational hygienist prior to commencing any refurbishment / demolition activities.

7.3.1 LEAD PAINT CLEARANCE

- Following the completion of the lead based paint removal works the occupational hygiene consultant will be required to undertake a thorough visual inspection of the work area and transit route.
- If removal works are not to the satisfaction of the occupational hygiene consultant, removal contractors will be required to re-enter the work area and rectify any issues arising from the inspection.
- AS/NZS 4361.2:2017 states that following the completion of works and the appropriate clean-up of the area, samples of dust can be collected and sent for analysis to determine if there has been a significant impact on the property and surrounding area from works undertaken and if the building is safe to reoccupy. Clearance dust samples can be collected and compared with the surface dust loading levels detailed within Table 4.1.
- Only following satisfactory clearance inspection, air monitoring and dust sampling, will removal works be deemed as completed.
- A final inspection of the work site will be required by the occupational hygiene consultant following removal of enclosure and equipment to ensure no debris or dust remains onsite.

7.4 GENERAL SMF MANAGEMENT GUIDELINES

All SMF removal should be done in accordance with the National Occupational Health and Safety Commission *National Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC: 2006 (1990)]. Some of the practices recommended are as follows:

- The work area should be designated by using barricade tape and signs where workable. Persons not involved in the removal should not be within 3 metres of the designated area.
 - Waste shall be placed in plastic bags or other containers which prevent fibre and/or dust emission, and disposed of in accordance with local waste disposal authority requirements.
 - PPE including goggles, half-face P2 respirator, gloves, long sleeve and loose fitting clothing should be worn.
-

7.5 GENERAL PCB MANAGEMENT GUIDELINES

To manage the potential risks associated with PCBs should any be identified, WSP recommends the following:

- A certified and experienced electrician, aware of the hazards associated with PCBs and able to identify suspect PCB containing materials, should be used to isolate electricity and advise on the removal requirements.
- If any suspect PCB containing materials are suspected, the presence of PCBs should be further assessed against the 1997 ANZECC *Identification of PCB-Containing Capacitors*. Information Booklet to identify PCB-containing capacitors.
- If PCB containing materials are confirmed to exist, the appropriate PPE (disposable suits, nitrile gloves, full face shield and hair protection) should be worn in case materials (e.g. capacitors) are damaged and potentially leaking PCBs. PCB containing materials should be carefully removed so as not to further damage them and prevent leakage and cross contamination.
- Removal staff are to be aware of the safety issues associated with PCBs and encourage good hygiene practices after handling PCBs with facilities to be available for washing.
- Any identified PCB-containing materials and PPE are to be placed in strong sealed polyethylene bags and then sealed in a sturdy metal drum with an absorbent material added to absorb any leaking PCB. All drums should be labelled '**PCB Waste**' and be appropriately stored and disposed.

8 LIMITATION STATEMENT

This Report is provided by WSP Australia Pty Limited (*WSP*) for Lendlease Development (*Client*) in response to specific instructions from the Client and in accordance with WSP's fee proposal dated 11 October 2024 Rev002 and executed agreement (Medium Professional Services Contract) with the Client dated 15 November 2024 (*Agreement*).

8.1 PERMITTED PURPOSE

This Report is provided by WSP for the purpose described in the Agreement and no responsibility is accepted by WSP for the use of the Report in whole or in part, for any other purpose (*Permitted Purpose*).

8.2 QUALIFICATIONS AND ASSUMPTIONS

The services undertaken by WSP in preparing this Report were limited to those specifically detailed in the Report and are subject to the scope, qualifications, assumptions and limitations set out in the Report or otherwise communicated to the Client.

Except as otherwise stated in the Report and to the extent that statements, opinions, facts, conclusion and / or recommendations in the Report (*Conclusions*) are based in whole or in part on information provided by the Client and other parties identified in the report (*Information*), those Conclusions are based on assumptions by WSP of the reliability, adequacy, accuracy and completeness of the Information and have not been verified. WSP accepts no responsibility for the Information.

Where the survey identifies that hazardous materials are on Site, the Conclusions are indicative of the presence of hazardous materials and cannot be regarded as absolute without further extensive sampling, outside the scope of the services set out in the Agreement. Site conditions, including the extent and visibility of hazardous materials, can change with time. On all sites, varying degrees of non-uniformity of conditions are encountered and the presence of hazardous materials which are not visually apparent at the time of inspection, may not be detected. No monitoring, common testing or sampling technique provides results that are totally representative of the presence or non-presence of hazardous materials at the Site. Site conditions, including subsurface conditions can change with time due to natural and anthropogenic causes.

Only material that was physically accessible at the time of inspection was sampled. Consequently, not all hazardous material may have been located at the Site. The survey identifying hazardous materials on Site should be reviewed prior to demolition or refurbishment as a more detailed destructive survey may be required prior to demolition or refurbishment works. Care should be taken during normal Site works, refurbishment or demolition works when entering previously inaccessible areas. If suspect material is encountered, works should cease in the area until samples have been collected and analysed by competent personnel.

It is impossible to locate all hazardous materials during an inspection. This is due to such factors as (without limitation):

- Time, budget and constraints requested by the Client;
- Access restrictions;
- The need to avoid causing physical damage to fixtures or structures on the Site;
- The need to minimise hazardous materials exposures to building occupants;
- The need to minimise inconvenience when the Site is in use (e.g. occupied) whilst an inspection is being conducted; and / or
- The availability of relevant building / plant construction plans.

Hazardous materials that could be routinely encountered in the normal day-to-day activities occurring on the Site have been identified and assessed, however there is no guarantee that the Site is free of hazardous materials, since future activities may reveal hazardous materials in areas inaccessible or unknown to WSP.

Within the limitations referred to above, the preparation of this Report has been undertaken and performed in a professional manner in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by reputable consultants. No other warranty, expressed or implied, is made.

WSP has prepared the Report without regard to any special interest of any person other than the Client when undertaking the services described in the Agreement or in preparing the Report.

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This Report can only be relied upon for the Permitted Purpose and may not be relied upon for any other purpose. The Report does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise. It is the responsibility of the Client to accept (if the Client so chooses) the Conclusions and implement any recommendations in an appropriate, suitable and timely manner. WSP does not (and will not) accept liability arising out of or in connection with any health or safety risks associated with hazardous materials.

In the absence of express written consent of WSP, no responsibility is accepted by WSP for the use of the Report in whole or in part by any party other than the Client for any purpose whatsoever. Without the express written consent of WSP, any use which a third party makes of this Report or any reliance on (or decisions to be made) based on this Report is at the sole risk of those third parties without recourse to WSP. Third parties should make their own enquiries, rely on the results of their own site inspections, and / or obtain independent advice in relation to any matter dealt with or conclusions expressed in the Report.

8.4 DISCLAIMER

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APPENDIX A

HAZARDOUS MATERIALS REGISTER



A1 HAZARDOUS MATERIALS REGISTER

A1.1 ASBESTOS-CONTAINING MATERIALS

136 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Ground Floor	Electrical cupboard	West wall lining	Fibre cement sheeting	WSP-326723	Chrysotile	5 m²	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170276
Ground Floor	Electrical cupboard	Wall lining of cupboard north and south	Fibre cement sheeting	WSP-326737	Chrysotile	10 m²	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170277
Ground Floor	Electrical cupboard	Electrical backing board	Compressed bituminous board	WSP-326742	Chrysotile	1 item	Yes	Non-Friable	Good	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170278
Ground Floor	Throughout	Floor covering under carpet	Vinyl sheeting	WSP-326724	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170275
Level 1	Residential unit	Underlay below carpet throughout floor	Underlay	WSP-326749	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170327
Level 1	Residential unit, Kitchen	Floor covering	Vinyl tile (cream)	WSP-326694	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170328
Level 1	Residential unit, Kitchen	Ceiling lining/bulkhead	Fibre cement sheeting, textured coating and associated accumulated dust	Ref: WSP-231457	Chrysotile	6 m²	No	Non-Friable	Fair	Medium	Medium	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170500
Level 1	Studio/storeroom / Residential unit	Ceiling texture white based paint system throughout	Textured coating	WSP-326751	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	LBP-30369
Level 1	Residential unit	Ceiling texture white based paint system internal throughout ceiling	Textured coating	WSP-326752	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	LBP-30370
Level 1	Fireplace	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170415
Roof Void	Roof void, Kitchen	Debris/fragments	Fibre cement sheeting and associated accumulated dust	WSP-231458	Chrysotile	≈ 1 m²	No	Non-Friable	Poor	Medium	Medium	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170413

136 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Roof Void	Roof void, hatch entrance (kitchen)	Upstands	Fibre cement sheeting, textured coating	WSP-231457	Chrysotile	10 m²	Yes	Non-Friable	Fair	Medium	Medium	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170423
Roof Void	Roof void, hatch entrance (kitchen)	Trim	Fibre cement sheeting	WSP-231465	Chrysotile	2 lin m	No	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170410
Roof Void	Roof void, services platform	Storage tank and lid	Compressed sheeting, moulded cement, tank and lid	WSP-231467	Chrysotile	4 m² (1 item)	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170418
Roof Void	Roof void, platform	Boiler tank “Simplex water heater”	Insulation material - encased	Not Sampled	Assumed Asbestos	1 item	Yes	Friable	Good	Low	Low	Further Investigation Required. Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170424
Roof Void	Roof void,	Services platform, dust and debris/insulation	Dust	WSP-231468	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170403
Roof Void	Roof void, risers/voids	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170404
Roof Void	Roof void	Various throughout, Debris	Bituminous membrane	WSP-231469	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170405
Roof Void	Roof void, Turret void	Floor	Bituminous material	WSP-231471	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170407
Roof Void	Level 1	Ceiling lining	Plaster straw mix	WSP-231472	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	
Roof Void	Roof void	Floor, ceiling top	Dust	WSP-231476	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170412
Roof Void	Level 1	Ceiling lining	Plaster straw mix	WSP-231470	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170419
Roof Void	Roof void	A/C ductwork	Dust	WSP-231474	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170422
Roof Void	Roof void	Floor, beams	Dust	WSP-231473	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170425
Roof Void	Roof void	Floor, ceiling	Dust	WSP-231475	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170426
Roof Void	Roof void, stored items (tenant’s belongings/items)	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170427

136 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Roof Void	Roof void	Pipework	Organic hessian wrap	Non-Suspect Material	-	-	-	-	-	-	-	No Action Required	170429
Roof Void	Roof void	Roof underside lining	Bituminous membrane	WSP-231466	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170843
Level 1 to Roof	Chimney shaft	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170428
External	Underground services	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170118
External	Exteriors	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170406
External	Roof	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170409
External	Exterior	Gate, wall infill	Fibre cement sheeting	WSP-231480	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170411
External	Exterior	Pavement floor slab, expansion joint	Bituminous material	WSP-231479	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	

*Bold text indicates material contains a positive analysis result or status for asbestos

A1.2 SYNTHETIC MINERAL FIBRES

136 New South Head Rd										
Level	Primary location / room	Secondary location / application	Status	Result	Extent (approx.)	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
Roof Void	Roof void	Air conditioning ductwork, insulation material	Visual Observation	SMF	100 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30383
Roof Void	Roof void	Plant and equipment, insulation material	Visual Observation	SMF	3 units	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30382
Roof Void	Throughout	Air conditioning ducting (foil clad), insulation material	Visual Observation	SMF	100 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30362
External	Level 1, Veranda Roof	Water heater service tank, insulation material	Visual Observation	SMF	1 unit	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30374

A1.3 LEAD BASED PAINTS

136 New South Head Rd											
Level	Primary location / room	Secondary location / application	Colour	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Roof Void / Level 1	Residential unit, Roof void hatch entrance (kitchen)	Upstands and door/trim	Red	Lead Paint Sample WSP-231454	LBP Detected 0.24 %w/w	10 m²	Poor	High	High Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30385
Ground Floor	Throughout	Walls and ceiling white based paint system	White	Lead Paint Sample WSP-326738	LBP Detected 0.27 %w/w	500 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30350
Level 1	Residential unit, Ceiling cavity main room	Cream based paint to walls	Cream	Lead Paint Sample WSP-326740	LBP Detected 1.4 %w/w	50 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30345
Level 1	Residential unit, Female toilet	Walls green paint based system	Green	Lead Paint Sample WSP-326741	LBP Detected 18 %w/w	30 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30351
Level 1	Residential unit	Bathroom and toilet pink based paint system walls and ceiling	Pink	Lead Paint Sample WSP-326747	LBP Detected 0.34 %w/w	20 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30373
Level 1	Residential unit	Wall cornice throughout interior	White	Lead Paint Sample WSP-326748	LBP Detected 5.5 %w/w	50 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30374
Level 1	Residential unit	Ceiling texture white based paint system throughout	White	Lead Paint Sample WSP-326751	LBP Detected 4.1 %w/w	100 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30369
Level 1	Residential unit	Ceiling texture white based paint system internal throughout ceiling	White	Lead Paint Sample WSP-326752	LBP Detected 0.22 %w/w	100 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30370

136 New South Head Rd											
Level	Primary location / room	Secondary location / application	Colour	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Level 1	Residential unit	Lead flashing on top of wall	-	-	Lead Metal	-	-	-	-	-	LBP-30372
External	Exterior	Walls and window frames	Yellow	Not Sampled	Presumed LBP	100 m²	Good/Fair	Low	Low	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30387
Roof Void	Roof void	Lead flashing	-	-	Lead Metal	-	-	-	-	-	LBP-30383
External	Exterior	Lead flashing	-	-	Lead Metal	-	-	-	-	-	LBP-30386
Level 1	Residential unit	Lead flashing-wall skirting external	-	-	Lead Metal	-	-	-	-	-	LBP-30371
Ground Floor	Columns	Black paint based system	Black	Lead Paint Sample WSP-326743	LBP Not Detected 0.007 %w/w	-	-	-	-	No Action Required	LBP-30352
Ground Floor	Under stairs to kitchen	Brown based paint sample	Brown	Lead Paint Sample WSP-326744	LBP Not Detected 0.04 %w/w	-	-	-	-	No Action Required	LBP-30348

*Bold text indicates paint system contains a positive analysis result or status for confirmed lead >0.1% parameter

A1.4 LEAD IN DUST

136 New South Head Rd										
Level	Primary location / room	Secondary location / application	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
Level 1	Women toilet ceiling cavity	On ceiling tile, Accumulated dust	Lead Surface Dust Sample WSP-326745	Lead Dust Detected 44 mg/m²	10 m² Total area ≈ 100 m²	Poor	High	High Risk	Remediate ceiling space by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30346
Level 1	Ceiling cavity main room	Ceiling space, Accumulated dust	Lead Surface Dust Sample WSP-326739	Lead Dust Detected 31 mg/m²	10 m² Total area ≈ 100 m²	Poor	High	High Risk	Remediate ceiling space by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30347
Roof Void	Roof void	Floorboard, Accumulated dust	Lead Surface Dust Sample WSP-231459	Lead Dust Detected 110 mg/m²	10 m² Total roof void area ≈ 200 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30381
Roof Void	Roof void	A/C ductwork, Accumulated dust	Lead Surface Dust Sample WSP-231460	Lead Dust Detected 22 mg/m²	10 m² Total roof void area ≈ 200 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30382

136 New South Head Rd										
Level	Primary location / room	Secondary location / application	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
Roof Void	Roof void	Roof beam, Accumulated dust	Lead Surface Dust Sample WSP-231461	Lead Dust Detected 18 mg/m²	10 m² Total roof void area ≈ 200 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30379
Roof Void	Roof void	Brickwork wall ledge, Accumulated dust	Lead Surface Dust Sample WSP-231463	Lead Dust Detected 190 mg/m²	10 m² Total roof void area ≈ 200 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30380
Roof Void	Roof void	Floor, Accumulated dust	Lead Surface Dust Sample WSP-231464	Lead Dust Detected 140 mg/m²	10 m² Total roof void area ≈ 200 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30384
All levels	Throughout	Suspected due to deteriorated lead paint systems	Not Sampled	Presumed Lead Dust	≈ 100 m²	Poor	High	High Risk	Remediate by experienced lead abatement contractor prior to refurbishment or demolition works.	

*Bold text indicates sample contains a positive analysis for lead concentration exceeding the acceptable value (adopted levels) and the dust should be treated as lead contaminated/impacted.

A1.5 POLYCHLORINATED BIPHENYLS

136 New South Head Rd											
Level	Primary location / room	Secondary location / application	Capacitor	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Roof Void	Roof void	Fluorescent light fittings	Unknown	Visual Observation	Presumed PCBs	3 units	Good	Low	Low Risk	Non-scheduled PCB material or waste	PCB-27624

A1.6 OTHER

136 New South Head Rd											
Level	Primary location / room	Type	Material	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
External	Residential Unit	Gas cylinders	Flammable or Combustible Material	Visual Observation	-	2 units	-	-	-	Remove and dispose of safely by competent person	ODS-27403
External	Exterior, east	UST	Flammable or Combustible Material	Visual Observation	-	-	-	-	-	Further investigation required.	ODS-27401

APPENDIX B

SITE / BUILDING PHOTOGRAPHS



B1 SITE / BUILDING PHOTOGRAPHS

136 New South Head Rd



136 New South Head Rd Footprint



APPENDIX C

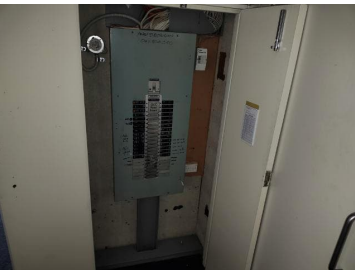
MATERIAL PHOTOGRAPHS



C1 PHOTOGRAPHS

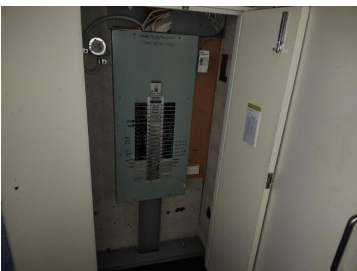
C1.1 ASBESTOS CONTAINING MATERIALS

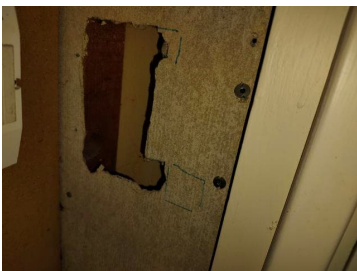
ASBESTOS - Confirmed			
Photo Ref	170276	Sample No	WSP-326723
Building	136 New South Head Rd		
Level	Ground floor		
Room	Electrical cupboard		
Application	West wall lining		
Material	Fibre cement sheeting		
Risk Rating	Low		





ASBESTOS - Confirmed			
Photo Ref	170277	Sample No	WSP-326737
Building	136 New South Head Rd		
Level	Ground floor		
Room	Electrical cupboard		
Application	Wall lining of cupboard north and south		
Material	Fibre cement sheeting		
Risk Rating	Low		





ASBESTOS - Confirmed			
Photo Ref	170278	Sample No	WSP-326742
Building	136 New South Head Rd		
Level	Ground floor		
Room	Electrical cupboard		
Application	Electrical backing board		
Material	Electrical mounting board		
Risk Rating	Low		



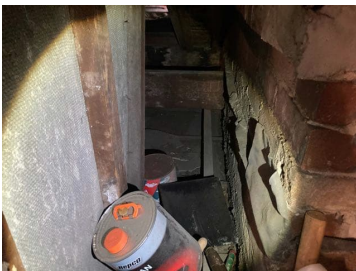


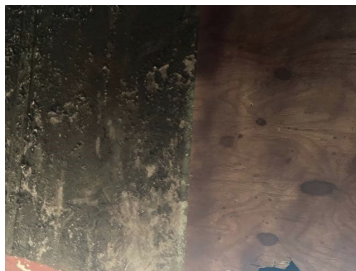
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Photo Ref	170415	Sample No	-
Building	136 New South Head Rd		
Level	Level 1		
Room	Fire place		
Application	-		
Material	-		
Risk Rating	Inaccessible		



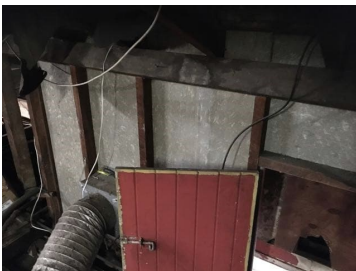
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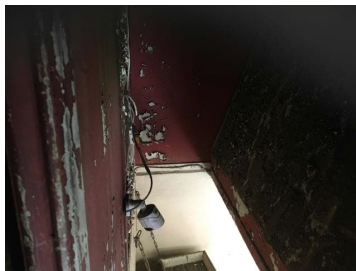
ASBESTOS - Confirmed			
Photo Ref	170413	Sample No	WSP-231458
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, kitchen		
Application	Debris/fragments		
Material	Fibre cement sheeting		
Risk Rating	Medium		





ASBESTOS - Confirmed			
Photo Ref	170423	Sample No	WSP-231457
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, hatch entrance (kitchen)		
Application	Upstands		
Material	Fibre cement sheeting		
Risk Rating	Medium		





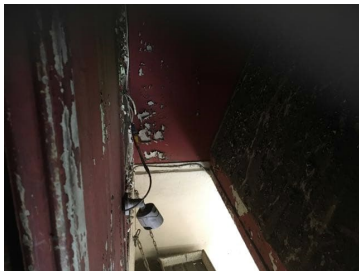
ASBESTOS - Confirmed			
Photo Ref	170500	Sample No	Ref: WSP-231457
Building	136 New South Head Rd		
Level	Level 1		
Room	Kitchen		
Application	Ceiling lining/bulkhead		
Material	Fibre cement sheeting, textured coating and associated accumulated dust		
Risk Rating	Medium		



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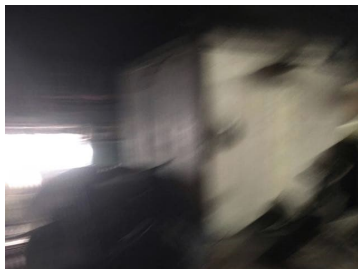
ASBESTOS - Confirmed			
Photo Ref	170410	Sample No	WSP-231465
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, hatch entrance (kitchen)		
Application	Trim		
Material	Fibre cement sheeting		
Risk Rating	Low		





ASBESTOS - Confirmed			
Photo Ref	170418	Sample No	WSP-231467
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, services platform		
Application	Storage tank		
Material	Compressed sheeting		
Risk Rating	Low		

A photograph of a large, light-colored, rectangular storage tank in a roof void. The tank has a yellow warning label and a valve at the bottom. A green plastic basket is visible next to it.

A very blurry photograph of a storage tank in a roof void, showing motion blur and a bright light source on the left.

ASBESTOS - Assumed			
Photo Ref	170424	Sample No	Visual Observation
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, platform		
Application	Boiler tank		
Material	Insulation material		
Risk Rating	Low		





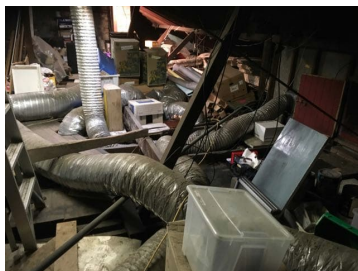
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Photo Ref	170404	Sample No	-
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, risers/voids		
Application	-		
Material	-		
Risk Rating	Inaccessible		





NO ACCESS			
Photo Ref	170427	Sample No	-
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, stored items		
Application	-		
Material	-		
Risk Rating	Inaccessible		





NO ACCESS			
Photo Ref	170428	Sample No	-
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, chimney shaft		
Application	-		
Material	-		
Risk Rating	Inaccessible		



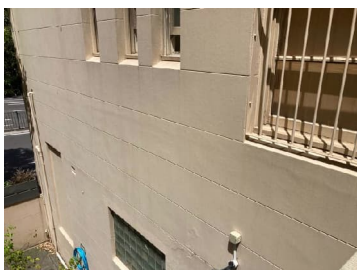


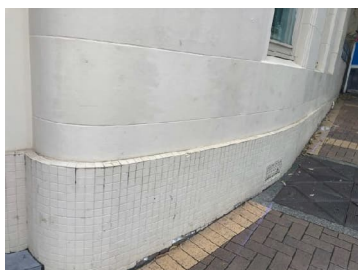
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Photo Ref	170118	Sample No	-
Building	136 New South Head Rd		
Level	External		
Room	Underground services		
Application	-		
Material	-		
Risk Rating	Inaccessible		





NO ACCESS			
Photo Ref	170406	Sample No	-
Building	136 New South Head Rd		
Level	External		
Room	Exteriors		
Application	-		
Material	-		
Risk Rating	Inaccessible		





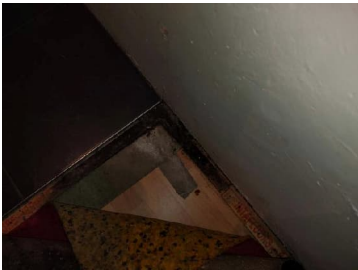
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Photo Ref	170409	Sample No	-
Building	136 New South Head Rd		
Level	External		
Room	Roof		
Application	-		
Material	-		
Risk Rating	Inaccessible		



No Photo Available

C1.2 NON-ASBESTOS CONTAINING MATERIALS

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170275	Sample No	WSP-326724
Building	136 New South Head Rd		
Level	Ground floor		
Room	Throughout		
Application	Vinyl sheet under carpet		
Material	Vinyl sheeting		
Risk Rating	No Asbestos		



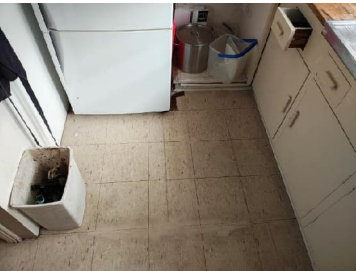


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170327	Sample No	WSP-326749
Building	136 New South Head Rd		
Level	Level 1		
Room	Residential unit		
Application	Underlay below carpet throughout floor		
Material	Insulation Board		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170328	Sample No	WSP-326694
Building	136 New South Head Rd		
Level	Level 1		
Room	Residential unit, kitchen		
Application	Floor covering		
Material	Vinyl tile		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170403	Sample No	WSP-231468
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, services platform		
Application	Accumulated dust and debris		
Material	Dust		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170405	Sample No	WSP-231469
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Various throughout, Debris		
Material	Bituminous material		
Risk Rating	No Asbestos		



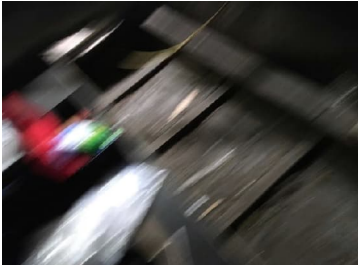


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170407	Sample No	WSP-231471
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void, Turret void		
Application	Floor		
Material	Bituminous material		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170412	Sample No	WSP-231476
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Floor, ceiling top		
Material	Dust		
Risk Rating	No Asbestos		



No Photo Available

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170419	Sample No	WSP-231470
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Ceiling lining		
Material	Plaster mix		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170422	Sample No	WSP-231474
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	A/c dust, beam		
Material	Dust		
Risk Rating	No Asbestos		



No Photo Available

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170425	Sample No	WSP-231473
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Floor, beams		
Material	Dust		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170426	Sample No	WSP-231475
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Floor, ceiling		
Material	Dust		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170429	Sample No	NSM
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Pipework		
Material	Other		
Risk Rating	No Asbestos		



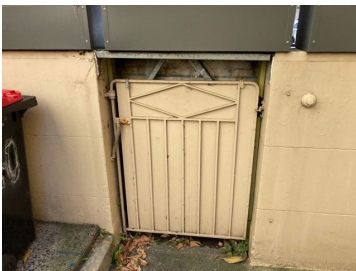


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170843	Sample No	WSP-231466
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Roof underside lining		
Material	Bituminous membrane		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170411	Sample No	WSP-231480
Building	136 New South Head Rd		
Level	External		
Room	Exterior		
Application	Gate, wall infill		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		



No Photo Available

C1.3 SYNTHETIC MINERAL FIBRES

SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30383	Sample No	Visual Observation
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Air conditioning ductwork, insulation material		
Risk Rating	Low Risk		





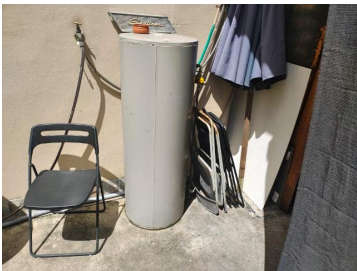
SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30382	Sample No	Visual Observation
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Plant and equipment		
Risk Rating	Low Risk		




SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30362	Sample No	Visual Observation
Building	136 New South Head Rd		
Level	Roof Void		
Room	Throughout		
Application	Air conditioning ducting		
Risk Rating	Low Risk		

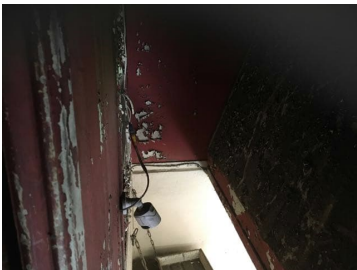



SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30374	Sample No	Visual Observation
Building	136 New South Head Rd		
Level	External		
Room	Jom photo studio		
Application	Water heater		
Risk Rating	Low Risk		

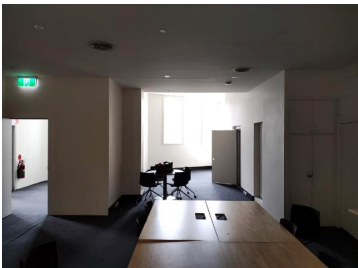


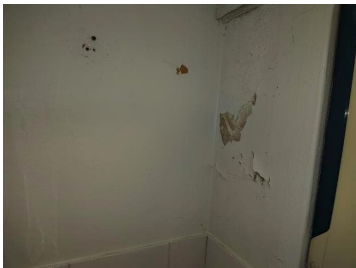

C1.4 LEAD BASED PAINTS

LBP DETECTED			
Photo Ref	LBP-30385	Sample No	Lead Paint Sample WSP-231454
Building	136 New South Head Rd		
Level	Roof Void/Level 1		
Room	Roof void hatch entrance (kitchen bulkhead)		
Application	Upstands and door/trim		
Risk Rating	High Risk		

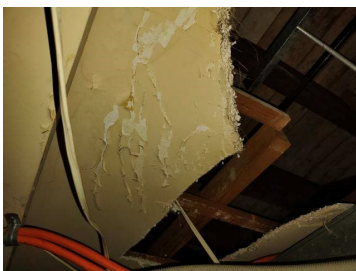


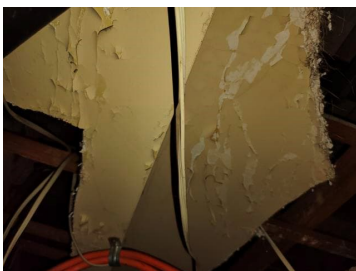

LBP DETECTED			
Photo Ref	LBP-30350	Sample No	Lead Paint Sample WSP-326738
Building	136 New South Head Rd		
Level	Sub-Basement		
Room	Throughout		
Application	Walls and ceiling white based paint system		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30345	Sample No	Lead Paint Sample WSP-326740
Building	136 New South Head Rd		
Level	Roof Void		
Room	Ceiling cavity main room		
Application	Cream based paint to walls		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30351	Sample No	Lead Paint Sample WSP-326741
Building	136 New South Head Rd		
Level	Roof Void		
Room	Female toilet		
Application	Walls green paint based system		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30373	Sample No	Lead Paint Sample WSP-326747
Building	136 New South Head Rd		
Level	Level 1		
Room	Jom photo studio/residential		
Application	Bathroom and toilet pink based paint system walls and ceiling		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30374	Sample No	Lead Paint Sample WSP-326748
Building	136 New South Head Rd		
Level	Level 1		
Room	Jom photo studio/residential		
Application	Wall cornice throughout interior		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30369	Sample No	Lead Paint Sample WSP-326751
Building	136 New South Head Rd		
Level	Level 1		
Room	Residential Unit		
Application	Ceiling texture white based paint system throughout		
Risk Rating	Medium Risk		

A wide-angle photograph of a white ceiling in a room. A circular, brown-colored ventilation grille is centered on the ceiling. To the left of the grille, a small black object, possibly a light fixture or sensor, is mounted. The ceiling shows signs of wear, with some small, dark spots and peeling paint visible. The walls are white, and a dark curtain is visible on the left side of the frame.

A close-up photograph of a white ceiling. The image shows significant peeling and flaking of the white paint, revealing a darker, brownish material underneath. A circular ventilation grille is visible in the upper right corner of the frame. The walls are white, and a dark curtain is visible on the left side of the frame.

LBP DETECTED			
Photo Ref	LBP-30370	Sample No	Lead Paint Sample WSP-326752
Building	136 New South Head Rd		
Level	Level 1		
Room	Jom photo studio/residential		
Application	Ceiling texture white based paint system internal throughout ceiling		
Risk Rating	Medium Risk		





Lead Metal			
Photo Ref	LBP-30372	Sample No	Lead Paint Presumed
Building	136 New South Head Rd		
Level	Level 1		
Room	Jom photo studio/residential		
Application	Lead flashing on top of wall		
Risk Rating	-		

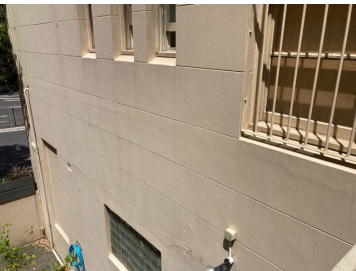


A wide-angle photograph showing a dark, weathered lead flashing strip installed along the top edge of a white wall. In the background, a photo studio is visible with shelves holding various bottles and equipment.



A close-up photograph of the lead flashing strip, highlighting its dark, textured surface and the way it is secured to the wall with visible fasteners.

LBP PRESUMED			
Photo Ref	LBP-30387	Sample No	Lead Paint Presumed
Building	136 New South Head Rd		
Level	External		
Room	Exterior		
Application	Walls and window frames		
Risk Rating	Low		





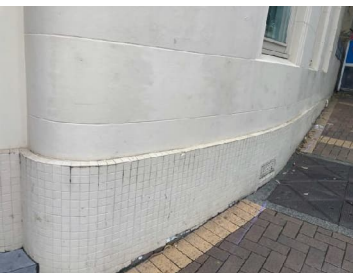
LEAD METAL			
Photo Ref	LBP-30383	Sample No	Lead Paint Presumed
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Lead flashing		
Risk Rating	-		



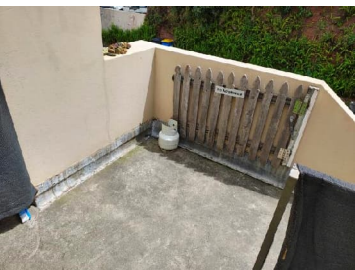


LEAD METAL			
Photo Ref	LBP-30386	Sample No	Lead Paint Presumed
Building	136 New South Head Rd		
Level	External		
Room	Exterior		
Application	Lead flashing		
Risk Rating	-		

A close-up photograph showing the corner of a building's exterior wall. The wall is made of a light-colored, possibly concrete or plaster, material. A dark, metallic lead flashing is visible along the edge of the wall, where it meets a dark, possibly black, metal frame or trim. A green plastic container is visible in the background, and a blue object is partially visible on the left.

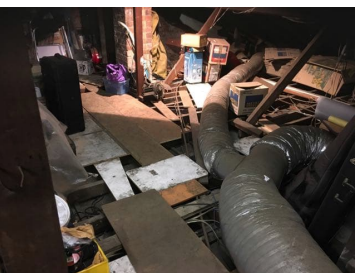
A photograph showing the corner of a building's exterior wall. The wall is made of a light-colored, possibly concrete or plaster, material. A dark, metallic lead flashing is visible along the edge of the wall, where it meets a dark, possibly black, metal frame or trim. A green plastic container is visible in the background, and a blue object is partially visible on the left.

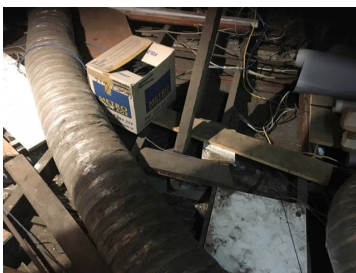
LEAD METAL			
Photo Ref	LBP-30371	Sample No	Lead Paint Presumed
Building	136 New South Head Rd		
Level	Level 1		
Room	Jom photo studio/residential		
Application	Lead flashing		
Risk Rating	-		





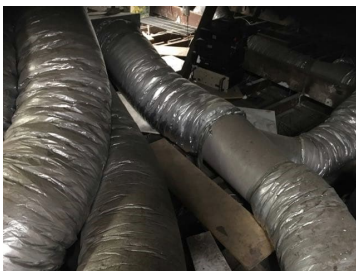
LEAD DUST DETECTED			
Photo Ref	LBP-30381	Sample No	Lead Dust Sample WSP-231459
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Accumulated Dust		
Risk Rating	High Risk		





LEAD DUST DETECTED			
Photo Ref	LBP-30382	Sample No	Lead Dust Sample WSP-231460
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Accumulated Dust		
Risk Rating	High Risk		





LEAD DUST DETECTED			
Photo Ref	LBP-30379	Sample No	Lead Dust Sample WSP-231461
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Accumulated Dust		
Risk Rating	High Risk		

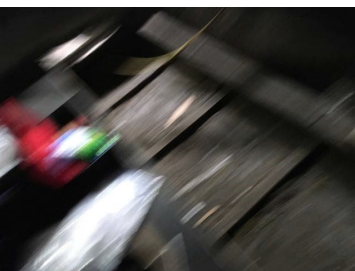


No Photo Available

LEAD DUST DETECTED			
Photo Ref	LBP-30380	Sample No	Lead Dust Sample WSP-231463
Building	136 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Accumulated Dust		
Risk Rating	High Risk		

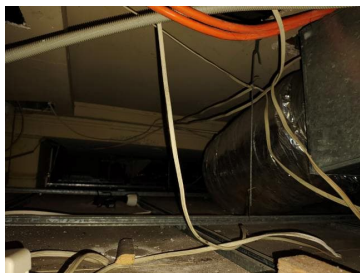


No Photo Available

LEAD DUST DETECTED					No Photo Available
Photo Ref	LBP-30384	Sample No	Lead Dust Sample WSP-231464		
Building	136 New South Head Rd				
Level	Roof Void				
Room	Roof void				
Application	Accumulated Dust				
Risk Rating	High Risk				

LEAD DUST DETECTED			
Photo Ref	LBP-30347	Sample No	Lead Dust Sample WSP-326739
Building	136 New South Head Rd		
Level	Level 1		
Room	Ceiling cavity main room		
Application	Accumulated Dust		
Risk Rating	High Risk		





LBP NOT DETECTED			
Photo Ref	LBP-30352	Sample No	Lead Paint Sample WSP-326743
Building	136 New South Head Rd		
Level	Sub-Basement		
Room	Columns		
Application	Black paint based system		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30348	Sample No	Lead Paint Sample WSP-326744
Building	136 New South Head Rd		
Level	Sub-Basement		
Room	Under stairs to kitchen		
Application	Brown based paint sample		
Risk Rating	-		



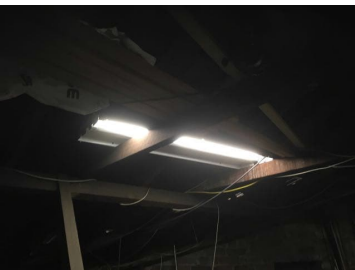


LEAD DUST DETECTED			
Photo Ref	LBP-30346	Sample No	Lead Dust Sample WSP-326745
Building	136 New South Head Rd		
Level	Level 1		
Room	Women toilet ceiling cavity		
Application	Accumulated Dust		
Risk Rating	High Risk		





C1.5 POLYCHLORINATED BIPHENYLS

PCB CAPACITOR					No Photo Available
Photo Ref	PCB-27624	Sample No	Visual Observation		
Building	136 New South Head Rd				
Room	Roof void				
Application	Fluorescent light fittings				
Material	Capacitor - Unknown				
Risk Rating	Low Risk				

C1.6 OTHER

COMBUSTIBLE MATERIALS			
Photo Ref	ODS-27403	Sample No	Visual Observation
Building	136 New South Head Rd		
Room	Jom photo studio		
Application	Gas bottles		
Material	Flammable and Combustible Materials		
Risk Rating	-		





COMBUSTIBLE MATERIALS			
Photo Ref	ODS-27401	Sample No	Visual Observation
Building	136 New South Head Rd		
Room	Exterior, various		
Application	UST		
Material	Flammable and Combustible Materials		
Risk Rating	-		





APPENDIX D

RISK MATRIX



RISK MATRIX

POTENTIAL TO BE DISTURBED

Score	Potential to be disturbed
High (3)	Disturbance may occur during typical occupancy of the building and is likely during maintenance works.
Medium (2)	Disturbance unlikely during typical occupancy of the building however may occur during maintenance works.
Low (1)	Disturbance unlikely during typical occupation of the building.

CONDITION

Score	Condition description
Poor (3)	Obvious damage or deterioration, extensive dust/contamination. Friable asbestos not encapsulated.
Fair (2)	Minor damage or deterioration, not sealed/encapsulated. Friable asbestos encapsulated (e.g. fire door) with no damage to encapsulation.
Good (1)	No obvious damage or deterioration, secured in place, sealed/encapsulated.
Unknown (1)	No access to assess condition.

FRIABILITY

Score	Friability Descriptor
Friable (1)	Material that; (A) is in a powder form or that can be crumbled, pulverised or reduced to powder by hand pressure when dry, and (B) contains asbestos.
Non-friable (0)	Material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.

RISK MATRIX TABLE

Material Condition	Disturbance Potential		
	High (3)	Medium (2)	Low (1)
Poor (3)	>6	5	4
Fair (2)	5	4	3
Good / Unknown (1)	4	3	2

Note – Friable asbestos containing materials also assigned a score of one (1).

Legend

>6	High Risk
4-5	Medium Risk
2-3	Low Risk

APPENDIX E

NATA LABORATORY ANALYTICAL REPORTS





Certificate of Analysis

WSP Australia Pty Limited



WORLD RECOGNISED
ACCREDITATION

Level 28, 680 George Street Sydney
PO Box 20967, World Square
Telephone +61 2 9272 1407
Email ANZLab@wsp.com

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 136 New South Head Road, Edgecliff NSW 2027
CERTIFICATE NO: SYD-PS218531-188258
CLIENT: Lendlease Development
DATE/S SAMPLED: 15/11/2024 to 18/11/2024
CLIENT ADDRESS: Level 14, Tower Three, International Towers
Sydney, Exchange Place, Barangaroo Avenue,
Barangaroo NSW 2000
DATE RECEIVED: 19/11/2024
TELEPHONE: 0438 321 555
DATE ANALYSED: 20/11/2024
EMAIL: jock.mitton@lendlease.com
ORDER NUMBER: N/A
CONTACT: Jock Mitton
SAMPLED BY: Leigh Rampley, Kaushik Botta

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	231457	Roof Void, hatch entrance (kitchen) - Upstands, Textured coating	Fibre Cement Sheet	1 g	CH
002	231458	Roof Void, kitchen - Debris/fragments	Fibre Cement Sheet	43 g	CH
003	231465	Roof Void, hatch entrance (kitchen) - Trim	Fibre Cement Sheet	1 g	CH
004	231466	Roof Void - Roof underside lining	Bituminous Membrane	2 g	OF, NAD
005	231467	Roof Void, services platform - Storage tank, Moulded cement, tank and lid	Compressed Sheet	<1 g	CH
006	231468	Roof Void, services platform - Accumulated dust and debris	Dust	3 g	OF, SMF, NAD ¹
007	231469	Roof Void - Various throughout, Debris	Bituminous Material	6 g	OF, NAD
008	231470	Roof Void - Ceiling lining, Plaster straw mix	Plaster	1 g	OF, NAD
009	231471	Roof Void, Turret void - Floor	Bituminous Material	1 g	OF, NAD
010	231472	Roof Void - Ceiling lining, Plaster straw mix	Plaster	1 g	OF, NAD
011	231473	Roof Void - Floor, beams	Dust	13 g	OF, NAD ¹
012	231474	Roof Void - A/c dust, beam	Dust	9 g	OF, NAD ¹
013	231475	Roof Void - Floor, ceiling	Dust	1 g	OF, NAD ¹
014	231476	Roof Void - Floor, ceiling top	Dust	3 g	OF, NAD ¹
015	326694	Level 1 - Kitchen floor cream vinyl tiles	Vinyl Tile	45 g	OF, NAD
015A			Adhesive		OF, NAD
016	326723	Sub-Basement Electrical cupboard - West wall	Fibre Cement Sheet	1 g	CH, OF
017	326724	Sub-Basement Throughout - Vinyl sheet under carpet	Vinyl Sheet	11 g	SMF, NAD
017A			Adhesive		OF, NAD
018	326737	Sub-Basement Electrical cupboard - Walls of cupboard north and south	Fibre Cement Sheet	1 g	CH, OF
019	326742	Sub-Basement Electrical cupboard - Electrical backing board	Electrical Backing Board	1 g	CH
020	326749	Level 1 - Underlay below carpet throughout floor	Underlay	4 g	OF, NAD



Certificate of Analysis

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ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 136 New South Head Road, Edgecliff NSW 2027 **CERTIFICATE NO:** SYD-PS218531-188258

LEGEND:

NAD	- No Asbestos Detected
CH	- Chrysotile Asbestos Detected
A	- Amosite Asbestos Detected
C	- Crocidolite Asbestos Detected
SMF	- Synthetic Mineral Fibres Detected
OF	- Organic Fibres Detected
1	- No asbestos detected at reporting limit of 0.1 g/kg

Approved Identifier

Grace Tuckwell

Approved Signatory

Name: Lauren DeRooy

Authorisation Date
Wednesday, 20 November 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

Sampling is not covered by the scope of accreditation.

This document may not be reproduced except in full.



Certificate of Analysis

WSP Australia Pty Limited

104 Market Street Wollongong
Telephone +61 2 4298 2600
Email ANZlab@wsp.com



WORLD RECOGNISED
ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 136 New South Head Road, Edgecliff NSW 2027 **CERTIFICATE NO:** WOL-PS218531 -188294

CLIENT: Lendlease Development **DATE/S SAMPLED:** 18/11/2024

CLIENT ADDRESS: Level 14, Tower Three, International Towers
Sydney, Exchange Place, Barangaroo Avenue,
Barangaroo NSW 2000 **DATE RECEIVED:** 19/11/2024

TELEPHONE: 0438 321 555 **DATE ANALYSED:** 21/11/2024

EMAIL: jock.mitton@lendlease.com **ORDER NUMBER:** N/A

CONTACT: Jock Mitton **SAMPLED BY:** Leigh Rampley

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	231479	External, Pavement floor slab, Expansion joint	Bituminous Material	2 g	OF, NAD
002	231480	External, Gate, Wall infill	Fibre Cement Sheet	<1 g	OF, NAD

LEGEND:

NAD - No Asbestos Detected
CH - Chrysotile Asbestos Detected
A - Amosite Asbestos Detected
C - Crocidolite Asbestos Detected
OF - Organic Fibres Detected

Approved Identifier

Holly Kitamura

Approved Signatory

Name: Melanie Reed

Authorisation Date
Thursday, 21 November 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

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TELEPHONE: 0438 321 555 **DATE ANALYSED:** 21/11/2024

EMAIL: jock.mitton@lendlease.com **ORDER NUMBER:** N/A

CONTACT: Jock Mitton **SAMPLED BY:** Leigh Rampley

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	231479	External, Pavement floor slab, Expansion joint	Bituminous Material	2 g	OF, NAD
002	231480	External, Gate, Wall infill	Fibre Cement Sheet	<1 g	OF, NAD

LEGEND:

NAD - No Asbestos Detected
CH - Chrysotile Asbestos Detected
A - Amosite Asbestos Detected
C - Crocidolite Asbestos Detected
OF - Organic Fibres Detected

Approved Identifier

Holly Kitamura

Approved Signatory

Name: Melanie Reed

Authorisation Date
Thursday, 21 November 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

Sampling is not covered by the scope of accreditation.

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CERTIFICATE OF ANALYSIS 366664

Client Details

Client	WSP Australia Pty Limited
Attention	Kaushik Botta, Leigh Rampley
Address	GPO Box 5394, Sydney, NSW, 2001

Sample Details

Your Reference	<u>PS218531 / N-00338</u>
Number of Samples	7 Swab, 10 Paint
Date samples received	14/11/2024
Date completed instructions received	19/11/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
 Samples were analysed as received from the client. Results relate specifically to the samples as received.
 Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	21/11/2024
Date of Issue	21/11/2024
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Asbestos Approved By

Analysed by Asbestos Approved Analyst: Lucy Zhu
 Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By

Loren Bardwell, Development Chemist
 Lucy Zhu, Asbestos Supervisor
 Tabitha Roberts, Senior Chemist

Authorised By

Nancy Zhang, Laboratory Manager

Lead in Paint						
Our Reference	UNITS	366664-6	366664-7	366664-9	366664-10	366664-11
Your Reference		WSP-231454	WSP-326738	WSP-326740	WSP-326741	WSP-326743
Date Sampled		18/11/2024	15/11/2024	15/11/2024	15/11/2024	15/11/2024
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	20/11/2024	20/11/2024	20/11/2024	20/11/2024	20/11/2024
Date analysed	-	20/11/2024	20/11/2024	20/11/2024	20/11/2024	20/11/2024
Lead in paint	%w/w	0.24	0.27	1.4	18	0.007

Lead in Paint						
Our Reference	UNITS	366664-12	366664-14	366664-15	366664-16	366664-17
Your Reference		WSP-326744	WSP-326747	WSP-326748	WSP-326751	WSP-326752
Date Sampled		15/11/2024	18/11/2024	18/11/2024	18/11/2024	18/11/2024
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	20/11/2024	20/11/2024	20/11/2024	20/11/2024	20/11/2024
Date analysed	-	20/11/2024	20/11/2024	20/11/2024	20/11/2024	20/11/2024
Lead in paint	%w/w	0.04	0.34	5.5	4.1	0.22

Lead in swab						
Our Reference		366664-1	366664-2	366664-3	366664-4	366664-5
Your Reference	UNITS	WSP-231459	WSP-231460	WSP-231461	WSP-231463	WSP-231464
Date Sampled		18/11/2024	18/11/2024	18/11/2024	18/11/2024	18/11/2024
Type of sample		Swab	Swab	Swab	Swab	Swab
Date prepared	-	20/11/2024	20/11/2024	20/11/2024	20/11/2024	20/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Lead in Swabs	µg/swab	1,100	220	180	1,900	1,400
Lead in Swabs	mg/m ²	110	22	18	190	140

Lead in swab			
Our Reference		366664-8	366664-13
Your Reference	UNITS	WSP-326739	WSP-326745
Date Sampled		15/11/2024	15/11/2024
Type of sample		Swab	Swab
Date prepared	-	20/11/2024	20/11/2024
Date analysed	-	21/11/2024	21/11/2024
Lead in Swabs	µg/swab	310	440
Lead in Swabs	mg/m ²	31	44

Asbestos ID - Paint			
Our Reference	UNITS	366664-16	366664-17
Your Reference		WSP-326751	WSP-326752
Date Sampled		18/11/2024	18/11/2024
Type of sample		Paint	Paint
Date analysed	-	21/11/2024	21/11/2024
Mass / Dimension of Sample	-	Approx. 10g	Approx. 10g
Sample Description	-	White/Yellow paint	White/Yellow paint
Asbestos ID in materials	-	No asbestos detected	No asbestos detected
Trace Analysis	-	No asbestos detected	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.
Metals-020/021/022	Acid digestion of Dust wipes/swabs and /or miscellaneous samples for metals determination by ICP-AES/MS and/or CV-AAS

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			20/11/2024	11	20/11/2024	20/11/2024		20/11/2024	[NT]
Date analysed	-			20/11/2024	11	20/11/2024	20/11/2024		20/11/2024	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	11	0.007	<0.005	33	97	[NT]

QUALITY CONTROL: Lead in swab					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			20/11/2024	[NT]	[NT]	[NT]	[NT]	20/11/2024	[NT]
Date analysed	-			21/11/2024	[NT]	[NT]	[NT]	[NT]	21/11/2024	[NT]
Lead in Swabs	µg/swab	1	Metals-020/021/022	<1	[NT]	[NT]	[NT]	[NT]	97	[NT]
Lead in Swabs	mg/m ²	0.1	Metals-020/021/022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

APPENDIX F

GENERAL INFORMATION ON HAZARDOUS MATERIALS



F1 BACKGROUND

Asbestos is the generic term for a group of naturally occurring mineral fibres with high tensile strength, flexibility, and resistance to thermal, chemical and electrical conditions. On account of these properties, asbestos has been used in many products for strength, heat, friction resistance and as insulation.

There are six types of the fibrous asbestos minerals, in two groups as described below:

- The serpentine asbestos is chrysotile (or white) asbestos. Chrysotile has been the most commonly used form of asbestos.
- Amphibole asbestiforms of which amosite (brown asbestos) and crocidolite (blue asbestos), were the most common types of amphibole asbestos used in building products.

Asbestos fibres enter the body by the inhalation and/or ingestion of airborne particles that can become embedded in tissues of the respiratory or digestive systems. International agencies and national authorities now recognise asbestos to be a human carcinogen. This designation was based on an observation of an increased incidence of lung cancer, mesotheliomas and gastrointestinal cancer in occupationally exposed workers, being consistent across investigators and study populations. Information from animal studies on the inhalation of fibres support these findings, although evidence for carcinogenicity via ingestion is limited.

In recognition of the above-mentioned issues, every effort should be made to eliminate the use of asbestos materials in buildings.

F2 USE OF ASBESTOS PRODUCTS

Asbestos was used extensively in structures such as buildings, processing plants, ships, trains and motor vehicles in the 1950s, 1960s and 1970s. Asbestos cement products are commonplace in building materials and buildings constructed prior to 1990.

Asbestos has been used in hundreds of different building materials. Some of the common building materials include:

- Adhesive sealants and paints.
- Electrical backing boards and internal linings.
- Vinyl floor tiles and vinyl sheets.
- Fibro-cement sheets in wall, ceiling and eave linings (internal & external).
- Fibro-cement internal flues and downpipes
- Bitumen-based water proofing such as malthoid (typically on roofs).

Whilst these materials are known to commonly contain asbestos, not all will. Confirmation must be made by detailed visual inspections coupled with laboratory analysis.

Generally, ACM consists of asbestos fibres bound in a cement matrix. The degree of fibre release and the risk posed by the asbestos will depend on the type of material (e.g. friable or non-friable), its condition and the potential for disturbance. As a result, it is necessary to have in place safe systems of work when working with or near asbestos.

F3 LEGISLATIVE REQUIREMENTS

State and Territory governments around Australia have generally adopted a consistent approach to asbestos management within workplaces. Whilst some minor differences are present from state to state, the following general requirements apply within workplaces:

- The owner of a workplace must determine if ACM are present in the workplace. This is usually undertaken through a visual inspection of the property.
- Upon identifying ACM, a risk assessment must be undertaken and must consider the following:
 - Friability
 - Condition
 - Location
 - Surrounding activities that could disturb the asbestos
- Where ACM is identified, it should be removed if removal is reasonably practicable. Where it is not reasonably practicable to remove, it must, depending on the level of risk, be either repaired, maintained and/or protected from future damage.
- ACM that is to remain in use (i.e. *in-situ*) must, when reasonably practicable, be labelled. An example of a warning label is shown below:

Figure F.1 Example asbestos warning label



- If ACM is found to be damaged, or is in a position where it is likely to be damaged, steps must be taken to prevent it being or becoming an unacceptable risk.
- If the risk of the ACM is found to be elevated, then steps must be taken to minimise the risk to employees / workers and other personnel who attend the workplace.

F4 HEALTH IMPACTS

As ACM is no longer used in Australia, most worker exposures now occur during the removal of asbestos and the renovation and maintenance of buildings and structures containing asbestos; particularly when asbestos is disturbed during activities such as handling, sawing, sanding, grinding, drilling, turning or similar.

The presence of asbestos may constitute a potential hazard; however, risk to health is based on the likelihood that respirable asbestos fibres are inhaled in significant quantities.

The level of risk posed by asbestos is linked to the size and shape of the fibres and the ability of it to penetrate deep into the lungs and become lodged. Fibres that measure less than three (3) microns wide and greater than five (5) microns long are referred to as respirable fibres and may enter the deepest part of the lungs. Larger fibres are deposited in the nose and major airways and can generally be cleared by normal physiological processes.

Once asbestos fibres have been inhaled (particularly respirable fibres) they can become lodged and are harder for our bodies to destroy, breakdown or remove. This is when they pose the greatest potential to cause disease and the likelihood of disease increases as the number of asbestos fibres inhaled increases.

Significant health risks may arise from the inhalation of airborne asbestos fibres, and their passage into the lungs. The risk of cancer increases as fibres diameter decreases and with increased exposure. Cigarette smoking greatly increases the risk of lung cancer in people heavily exposed to asbestos, but has no known association with mesothelioma.

Crocidolite and amosite have the most potent documented effects in producing the highly malignant mesothelioma tumour.

Asbestos fibres reaching the alveoli are handled in different ways. Some are carried out of the lung through the lymphatic system (part of the immune system). Of those fibres that remain some do not cause health effects whilst some may lead to lung changes such those outlined below:

Asbestosis	A form of fibrosis (scarring) of the lungs, which results in breathlessness. Asbestosis is a serious, chronic, non-cancerous respiratory disease. Asbestosis can take between 20 to 40 or longer years to develop.
Lung Cancer	Lung cancer is a disease which consists of uncontrolled cell growth in tissues of the lung. The incidence of lung cancer in people who are directly involved in the mining, milling, manufacturing and use of asbestos and its products is much higher than those who weren't involved in those industries.
Mesothelioma	Mesothelioma is a cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelial cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness. Mesothelioma was once rare, but its incidence is increasing throughout the industrial world because of past exposures to asbestos. Australia has the highest incidence rate in the world.

The primary objective in any asbestos management plan is to eliminate, where possible, exposure to airborne asbestos fibres, or as a minimum, ensure workers are not exposed to fibre concentrations greater than the National Occupational Health and Safety Commission's occupational exposure standards for asbestos. It should be noted, that in situations where asbestos has been incorporated into a stable matrix and airborne dust is not generated, the asbestos-related health risk is negligible.

F5 SYNTHETIC MINERAL FIBRES

Synthetic Mineral Fibres (SMF) are a group of amorphous substances, including Glasswool, Rockwool and Ceramic fibre that have been fiberised by mechanical means, such as spinning or blowing during manufacturing. SMFs are commonly found in false ceiling panels and insulation and are typically identified by visual observation or by Optical Microscope techniques.

In the late 1980s the International Agency for Research on Cancer (IARC) evaluated certain SMF materials as being possibly carcinogenic to humans. The similarity in application and appearance to asbestos has resulted in some community concern regarding the health effects associated with exposure to SMF.

Reference information on SMF and their management is provided in the rescinded National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].

F6 LEAD BASED PAINTS

In the past lead was added to paint as a pigment and to assist with drying, improve durability, resist moisture and retain a fresh appearance. Lead carbonate (white lead) was once the principal white pigment in paints for houses and public buildings. Paint with lead pigment was manufactured up until the late 1960s, and in 1969 the National Health and Medical Research Council's Uniform Paint Standard was amended to restrict the lead content in domestic paint. The use of lead in paint as a significant component was phased out in Australia by the early 1980s.

Many older Australian buildings still contain lead-based paint, even though it may be covered with layers of more recent paint. Lead-based paint was used mainly on exterior surfaces, and to a lesser degree on interior doors and door and window architraves, especially in undercoats and primers, where concentrations of up to 20 percent lead content were used. Interior walls were not commonly painted with paint containing white lead pigment, although some colours did contain red, orange and yellow lead pigments.

Other areas that may contain lead include lead flashing and lead backing in electrical components. Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Lead paint removal poses two potential avenues of transmission. Firstly, by inhalation or ingestion by workers and public near the works, and secondly by the deposition of particles on nearby footpaths, streets or soil where they may be re-suspended, tracked into houses or buildings where it can be inhaled or ingested.

Lead based paints are to be managed in accordance with the Australian Standard *Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings* (AS4361.2:2017) .

F7 POLYCHLORINATED BIPHENYLS

Polychlorinated biphenyl (PCBs) compounds are synthetic organic compounds that were used in transformer oils, capacitor oils, hydraulic and heat-exchange fluids, lubricating oils, cutting oils, fluorescent light fittings, ceiling fans, dishwashers, clothes dryers, vacuum pumps, electric motors and washing machines. PCBs are highly stable chemicals with good insulating properties; they do not degrade appreciably over time or with exposure to high temperatures, acids or alkalis. It is these properties that made PCBs attractive for use in electrical devices. They were first used in about 1929 and were commonly used from the 1950s to the 1970s.

Fluorescent light-fittings containing capacitors can be compared with details contained in the ANZECC Identification of PCB Containing Capacitors database (1997).

It is considered that Australian electrical equipment manufactured since 1970 is unlikely to contain PCBs. Imports of PCBs to Australia were banned since 1986 once it became known that PCBs could harm human health and contaminate the environment.

APPENDIX G

APPLICABLE LEGISLATION AND REFERENCES



G1 LEGISLATION

PRIMARY ASBESTOS LEGISLATION	ASBESTOS SURVEY REQUIREMENTS	ASBESTOS RESURVEY REQUIREMENTS	REPORTING REQUIREMENTS	MANAGEMENT AND LABELLING/SIGNAGE REQUIREMENTS	OTHER REQUIREMENTS
Work Health and Safety Act 2011 Work Health and Safety Regulations 2017 Supported by: Code of Practice – How to Manage and Control Asbestos in the Workplace (2022) Code of Practice – How to Safely Remove Asbestos (2022)	A PCBU must, for work place buildings/structures that are constructed prior to December 31, 2003 Survey to identify and locate any ACMs; and Compile and keep at the workplace a site specific Asbestos Register. If ACM is identified at the work place, an AMP is to be compiled for the management of the identified ACM. The Asbestos Register and the AMP must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.	Re-inspections of identified ACM is determined on a case-by-case basis depending on the risk situation and should be informed by and conducted in accordance with the site specific AMP.	The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey. The Asbestos Register must be maintained and also updated if: — The AMP is under review — Further ACM is identified and/or — ACM is removed, disturbed or encapsulated. The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place. The AMP must be maintained and updated: — When the Asbestos Register is under review — If asbestos is removed, disturbed or encapsulated — If the AMP is no longer adequate for managing the ACM — If a Health and Safety Officer requests a review and/or at least — Once every 5 years.	Generally, health monitoring is not required except for workers involved in asbestos removal works. Training is required for persons involved in asbestos removal work or carrying out asbestos related works. All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item. Before refurbishment or demolition: — Ensure Asbestos Register is current — Undertake necessary inspections. A licensed asbestos removalist is required unless: ACM <10 m² and non-friable and then by a competent person.	WHS Regulation 419 requires that a PCBU must not carry out, or direct or allow a worker to carry out, work involving asbestos; excepting as is applicable: — Managing risk — Sampling, identification and analysis — Maintenance — Removal/disposal — Other exemptions per s.419 (3).

WSP

G2 REFERENCES

- NOHSC. (April 2005a). *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition*. National Occupational Health & Safety Commission, Australian Government.
- Standards Australia. (April 1994). *Safety Signs for the Occupational Environment*. Australian Standard.
- Standards Australia. (February 2009). *Selection, use and maintenance of respiratory protective equipment*.
- Standards Australia. (February 2012). *Respiratory protective devices*. Australian / New Zealand Standard, Joint Technical Committee QR-011.
- Standards Australia. (September 2001). *Demolition of structures*. Australian Standard, Committee BD-059.

ABOUT US

WSP is one of the world's leading engineering professional services consulting firms. We are dedicated to our local communities and propelled by international brainpower. We are technical experts and strategic advisors including engineers, technicians, scientists, planners, surveyors, environmental specialists, as well as other design, program and construction management professionals. We design lasting Property & Buildings, Transportation & Infrastructure, Resources (including Mining and Industry), Water, Power and Environmental solutions, as well as provide project delivery and strategic consulting services. With 36,000 talented people in more than 500 offices across 40 countries, we engineer projects that will help societies grow for lifetimes to come.



HAZARDOUS MATERIALS SURVEY REPORT

142-146 & 148 NEW SOUTH
HEAD ROAD
EDGECLIFF, NSW, 2027



Status of hazardous materials at 142-146 & 148 New South Head Road



WARNING: Hazardous materials identified at the Site.

Refer to the report in its entirety for details of identified hazardous materials and the associated limitations (e.g. areas unable to be assessed).



Question today *Imagine tomorrow* Create for the future

Hazardous Materials Survey Report 142-146 & 148 New South Head Road Edgecliff, NSW, 2027 LENDLEASE DEVELOPMENT

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REV	DATE	DETAILS
A1	26 November 2024	Initial Draft Report Issued to Client
A2	29 November 2024	Final Report Issued to Client

	NAME	DATE	SIGNATURE
Prepared by:	Kaushik Botta	22 November 2024	
Reviewed by:	Leigh Rampley	26 November 2024	
Approved by:	Daniel Abela	26 November 2024	

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APPENDIX G APPLICABLE LEGISLATION AND REFERENCES

GLOSSARY

Report / Register – Risk Assessment Glossary

Primary Location/Room	The primary location description of the material described in the hazardous materials register (e.g. Main Office).
Secondary Location/Application	Means the use or application of the material described in the asbestos register (e.g. wall lining, floor covering, soffit lining, pipe lagging, etc.).
Material/Product Description	Refers to the type of known/suspected ACM identified (e.g. vinyl tile, fibre cement sheeting, fibrous insulation, etc.). Does not refer to the use or application of the material. This is covered in 'Secondary Location/Application'.
Friable (Asbestos)	Means asbestos-containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.
Non-Friable (Bonded Asbestos)	Material containing asbestos that is not friable asbestos, includes materials containing asbestos fibres reinforced with a bonding compound.
Condition (Good)	Condition of a material where: — The material has no evidence of any significant damage/deterioration. — The material is in, or is close to, 'as new' condition.
Condition (Fair)	Condition of a material where: — There is some minor damage or wear throughout the extent of the material. — There is some obvious damage or significant wear but only in localised areas.
Condition (Poor)	Condition of a material where: — The material exhibits consistent damage or wear throughout the extent of the material. — Major or significant damage is evident, even if only in localised areas. — Any non-fixed material (e.g. debris).
Disturbance (Low)	The potential for disturbance is low when: — Activities in the area where the hazardous material is located are unlikely to result in damage or deterioration of the material. — The material is completely isolated from normal day to day activities. — The material is completely protected from nearby activities by an enclosure or encapsulation.
Disturbance (Medium)	The potential for disturbance is medium when: — Activities in the area have a potential to mildly impact upon the material and the activities are infrequent — The material is protected from activities by an enclosure or encapsulation, however the protection is not comprehensive.
Disturbance (High)	The potential for disturbance is high when: — Activities undertaken in the area are likely to result in immediate damage to identified hazardous materials — Activities in the area, whilst typically of low impact, happen on a regular basis and are likely to result in deterioration or damage to the material in the short to medium term.

Report Glossary

Airborne asbestos	Any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
Asbestos	The asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
Asbestos Cement (AC)	Products consisting of sand aggregate and cement reinforced with asbestos fibres (e.g. asbestos cement pipes and flat or corrugated asbestos cement sheets).
Asbestos containing material (ACM)	Any material, object, product or debris that contains asbestos.
Asbestos contaminated dust or debris (ACD)	Dust or debris that has settled within a workplace and is (or is assumed to be) contaminated with asbestos.
Asbestos removal work	Work involving the removal of asbestos or ACM, friable asbestos removal work or non-friable asbestos removal work.
Asbestos removalist	A person conducting a business or undertaking who carries out asbestos removal work.
Asbestos-related work	Work involving asbestos.
Competent person	A person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work.
Dust and debris	Visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.
Hazard	Anything in the workplace that has the potential to harm people and the environment.
Inaccessible areas	Areas that are difficult to access, such as wall cavities and the interiors of plant and equipment.
In-situ asbestos	Asbestos or ACM fixed or installed in a structure, equipment or plant but does not include naturally occurring asbestos.
NATA-accredited laboratory	A testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.
Person conducting a business or undertaking (PCBU)	A person conducts a business or undertaking is one who meets the definition outlined in Section 5 of the WHS Act.
Person with control	In relation to premises, a person who has control of premises used as a workplace. The person with control may be: — The owner of the premises — A person who has, under any control or lease, an obligation to maintain or repair the premises — A person who is occupying the premises — A person who can make decisions about work undertaken at the premises.
Respirable asbestos	An asbestos fibre that: — Is less than 3 microns (μm) wide — Is more than 5 μm long — Has a length to width ratio of more than 3:1.
Risk	Refers to the level of risk posed by the ACM based on its condition, friability, potential for disturbance (accessibility) and other factors such as proposed demolition/refurbishment works. Refer to the Risk Matrix in Appendix D
Sealed	Refers to whether the ACM is encapsulated with a sealant (such as paint, wall paper, etc.), concealing its exposed surfaces.

Airborne asbestos	Means any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
Asbestos	Means the asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
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Asbestos removal work	Means work involving the removal of asbestos or ACM, friable asbestos removal work or non-friable asbestos removal work.
Asbestos removalist	Means a person conducting a business or undertaking who carries out asbestos removal work.
Asbestos-related work	Means work involving asbestos.
Competent person	Means a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work.
Condition (Fair)	Means: — There is some minor damage or wear throughout the extent of the material — There is some obvious damage or significant wear but only in localised areas.
Condition (Good)	Means: — The material has no evidence of any significant damage/deterioration — The material is in, or is close to, 'as new' condition.
Condition (Poor)	Means: — The material exhibits consistent damage or wear throughout the extent of the material — Major or significant damage is evident, even if only in localised areas — Any non-fixed material (e.g. debris).
Disturbance (High)	Means: — Activities undertaken in the area are likely to result in immediate damage to identified hazardous materials — Activities in the area, whilst typically of low impact, happen on a regular basis and are likely to result in deterioration or damage to the material in the short to medium term.

Disturbance (Low)	Means: — Activities in the area where the hazardous material is located is unlikely to result in damage or deterioration of the material — The material is completely isolated from normal day to day activities — The material is completely protected from nearby activities by an enclosure or encapsulation.
Disturbance (Medium)	Means: — Activities in the area have a potential to mildly impact upon the material and the activities are infrequent — The material is protected from activities by an enclosure or encapsulation, however the protection is not comprehensive.
Dust and debris	Means visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.
Friable (Asbestos)	Means asbestos-containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.
Hazard	Anything in the workplace that has the potential to harm people.
Inaccessible areas	Means areas which are difficult to access, such as wall cavities and the interiors of plant and equipment.
In-situ asbestos	Means asbestos or ACM fixed or installed in a structure, equipment or plant but does not include naturally occurring asbestos.
Material/Product Description	Refers to the type of known/suspected ACM identified (e.g. vinyl tile, fibre cement sheeting, fibrous insulation, etc). Does not refer to the use or application of the material. This is covered in 'Application (secondary location)'.
NATA-accredited laboratory	Means a testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.
Non-Friable (Bonded Asbestos)	Means material containing asbestos that is not friable asbestos, includes materials containing asbestos fibres reinforced with a bonding compound.
Person conducting a business or undertaking (PCBU)	A person conducts a business or undertaking is one who meets with the definition outlined in Section 5 of the WHS Act.
Person with control	Means, in relation to premises, a person who has control of premises used as a workplace. The person with control may be: — The owner of the premises — A person who has, under any control or lease, an obligation to maintain or repair the premises — A person who is occupying the premises — A person who is able to make decisions about work undertaken at the premises.
Primary Location/Room	Means the primary location description of the material described in the hazardous materials register (e.g. Main Office).

Respirable asbestos	Means an asbestos fibre that: — Is less than 3 microns (µm) wide — Is more than 5 microns (µm) long — Has a length to width ratio of more than 3:1.
Risk	Refers to the level of risk posed by the ACM based on its condition, friability, potential for disturbance (accessibility) and other factors such as proposed demolition/refurbishment works. Refer to the Risk Matrix in Appendix A .
Sealed	Refers to whether or not the ACM is encapsulated with a sealant such as paint, wall paper, etc. concealing its exposed surfaces.
Secondary Location/Application	Means the use or application of the material described in the asbestos register (e.g. wall lining, floor covering, soffit lining, pipe lagging, etc).

ABBREVIATIONS

A	Amosite Asbestos (brown Asbestos)
AC	Asbestos cement (Asbestos-containing fibrous cement material)
ACD	Asbestos contaminated dust or debris
ACM	Asbestos containing material
AMP	Asbestos management plan
ARCP	Asbestos removal control plan
ASCC	Australian Safety & Compensation Council
C	Crocidolite Asbestos (blue Asbestos)
CH	Chrysotile Asbestos (white Asbestos)
EPA	Environment Protection Authority
FC	Fibre cement (usually sheeting)
Fibres/mL	Countable fibres per millilitre of air sampled
L/min	Litres per minute of air
LAA	Licensed asbestos assessor
NAD	No Asbestos Detected
NATA	National Association of Testing Authorities, Australia
NOHSC	National Occupational Health and Safety Commission
ODS	Ozone Depleting Substance
OH&S	Occupational health and safety (also, refer to WH&S)
PAM	Presumed Asbestos material
PCB	Polychlorinated biphenyls
PCBU	Person conducting a business or undertaking
PPE	Personal protective equipment
RPE	Respiratory protective equipment
SMF	Synthetic Mineral Fibre
SWMS	Safe work method statement
WH&S	Workplace health and safety

EXECUTIVE SUMMARY

WSP Australia Pty Ltd (WSP) was engaged by Lendlease Development (referred to as the ‘Client’) to undertake a hazardous building materials survey of 142-146 & 148 New South Head Road, located at Edgecliff, NSW 2027 (referred to as the ‘Site’). The area is to undergo major redevelopment, and the Site is to be demolished.

SITE NAME	142-146 & 148 New South Head Road
SITE ADDRESS	Edgecliff, NSW 2027
SURVEYOR NAME	Kaushik Botta and Leigh Rampley
SURVEY DATE	11 November 2024 to 18 November 2024 (not inclusive)

The Client’s objective is to comply with applicable legislative and the State Significant Development Guidelines - Safety Environmental Assessment Requirements (SSD – SEAR’s) clause requirement by providing a hazardous materials survey of a building proposed to be demolished or altered so that they can be safely removed and lawfully disposed of, as required. The hazardous materials targeted as part of the survey were:

- Asbestos-Containing Materials (ACM)
- Lead-based paints (LBP)
- Lead in dust
- Synthetic mineral fibres (SMF)
- Polychlorinated biphenyl (PCB)

The scope of services for this inspection comprised a detailed visual inspection of all accessible areas on the Site (buildings, structures and plant). Representative samples were collected from materials suspected of being ACM or lead containing. All data generated from the survey was used to create an hazardous materials register (Appendix A) and assesses the risk associated with identified hazardous material (refer to risk matrix in Appendix D).

FINDINGS

The following table summarises asbestos/hazardous materials identified or presumed (assumed) during the Site inspections. Refer to Section 6. for recommendations

MATERIAL	IDENTIFIED/PRESUMED	RISK RANGE*		
142-146 & 148 New South Head Rd				
Friable ACM	No	-	to	-
Non-friable ACM	Yes	Low	to	Medium
Synthetic Mineral Fibres	Yes	Low	to	Low
Lead Based Paints	Yes	Low	to	Medium
Lead in Dust	Yes	High	to	High
PCBs	Yes	Low	to	Low

*No high-risk asbestos materials were identified during the Site inspection. The risk arising from potential exposure to hazardous materials must be managed in accordance with the *NSW WHS Regulation clause 49* during demolition works.

1 INTRODUCTION

WSP Australia Pty Ltd (WSP) was engaged by Lendlease Development (referred to as the 'Client') to undertake a hazardous building materials survey of 142-146 & 148 New South Head Road, located at Edgecliff, NSW 2027 (referred to as the 'Site'). The area is to undergo major redevelopment, and the Site is to be demolished.

This report presents the findings of the inspection conducted on 11 November 2024 to 18 November 2024, not inclusive.

No one section or part of a section of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including the asbestos register and sample results.

1.1 OBJECTIVE

The Client's objective is to comply with applicable legislative and the State Significant Development Guidelines - Safety Environmental Assessment Requirements (SSD – SEAR's) clause requirement by providing a hazardous materials survey of a building proposed to be demolished or altered so that the materials can be safely removed and lawfully disposed of, as required.

1.2 SCOPE OF WORK

WSP's completed scope of work is summarised below:

- Attended Site to undertake building (structure and plant) survey inspections in safely accessible areas
- Collected representative asbestos and lead samples, where safe to do so, to:
 - Confirm the presence/absence of asbestos or lead materials
 - Assess the condition and potential for disturbance of hazardous materials encountered; and
 - Determine the approximate extent and quantities of hazardous materials
- Hazardous materials were photographed
- The Site survey encompassed all accessible Site buildings, features, services, ceilings, roofing and areas of the Site. Where areas were inaccessible or samples could not be collected, this was noted.

1.3 SURVEY TYPE

The demolition and refurbishment survey was undertaken by visual inspection and through intrusive investigations and destructive sampling, where safe to do so, and analysis of those areas of the site accessible at the time of the survey. Intrusive/Destructive Survey Inspections are normally undertaken at the time of (or immediately prior to) the refurbishment or demolition works being undertaken. This type of survey is fully intrusive using destructive investigation techniques and sampling regimes, therefore as a consequence, the potential exists for the disturbance for any asbestos and other hazardous materials present. This type of survey requires more personal protection measures being undertaken for the surveyor.

All safely accessible external and internal areas of the Site structures and plant were inspected. The inspection included general building areas, occupied areas, ceiling spaces, sub floors, roof spaces, plant equipment and platform areas. Where it was not possible to collect a sample of a suspect material, records were included in the hazardous materials register as "assumed/presumed material". All inaccessible areas were noted.

2 SITE INFORMATION

2.1 SITE DETAILS

WSP was engaged to complete an hazardous materials survey of the following Site.

Table 2.1 Site details

SITE NAME	142-146 & 148 New South Head Road
SITE ADDRESS	Edgecliff, NSW, 2027
MAJOR SITE STRUCTURES	142-148 New South Head Rd
APPROXIMATE AGE OF SITE	1897

2.2 SITE DESCRIPTION

Details of the buildings are presented below:

Table 2.2 Building description

Building	Building Description	Approximate Building Age
142-148 New South Head Rd	Two storey commercial building. Constructed of double brickworks walls, timber floorboards, timber frame and slate tiled roof. Interior walls are constructed of Lathe and plaster, plasterboard. Interior ceilings are lathe and plaster and plasterboard soffits. The Site was divided into two properties as a semi-detached building.	1897

The building was vacant and electrics isolated. Some salvaging had taken place as well as rubbish observed dumped rubbish around the property, with unauthorised access/squatting.

The inspection was intrusive, with destructive investigations in representative areas, and was limited to the building(s) listed above. Hazardous materials located in inaccessible areas, or located in areas that posed an unacceptable risk to health and safety (e.g. live electrical areas, confined spaces, etc.) and security, were not inspected or sampled during the survey.

3 HAZARDOUS MATERIALS RISK ASSESSMENT

To assess the health risk posed by the presence of ACMs, SMF, lead based paint, and PCBs, the following factors must be considered:

3.1 ACM & SMF RISK ASSESSMENT FACTORS

These factors include:

- Condition of the material. This is described as being either good (not been damaged or have not deteriorated), medium (minor deterioration or damage) or poor (materials which have been extensively damaged, or their condition has deteriorated over time);
- Proximity of air plenums and direct air stream;
- Friability of the material (ease with which the material can be crumbled) listed as either friable or non-friable;
- Requirement for access for building or maintenance operations and accessibility (low, medium or high);
- Likelihood of disturbance of the material;
- Exposed surface areas and;
- Environmental conditions.

These aspects are in turn judged upon; (i) potential for fibre generation; and, (ii) the potential for exposure. When these factors have indicated that there is a possibility of exposure to airborne fibres, appropriate recommendations for repair, maintenance or abatement of the asbestos containing materials are made.

3.2 LEAD BASED PAINT RISK ASSESSMENT FACTORS

Risk assessment factors include:

- Concentration of lead in paint;
- Condition of the paint.
- Deterioration/damage (peeling, flaking);
- Proximity of air plenums, direct air stream and sensitive receptors such as foodstuffs;
- Ease with which the paint can be disturbed/removed;
- Requirement for access for building or maintenance operations and accessibility (low, medium or high); and
- Magnitude of exposed surface areas.

These aspects are in turn judged upon the potential for exposure. When these factors have indicated that there is a possibility of exposure to lead-based paint/dust, appropriate recommendations for the repair, maintenance, abatement and removal of the paint are made.

3.3 POLYCHLORINATED BIPHENYLS (PCBS) RISK ASSESSMENT FACTORS

Risk assessment factors include:

- The manufacture age and location of the capacitor;
- The condition of the capacitor (visible leaks/spills of fluid);
- Potential of exposure to the PCBs from contact with capacitors;
- Ease with which the capacitors can be accessed and;
- The requirement for access to light fittings for building or maintenance operations and accessibility (low, medium or high).

As above, these aspects are in turn judged upon the potential for exposure. When risk factors have indicated a possibility of exposure to PCBs, appropriate recommendations for the removal and disposal of the capacitors are made.

3.4 DUST

Risk assessment factors include:

- Dust loading;
- Surface area/spaces;
- Likelihood of disturbance of the material;
- Environmental conditions; and;
- Inherent risk.

Dust has a high disturbance potential and high risk of exceeding exposure standards as can easily become airborne.

4 SURVEY METHODOLOGY

4.1 SITE INSPECTION

The Site inspection involved a thorough and systematic walkthrough of the building and structure and plant. Access was made only where safe access by solid floors, decking, walkways, protected catwalks or ladders was available. Minimal to no disturbance of any equipment was undertaken as part of the survey as all plant, electrical installations, pipe-work and associated equipment were considered live at the time of the survey. No soil investigation or soil sampling was undertaken as part of the survey.

The identification of hazardous materials involved a combination of visual inspection of the accessible areas of the building/structure and the collection of small representative samples (where required as sample collection is not always a requirement during asbestos surveys) of the suspect materials for analytical confirmation. Where identical suspect materials were detected at different locations, visual confirmation only may have been made rather than additional sample collection.

Observations recorded for known and suspected hazardous materials included details of the:

- Location
 - Condition
 - Potential for disturbance/accessibility
 - Friability
 - Quantity/extent.
-

4.2 ASBESTOS SAMPLE ANALYSIS

Representative samples of materials suspected of containing asbestos were collected and analysed by WSP's in-house NATA accredited laboratory. The identification of asbestos fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. This is detailed in Australian Standard 4964-2004 'Method for the qualitative identification of asbestos in bulk samples'. Asbestos samples were only collected for analysis where the safety of personnel would not be compromised. Sampling was conducted in accordance with WSP's in-house survey guide.

4.3 COLLECTION OF DATA

Following the hazardous materials inspection survey and any subsequent sample analysis, all data collected was tabulated to form a hazardous materials register that includes risk ratings, location, and representative photos.

4.4 INACCESSIBLE AREAS

Hazardous materials located in inaccessible areas, or located in areas that pose an unacceptable risk to health and safety (e.g. live electrical areas) and security, were not inspected or sampled during the survey. Common locations where access may be limited or missing are listed below:

- Inside voids concealed within a building structure that cannot be accessed without major demolition
- Roofs, ceiling spaces and other height restricted areas that cannot be accessed without specialised equipment
- Within confined spaces
- Energised services/utilities, including gas, water and electrical

The following table summarises inaccessible areas identified during the Site inspection.

Table 4.1 Summary of inaccessible areas at time of inspection

INACCESSIBLE AREAS	DETAILS
142-148 New South Head Rd, External Underground services	No access - Below ground
142-148 New South Head Rd, External Grounds, Garden Beds and courtyards	No Access - Overgrowth and dumped rubbish not inspected
142-148 New South Head Rd, Sub-Basement Sub-floor and soils	Limited access - Low clearance. Crawl space.
148 new South head road , Level 1 Room with fireplace	No access - Fireplace chimney not accessible height restriction / enclosed void
148 new South head road , Ground Floor Operation room fire place	No access - Fireplace chimney not accessible height restriction / enclosed void
142-148 New South Head Rd, External Roof	No access - Height restriction

4.5 IDENTIFICATION OF MATERIAL

4.5.1 ASBESTOS CONTAINING MATERIALS (ACM)

Representative samples of materials suspected to contain asbestos were collected and analysed at WSP Australia's NATA Accredited Laboratory. The identification of asbestos fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. This is detailed in Australian Standard 4964-2004 '*Method for the qualitative identification of asbestos in bulk samples*'. Asbestos samples were only collected for analysis where the safety of personnel would not be compromised. Sampling was conducted in accordance with the WSP Australia's standing operating procedures.

4.5.2 LEAD-BASED PAINTS

Representative samples of paint suspected to be lead based were collected and analysed at an external NATA Accredited Laboratory. Laboratory analysis of lead based paints is used to achieve a reportable weight by weight percentage of lead throughout the paint layers and is reported against AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings lead containing paint system level of 0.1 per cent (w/w) of the dried film.

The analysis of the physical samples is achieved by digestion of the sample for determination of lead content by one of two methods, atomic absorption spectroscopy (AAS) or inductively coupled plasma emission spectrometry (ICP-AES). Collection of lead based paint samples was only conducted where the safety of personnel would not be compromised. Sampling was conducted in accordance with the WSP Australia's in house survey guide and AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings.

Sampling methodology will consider the various paint coats and record these layers accordingly, these observations will be referred to alongside the analytical sample results to acknowledge that lead paint layers of varying lead content will affect the analytically observed lead weight concentration recorded from the sample. To this end, where multiple lead paint layers have been visually recorded but analytically determined lead percentage of the collective paint layers is below actionable limits, the paint undercoats may still be determined as hazardous due to its dilution in the sample by the non-lead topcoats. Sampling methodology may also consist of the use of a lead paint chemical colorimetric test reagent that can provide an instantaneous result of lead presence within specific layers. This testing will however be used in conjunction with a physical sample to determine the lead concentration as above.

4.5.3 LEAD CONTAINING DUST

In the absence of regulatory guidelines, WSP has adopted guidelines from AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings. This has been justified in WSP's technical memo TM01/18 "Lead in Dust Guidance Levels" dated 9th July 2018. The adopted guidelines for commercial facilities are listed in the table below.

Table 4.2 Adopted lead containing dust surface loading guidelines for commercial facilities

Commercial Facilities Areas	Concentration
Ceiling dust	8 mg/m ²
Interior surfaces	5 mg/m ²
Floors and eating areas	1 mg/m ²

These surface contamination reference limits should be used as a guideline to assist in the evaluation and control of workplace housekeeping standards and not as defined lines between safe and un-safe levels. Wherever possible, surface dust loading levels should be as low as reasonably achievable (ALARA). The ALARA principal is recommended to keep any potential hazardous material exposures as much below the guidelines as practicable

4.5.4 SYNTHETIC MINERAL FIBRES (SMF) MATERIALS

If representative samples of materials suspected to contain asbestos were collected and analysed at WSP Australia's in-house NATA Accredited Laboratory, SMF can also be identified. The identification of SMF fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. Alternatively, our experienced surveyor visually identified and recorded the presence of synthetic mineral fibre products onsite.

4.5.5 POLYCHLORINATED BIPHENYLS (PCBS)

Where access was available, and power was isolated representative examples of each major type of fluorescent light fittings were examined to determine which lights were fitted with PCB containing ballast capacitors. The details of the brand, model of each capacitor and capacity were recorded and checked against with the ANZECC database of known PCB capacitors and PCB free capacitors.

The Australian and New Zealand Environment Conservation Council 'Polychlorinated Biphenyls Management Plan, November 1996' outlines the National Strategy for the management of PCBs.

The document defines PCB materials and wastes as follows:

Table 4.3 PCB Concentration Classification

PCB CONCENTRATION	WASTE CLASSIFICATION
<2 mg/kg	PCB free
2 mg/kg to <50 mg/kg	Non-scheduled PCB material or waste
>50 mg/kg	Scheduled PCB material or waste
>100,000 (10%)	Concentrated PCB material

5 RESULTS / FINDINGS

All data generated from the survey was used to create an hazardous materials register (Appendix A) with photographs of site structures (Appendix B) and documented materials. A risk assessment was completed for known and suspected hazardous materials using the risk matrix presented in Appendix D.

This section summarises findings from the survey.

Table 5.1 Summary of identified or presumed (assumed) asbestos or hazardous containing materials

MATERIAL	IDENTIFIED/PRESUMED	RISK RANGE*		
142-146 & 148 New South Head Road				
Friable ACM	No	-	to	-
Non-friable ACM	Yes	Low	to	Medium
Synthetic Mineral Fibres	Yes	Low	to	Low
Lead Based Paints	Yes	Low	to	Medium
Lead in Dust	Yes	High	to	High
PCBs	Yes	Low	to	Low

*No high-risk asbestos materials were identified during the Site inspection. The risk arising from potential exposure to hazardous materials must be managed in accordance with the *NSW WHS Regulation clause 49* during demolition works.

Non-friable ACM in the form of fibre cement sheet fragments / debris identified on the soil surface in the subfloor. Likely source from building material waste and may be present throughout the sub-floor and possibly be contained within the soil below the surface.

6 RECOMMENDATIONS

6.1 GENERAL RECOMMENDATIONS

To ensure that identified hazardous materials are appropriately managed, WSP recommends the following:

- Refer to the hazardous materials register and specific management actions to remove/maintain identified hazardous materials to ensure that health and environmental risks are appropriately managed.
- Inaccessible areas should be assumed to contain hazardous materials and managed accordingly until such time that this can be assessed by a competent person.
- All Assumed Positive ACM should be treated as asbestos and all requirements for removal asbestos must be followed, until such time as proven otherwise with testing has confirmed that it is not or does not contain asbestos.
- All Safe Work Method Statements (SWMS) must identify hazardous materials on site as part of demolition works and any safe systems of work put into place to manage the risk.
- The survey was undertaken using limited destructive methods and intrusive methods. There may remain a potential for hazardous materials to be concealed within the building structure(s) where it would only be possible to locate during controlled demolition or dismantling. Accordingly, caution should be exercised where subsequent demolition or dismantling of the structure(s) is required.
- If Unexpected finds and/or any suspected materials are identified during works, stop work, restrict area, engage a qualified hygienist (Such as WSP) to sample materials and test in a NATA registered laboratory for the presence of hazardous materials.
- Activities near hazardous materials should be restricted to minimise the potential for damaging hazardous materials.
- Ensure a current copy of the hazardous materials register is kept on Site, and readily available to personnel, employees and any contractors likely to encounter hazardous materials.
- Implement control measures to minimise dust disturbance and ingestion/inhalation pathways for dust containing lead.
- Further investigation is required for the items where limited access was available and the extent of the hazard was not determined (e.g. subfloor areas). Sampling and analysis of these areas is required to remedial plan (technical specification for removal).
- Prior to works that may disturb accumulated dust a risk assessment should be undertaken and at a minimum housekeeping and hygiene controls should be implemented such as dust suppression, use of PPE including nitrile gloves and suitable decontamination such as hand washing.

6.2 REMOVAL RECOMMENDATIONS:

- A technical specification for removal of hazardous materials should be developed to form a scope of work, and to provide guidance on the remediation/removal works to be undertaken and clearance to be achieved in a safe manner, as well as to set legislative requirements for stakeholders.
- Remove all identified and presumed hazardous materials that will be disturbed by the scheduled demolition works (as far as reasonably practical) by an appropriately licensed/experienced abatement contractor prior, where required.
- Disposal receipts should be obtained from the removal contractor as evidence that the waste has been taken to an appropriate landfill facility and disposed of lawfully.

6.2.1 ASBESTOS:

- Engage a licensed asbestos removal contractor (LARC) to undertake removal/remediation works of any ACMs that will be disturbed by the proposed works under controlled conditions prior to refurbishment or demolition works.
- All removal works must be undertaken in accordance with *NSW WHS Regulations* and the *Code of Practice How to safely remove asbestos*.
- Engage an independent asbestos hygienist (competent person or licensed asbestos assessor) to undertake asbestos fibre air monitoring during the remedial/removal works and a visual inspection at the completion of the removal works, where required. Following the clearance inspection a clearance certificate must be issued prior to the area being reoccupied for demolition or other work.
- All licensed asbestos removal work must be notified to the state regulator in writing at least five days before licensed asbestos removal work commences as stated in the *NSW WHS Regulations*.
- The Licensed Asbestos removalist must obtain the asbestos register of the workplace before commencing licensed asbestos removal work. The register must be reviewed and if necessary revised if asbestos removal work is being conducted to be sufficient for asbestos remediation/removal to be undertaken.
- All associated asbestos waste must be disposed of lawfully in accordance with the waste disposal procedures and personal decontamination must be carried out in accordance with *NSW WHS Regulations*, *Code of Practice How to safely remove asbestos* and the *Environmental Protection guidelines*.

6.2.2 HAZMAT:

- Removal of contaminated dust and lead based paint may be undertaken by an appropriately experienced lead abatement contractor, WSP recommend a Class A (LARC) for such works, however, using suitable controls and PPE in accordance with *AS/NZS 4361.2:2017 Guide to hazardous materials paint management – Part 2: Lead paint in residential, public or commercial buildings*.
- The contractor should assess if “Lead Risk Work” is to be undertaken and whether the work is likely to cause lead levels in the worker’s blood to exceed healthy levels. Lead Risk Work must be notified to the state regulator in writing at least seven days before the work commences as stated in the *NSW WHS Regulations*.
- Lead waste must be handled appropriately and disposed of according to the relevant state or territory waste regulations.
- Remove under controlled conditions all items identified as containing Polychlorinated Biphenyls. Capacitors and electrical components items must be de-energised by a licensed electrician. Appropriately experienced contractors should use appropriate Personal Protective Equipment (PPE) including face shield, gloves, skin and eye protection.
- Appropriately dispose of items identified as containing Polychlorinated Biphenyls in accordance with waste and environmental protection guidelines.
- Remove SMF under controlled conditions, by an appropriately experienced contractor in accordance with the requirements of the *Code of Practice for the Safe Use of Synthetic Mineral Fibres NOHSC:2006(1990)*. Contractors should use appropriate Personal Protective Equipment (PPE) including skin, eye and respiratory protection.

WSP may assist with the implementation of any of the above recommendations.

7 GENERAL MANAGEMENT GUIDELINES

7.1 HAZARDOUS BUILDING MATERIALS MANAGEMENT PLAN

To assist in the management of hazardous materials and to ensure compliance with relevant regulations, it is recommended that a separate Hazardous Materials Management Plan be prepared, which should include information regarding:

- Roles and responsibilities
- Prohibitions
- Management plan and register reviews
- Labelling
- Demolition and refurbishment works
- Remediation works
- Incidents and emergencies
- Record keepings

Hazardous materials outlined in this report are not to be disturbed (e.g. brushed, sanded or tooled in any way) to prevent the generation of dust and minimise the potential health risks.

7.2 ASBESTOS GENERAL MANAGEMENT GUIDELINES

WSP Australia has provided the following recommendations as a general guide for the safe removal of asbestos containing materials in accordance with the requirements of SafeWork NSW How to Safely Remove Asbestos, Code of Practice 2022 and WHS Regulations.

If friable asbestos is identified the following is recommended:

- Access be restricted to areas where friable asbestos is present, and a management plan be implemented to control the risk of human exposure. Where practicable, positively identified asbestos containing materials should be labelled to indicate the presence of asbestos.
- Any persons wishing to access areas where presumed friable asbestos exists are to undertake a suitable and sufficient Risk Assessment prior to doing so, the results of which may include the use of appropriate Personal Protective Equipment (PPE) such as disposable coveralls and respiratory protection.
- Consideration should be given to engaging a qualified and experienced asbestos consultant to conduct a program of asbestos air monitoring in/around area containing friable asbestos to document airborne asbestos levels and help assess the exposure risk to occupants.
- Consideration should be given to engaging a qualified and experienced asbestos consultant to conduct a program of settled dust sampling/analysis to more accurately assess the extent of asbestos contamination that may be present.

If non-friable asbestos such as fibre cement sheeting (flat and corrugated), pipes and visually identified electrical distribution boards are identified, the following is recommended:

- All damaged / poor condition ACM should have access restricted and make safe works conducted to seal exposed damaged areas. A management plan is to be implemented to control the risk of human exposure to damaged asbestos materials. Where practicable, positively identified asbestos containing materials should be labelled to indicate the presence of asbestos.
- All non-friable ACM in an in-tact condition may remain in-situ provided they are not drilled, ground or otherwise disturbed. If damaged, broken pieces are to be removed as soon as practicable. As part of good ongoing management we recommend regular inspections of ACM left in-situ to check the condition of these materials.
- Any areas of the workplace that contain ACM including plant, equipment and components should be signposted with appropriate warning signs to ensure that asbestos is not unknowingly disturbed without the correct precautions being taken. These signs should be placed at all the main entrances to the work areas where asbestos is present and should conform with *Australian Standard 1319-1994 Safety Signs for the Occupational Environment*.
- This document should be held as an Asbestos Register of the areas inspected and updated as indicated in Section 2.1 or earlier where ACM have been disturbed or a risk assessment indicates the need for re-assessment. All occupiers of the workplace are to be provided with a copy of this register and all updates to it.
- In order to comply with the applicable legislation (Appendix H), implement a hazardous materials management plan. A suitably qualified and experienced consultant can advise and assist in developing an appropriate management plan.
- Prior to renovation or demolition works a refurbishment/demolition building materials survey should be undertaken by a suitable qualified and experience consultancy, such as WSP. A Refurbishment and/or Demolition Survey is required under the *AS2601 (2001): The Demolition of Structures*.
- Prior to the commencement of any specific asbestos removal works, a site and material specific asbestos removal control plan must be developed by a competent person such as a licenced asbestos assessor or licensed asbestos removal contractor.
- All persons engaged in asbestos removal work should wear appropriate PPE including respiratory protective equipment (RPE) conforming with the requirements of AS/NZS 1716:2012, *Respiratory Protective Devices* and AS/NZS 1715:2009, *Selection, Use and Maintenance of Respiratory Protective Equipment*. Protective disposable coveralls must be chosen that provide particle-tight protection (Type 5) and limited splash-tight protection (Type 6). Disposable coveralls should not have external pockets or Velcro fastenings.
- All removal work and asbestos disposal should be carried out in accordance with the applicable legislation (Appendix H).
- All fibre air monitoring shall be carried out by a competent person or licenced asbestos assessor with NATA accreditation in accordance with National Occupational Health and Safety Commission (NOHSC), Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)], NOHSC, Australia.
- Personal decontamination must be undertaken each time workers leave the asbestos work area and at the completion of the asbestos removal work. Personal decontamination should be undertaken within the nominated decontamination area. The extent of decontamination required is dependent upon the type of asbestos being removed. If friable asbestos is being removed, then a three-stage wet decontamination unit shall be required. If it is noted that non-friable ACM is being removed this may be undertaken in a nominated dry decontamination area.
- A clearance inspection of the work area shall be undertaken at the completion of the asbestos removal works by a licenced asbestos assessor.

7.3 GENERAL LEAD PAINT / DUST MANAGEMENT

If lead containing paints and / or lead in dust are identified the following management controls are recommended:

- Lead paint in poor, flaking condition must be remediated as soon as reasonably practicable.
- Paint in good condition may remain in situ provided it is not disturbed and maintained in a good condition.

All lead paint removal/stabilisation must be undertaken in accordance with AS/NZS 4361.2:2017, *Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings*. It should be noted that this document does not replace AS/NZS 4361.2:2017. Rather it provides general advice to assist with the creation of a site-specific document to facilitate the safe removal/stabilisation of lead paint works.

This document provides general guidance for the removal of lead based paint systems via various methods commonly employed such as the use of a chemical strippers and the stabilisation of flaking lead based paints via scraping and wet sanding. Reference is made to a particular brand name of chemical stripper; however, this advice does not replace information provided by the manufacturer and one should always refer to the products guidance and relevant Australian legislation, standards, MSDS and guidance material.

In addition, it provides guidance for decontamination procedures. Disposal requirements and provisions for lead air monitoring and clearance inspections.

While it may not be practicable to remove lead based paints, it is important to ensure they are appropriately managed to minimise risks. To achieve this WSP recommends the following management measures be implemented in relation to the handling of any suspected lead based paints:

- Do not disturb lead based paints. If activities are likely to disturb lead based paints, their use should only be permitted with appropriate controls in place.
- Keep children and pets away from lead based paints and make sure they don't eat or play with paint debris.
- Do not burn lead paint or timber that is coated with paint containing lead.
- Ensure demolition staff are aware of the safety issues associated with lead and encourage good hygiene practices, with facilities to be available for hand washing before eating.
- Air monitoring can be considered to provide assurance to regulators and personnel that activities are not generating airborne lead dust.
- Should any lead exposure be suspected, health surveillance monitoring can be undertaken. If this is necessary, having baseline health surveillance results (blood lead testing) for comparison purposes would be beneficial and this should be considered in consultation with the occupational hygienist prior to commencing any refurbishment / demolition activities.

7.3.1 LEAD PAINT CLEARANCE

- Following the completion of the lead based paint removal works the occupational hygiene consultant will be required to undertake a thorough visual inspection of the work area and transit route.
- If removal works are not to the satisfaction of the occupational hygiene consultant, removal contractors will be required to re-enter the work area and rectify any issues arising from the inspection.
- AS/NZS 4361.2:2017 states that following the completion of works and the appropriate clean-up of the area, samples of dust can be collected and sent for analysis to determine if there has been a significant impact on the property and surrounding area from works undertaken and if the building is safe to reoccupy. Clearance dust samples can be collected and compared with the surface dust loading levels detailed within Table 4.1.
- Only following satisfactory clearance inspection, air monitoring and dust sampling, will removal works be deemed as completed.
- A final inspection of the work site will be required by the occupational hygiene consultant following removal of enclosure and equipment to ensure no debris or dust remains onsite.

7.4 GENERAL SMF MANAGEMENT GUIDELINES

All SMF removal should be done in accordance with the National Occupational Health and Safety Commission *National Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC: 2006 (1990)]. Some of the practices recommended are as follows:

- The work area should be designated by using barricade tape and signs where workable. Persons not involved in the removal should not be within 3 metres of the designated area.
- Waste shall be placed in plastic bags or other containers which prevent fibre and/or dust emission, and disposed of in accordance with local waste disposal authority requirements.
- PPE including goggles, half-face P2 respirator, gloves, long sleeve and loose fitting clothing should be worn.

7.5 GENERAL PCB MANAGEMENT GUIDELINES

To manage the potential risks associated with PCBs should any be identified, WSP recommends the following:

- A certified and experienced electrician, aware of the hazards associated with PCBs and able to identify suspect PCB containing materials, should be used to isolate electricity and advise on the removal requirements.
- If any suspect PCB containing materials are suspected, the presence of PCBs should be further assessed against the 1997 ANZECC *Identification of PCB-Containing Capacitors*. Information Booklet to identify PCB-containing capacitors.
- If PCB containing materials are confirmed to exist, the appropriate PPE (disposable suits, nitrile gloves, full face shield and hair protection) should be worn in case materials (e.g. capacitors) are damaged and potentially leaking PCBs. PCB containing materials should be carefully removed so as not to further damage them and prevent leakage and cross contamination.
- Removal staff are to be aware of the safety issues associated with PCBs and encourage good hygiene practices after handling PCBs with facilities to be available for washing.
- Any identified PCB-containing materials and PPE are to be placed in strong sealed polyethylene bags and then sealed in a sturdy metal drum with an absorbent material added to absorb any leaking PCB. All drums should be labelled '**PCB Waste**' and be appropriately stored and disposed.

8 LIMITATION STATEMENT

This Report is provided by WSP Australia Pty Limited (*WSP*) for Lendlease Development (*Client*) in response to specific instructions from the Client and in accordance with WSP's proposal dated 11 October 2024 Rev002 and executed agreement (Medium Professional Services Contract) with the Client dated 15 November 2024 (*Agreement*).

8.1 PERMITTED PURPOSE

This Report is provided by WSP for the purpose described in the Agreement and no responsibility is accepted by WSP for the use of the Report in whole or in part, for any other purpose (*Permitted Purpose*).

8.2 QUALIFICATIONS AND ASSUMPTIONS

The services undertaken by WSP in preparing this Report were limited to those specifically detailed in the Report and are subject to the scope, qualifications, assumptions and limitations set out in the Report or otherwise communicated to the Client.

Except as otherwise stated in the Report and to the extent that statements, opinions, facts, conclusion and / or recommendations in the Report (*Conclusions*) are based in whole or in part on information provided by the Client and other parties identified in the report (*Information*), those Conclusions are based on assumptions by WSP of the reliability, adequacy, accuracy and completeness of the Information and have not been verified. WSP accepts no responsibility for the Information.

Where the survey identifies that hazardous materials are on Site, the Conclusions are indicative of the presence of hazardous materials and cannot be regarded as absolute without further extensive sampling, outside the scope of the services set out in the Agreement. Site conditions, including the extent and visibility of hazardous materials, can change with time. On all sites, varying degrees of non-uniformity of conditions are encountered and the presence of hazardous materials which are not visually apparent at the time of inspection, may not be detected. No monitoring, common testing or sampling technique provides results that are totally representative of the presence or non-presence of hazardous materials at the Site. Site conditions, including subsurface conditions can change with time due to natural and anthropogenic causes.

Only material that was physically accessible at the time of inspection was sampled. Consequently, not all hazardous material may have been located at the Site. The survey identifying hazardous materials on Site should be reviewed prior to demolition or refurbishment as a more detailed destructive survey may be required prior to demolition or refurbishment works. Care should be taken during normal Site works, refurbishment or demolition works when entering previously inaccessible areas. If suspect material is encountered, works should cease in the area until samples have been collected and analysed by competent personnel.

It is impossible to locate all hazardous materials during an inspection. This is due to such factors as (without limitation):

- Time, budget and constraints requested by the Client;
- Access restrictions;
- The need to avoid causing physical damage to fixtures or structures on the Site;
- The need to minimise hazardous materials exposures to building occupants;
- The need to minimise inconvenience when the Site is in use (e.g. occupied) whilst an inspection is being conducted; and / or
- The availability of relevant building / plant construction plans.

Hazardous materials that could be routinely encountered in the normal day-to-day activities occurring on the Site have been identified and assessed, however there is no guarantee that the Site is free of hazardous materials, since future activities may reveal hazardous materials in areas inaccessible or unknown to WSP.

Within the limitations referred to above, the preparation of this Report has been undertaken and performed in a professional manner in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by reputable consultants. No other warranty, expressed or implied, is made.

WSP has prepared the Report without regard to any special interest of any person other than the Client when undertaking the services described in the Agreement or in preparing the Report.

8.3 USE AND RELIANCE

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This Report can only be relied upon for the Permitted Purpose and may not be relied upon for any other purpose. The Report does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise. It is the responsibility of the Client to accept (if the Client so chooses) the Conclusions and implement any recommendations in an appropriate, suitable and timely manner. WSP does not (and will not) accept liability arising out of or in connection with any health or safety risks associated with hazardous materials.

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8.4 DISCLAIMER

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APPENDIX A

HAZARDOUS MATERIALS REGISTER



A1 HAZARDOUS MATERIALS REGISTER

A1.1 ASBESTOS CONTAINING MATERIALS

142-148 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Sub-floor	Sub-floor, Perimeter walls	Damp proof course	Bituminous membrane	WSP-231425	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169638
Sub-floor	Sub-floor and soils	-	-	-	-	-	-	-	-	-	Inaccessible (limited access)	Further Investigation Required.	169643
Ground Floor	Throughout	Walls, decorative trim	Plaster mix	Ref: WSP-231407	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169626
Ground Floor	142-146 Kitchen Store Room	Walls	Render	WSP-231418	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169629
Ground Floor	142-146 Comms room and bathroom	Wall lining and infill	Fibre cement sheeting	Ref: WSP-231410	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169640
Level 1	142-146 Throughout	Floors - Carpet, underlay to timber floor boards. Salvaged (removed) of timber skirting and trim undertaken	-	Non Suspect Material	-	-	-	-	-	-	No Asbestos	No Action Required	-
Level 1	142-146 Comms/Store Room	Floor lining	Composite sandwich panel	WSP-231411	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169630
Level 1	142-146 Throughout	Exterior facing walls	Plaster render	WSP-231405	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169632
Level 1	142-146 Comms/Store Room	Ceiling, Roof access hatch	Fibre cement sheeting	WSP-231415	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169634
Level 1	142-146 Throughout	Throughout, under skirting to walls	Plaster render	WSP-231408	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169635
Level 1	142-146 Comms/Store Room/Bathroom	Wall, Infill panel	Fibre cement sheeting	WSP-231410	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169636
Level 1	142-146 Throughout	Decorative trim to walls	Plaster render	WSP-231407	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169642
Level 1	142-146 Throughout	Lathe and plaster partition walls	Horse hair plaster	WSP-231404	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169644

142-148 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Roof Void	142-146 Roof void, central	Tank and lid, and redundant lid	Compressed cement sheeting	WSP-231450	Chrysotile + Amosite + Crocidolite	2 items	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170067
Roof Void	142-146 Roof void, Entry hatch	Top of ceiling	Dust and debris	WSP-231413	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169631
External	Underground services	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	169625
External	142-146 Entrance	Switchboard and meterboard	Timber laminate and plastic boards	Non Suspect Material	-	-	-	-	-	-	-	No Action Required	169633
External	Grounds, Garden Beds and courtyards	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	169637
External	Grounds, North	Telstra pit	Fibre cement sheeting	WSP-231431	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169639
External	Perimeter walls	Sash timber Windows, window beading	Timber frame. Caulking	WSP-231422	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169641
External	Exterior, wall	Sandstone brick wall	Mastic, pointing	WSP-231478	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170414
External	Roof	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170420
External	HV cupboard	Wall lining, backing	Fibre cement sheeting	WSP-231453	Chrysotile	2 m²	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170066
Sub-floor	148 Floor void	Debris/fragments	Fibre cement sheeting	WSP-326698	Chrysotile	Unknown	No	Non-Friable	Poor	Low	Medium	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works. Possible throughout subfloor.	169659
Sub-floor	148 Floor void	Debris/fragment	Bituminous material	WSP-326699	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169664
Ground Floor	148 Room adjacent Sterilization room	Electrical backing board	Electrical mounting board	WSP-326681	Chrysotile	2 items	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	169647

142-148 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Ground Floor	148 Room adjacent Sterilization room	Floor covering	Vinyl tile (white)	WSP-326680	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169646
Ground Floor	148 Dr Sara lassamilante visiting room	Wall vent	Fibre cement casting	WSP-326677	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169648
Ground Floor	148 Dr Sara lassamilante visiting room	Fireplace lining	Dust/insulation	WSP-326674	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169651
Ground Floor	148 External quarters living room	Floor- carpet underlay	Woven product	WSP-326673	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169652
Ground Floor	148 Operation room fireplace chimney	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	169661
Ground Floor	148 Stair landing	Electrical backing board	Electrical mounting board	WSP-326696	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169662
Ground Floor	148 Arch entrance	Decorative coating	Cement render	WSP-326704	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169668
Ground Floor	148 Sterilization room	Floor covering	Vinyl sheeting (cream)	WSP-326679	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169669
Ground Floor	148 Electrical backing board	Switch	Composite plastic	WSP-326700	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169670
Ground Floor	148 Dr Sara lassamilante visiting room	Floor covering	Vinyl sheeting and adhesive (green)	WSP-326676	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169672
Ground Floor	148 Kitchen	Padding under sink	Bituminous material	WSP-326678	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169673
Level 1	148 Room adjacent Sterilization room	Movement, electrical backing board	Electrical mounting board	WSP-326682	Chrysotile	1 item	Yes	Non-Friable	Good	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	169665
Level 1	148 Fireplace chimney	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	169653
Level 1	148 Storage room adjacent operations room	Floor covering	Vinyl sheeting (yellow)	WSP-326689	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169655
Level 1	148 Room with fireplace	Design plasterboard at can ceiling lining	Fibre cement casting	WSP-326683	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169657

142-148 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Level 1	148 Surgery room south	Floor covering	Vinyl sheeting (grey) and adhesive	WSP-326688	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169658
Level 1	148 Storage room adjacent operations room	Floor covering Sheeting under yellow vinyl	Vinyl sheeting	WSP-326690	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169663
Level 1	148 Storage room adjacent surgery and movement	Design plaster with hessian	Cement render	WSP-336684	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169666
Level 1	All rooms	Window putty	Putty	WSP-326687	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169667
Roof Void	148 Ceiling void dust	Dust in ceiling void	Dust	WSP-326692	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169660
External	Roof	Roof tiles	Other	WSP-326693	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169656
External	Bolts sealant	Throughout	Sealant	WSP-326701	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169671
External	Roof, Power Distribution Box to A/C plant	Electrical Backing Board	Bituminous material	Not Sampled	Assumed Asbestos	1 item	No	Non-Friable	Good	Low	Low	Further Investigation Required. Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	169200

*Bold text indicates material contains a positive analysis result or positive status for asbestos

A1.2 SYNTHETIC MINERAL FIBRES

142-148 New South Head Rd										
Level	Primary location / room	Secondary location / application	Status	Result	Extent (approx.)	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
Sub-floor	Sub-floor	Air conditioning ductwork - insulation material	Visual Observation	SMF	100 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30222
Ground Floor	Kitchen Store Room	Hot water system tank - insulation material	Visual Observation	SMF	1 unit	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30221
Roof Void	Roof void	Ceiling loose insulation	Visual Observation	SMF	10 m²	Poor	High	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30317
Roof Void	Roof void	Air conditioning ductwork	Visual Observation	SMF	100 m²	Poor	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30316
Roof Void	Roof void	Air conditioning ductwork - insulation material	Visual Observation	SMF	100 lin m	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30220
External	Storage room north	Sarking insulation on ceiling	Visual Observation	SMF	15 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30363
Sub-floor	Subfloor	Plant and equipment- internal insulation	Visual Observation	SMF	100 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30318
Ground Floor	Waiting room	Heater – insulation material	Visual Observation	SMF	1 unit	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30230
Ground Floor	Operation room	Window air conditioner	Visual Observation	SMF	1 unit	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30228
Ground Floor	Sterilization room	Heater – insulation material	Visual Observation	SMF	1 unit	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30225
Ground Floor	Dr Sara lassamilante visiting room	Insulation batts in walls	Visual Observation	SMF	20 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30224
Level 1	Surgery rooms	Ceiling tiles – compressed SMF sheeting	Visual Observation	SMF	40 m²	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30231
Level 1	Storage room adjacent surgery and movement	Ceiling tiles – compressed SMF sheeting	Visual Observation	SMF	20 m²	Fair	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30227
Roof Void	Ceiling void sarking insulation	Sarking to the roof and ducting	Visual Observation	SMF	100 m²	Poor	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30226
External	Heat pumps	Heat pumps external	Visual Observation	SMF	4 units	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30229

A1.3 LEAD BASED PAINTS

142-148 New South Head Rd											
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Ground Floor	142-146 Kitchen Storeroom	Brickwork walls	Beige	Lead Paint Sample WSP-231416	LBP Detected 4.7%w/w	10 m²	Fair	Low	Low Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30247
External	Exterior, Throughout	Timber windows	White	Ref: WSP-231427	LBP Detected 13%w/w	1000 m²	Poor	Medium	Medium Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30249
External	Perimeter walls	Timber windows	White	Lead Paint Sample WSP-231427	LBP Detected 13%w/w	1000 m²	Poor	Medium	Medium Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30252
External	Throughout	Perimeter walls	Pink/Purple	Lead Paint Sample WSP-231428	LBP Detected 0.18%w/w	1000 m²	Poor/Fair	Medium	Medium Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30245
Level 1	142-148 Throughout	Walls, decorative trim	Beige	Lead Paint Sample WSP-231406	LBP Detected 4.3%w/w	100 m²	Good	Low	Low Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30246
Level 1	142-148 Throughout, Perimeter Walls	Window frames	White	Lead Paint Sample WSP-231409	LBP Detected 0.68%w/w	100 m²	Good	Low	Low Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30244
External	Storage room north	Lead flashing	-	-	Lead Metal	-	-	-	-	-	LBP-30349
External	Throughout	Lead flashing	-	-	Lead Metal	-	-	-	-	-	LBP-30248
Level 1	142-148 Throughout	Walls	Blue	Lead Paint Sample WSP-231412	LBP Not Detected 0.054%w/w	-	-	-	-	-	LBP-30250
Ground Floor	142-148 Throughout	Interior partition walls	Beige	Lead Paint Sample WSP-231419	LBP Not Detected 0.05%w/w	-	-	-	-	-	LBP-30253
External	148 Walls and columns	White based paint system	White	Lead Paint Sample WSP-326695	LBP Detected 2.8%w/w	1000 m²	Fair	Medium	Medium Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30261
External	148 Windows throughout	Grey based paint system	Grey	Lead Paint Sample WSP-326703	LBP Detected 0.58%w/w	75 m²	Fair	Medium	Medium Risk	Hazardous Waste or Remove by experienced lead abatement contractor.	LBP-30257
Ground Floor	148 External change room	White based paint	White	Lead Paint Sample WSP -326671	LBP Not Detected 0.03%w/w	-	-	-	-	-	LBP-30258

142-148 New South Head Rd											
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Ground Floor	External kitchen	Cream based paint - walls	Cream	Lead Paint Sample WSP-326672	LBP Not Detected 0.052%w/w	-	-	-	-	-	LBP-30256
Ground Floor	148 Dr Sara lassamilante sun room adjacent visiting room	Green paint based system	Light Green	Lead Paint Previously Sampled WSP-326675	LBP Not Detected <0.005%w/w	-	-	-	-	-	LBP-30255
Ground Floor	148 Dr Sara lassamilante visiting room	Green paint based system	Light Green	Lead Paint Sample WSP-326675	LBP Not Detected <0.005%w/w	-	-	-	-	-	LBP-30254
External	Walls throughout	Pink based paint system	Pink	Lead Paint Sample WSP-326697	LBP Not Detected 0.04%w/w	-	-	-	-	-	LBP-30260

*Bold text indicates paint system contains a positive analysis result or status for confirmed lead >0.1% parameter

A1.4 LEAD IN DUST

142-148 New South Head Rd										
Level	Primary location / room	Secondary location / application	Sample number	Result	Quantity	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
Roof Void	Roof void	Timber frame/beam Accumulated dust	Lead Surface Dust Sample WSP-231414	Lead Dust Detected 690 mg/m²	10 m² Total roof void area ≈ 1000 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30251
Roof Void	Roof void	Top of ceiling, Accumulated dust	Lead Surface Dust Sample WSP-231451	Lead Dust Detected 110 mg/m²	10 m² Total roof void area ≈ 1000 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30314
Roof Void	Roof void	Top of ceiling, Accumulated dust	Lead Surface Dust Sample WSP-231452	Lead Dust Detected 350 mg/m²	10 m² Total roof void area ≈ 1000 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30313
Roof Void	Ceiling void	Dust in roof void	Lead Surface Dust Sample WSP-326691	Lead Dust Detected 270 mg/m²	10 m² Total roof void area ≈ 1000 m²	Poor	High	High Risk	Remediate roof void by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30262
Level 1	Storage room adjacent surgery and movement	Lead dust above ceiling tiles	Lead Surface Dust Sample WSP-326685	LD Not Detected 7.8	10 m²	-	-	-	-	LBP-30259

*Bold text indicates sample contains a positive analysis for lead concentration exceeding the acceptable value (adopted levels) and the dust should be treated as lead contaminated/impacted.

A1.5 POLYCHLORINATED BIPHENYLS

142-148 New South Head Rd											
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Quantity	Condition	Disturbance Potential	Risk rating	Comments / Removal Recommendations	Photo reference
Level 1	142-146 Comms/Storeroom	Fluorescent light fittings	CP4.0-06 - ATCO Capacitors, post 1997	Visual Observation	PCB free	-	-	-	-	No Action Required.	PCB-27593

APPENDIX B

SITE / BUILDING PHOTOGRAPHS



B1 SITE / BUILDING PHOTOGRAPHS

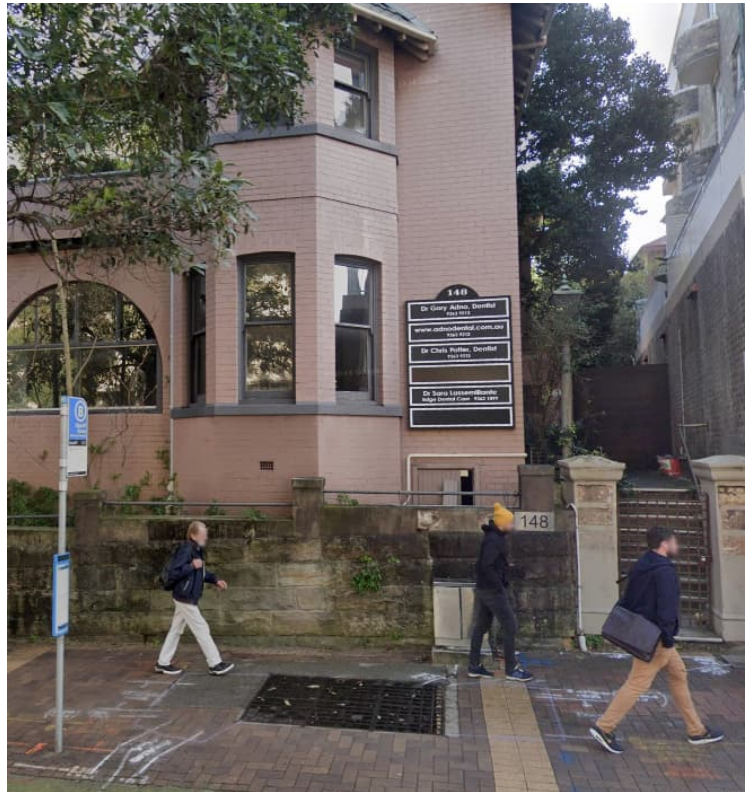
142-146 New South Head Rd



142-148 New South Head Rd



148 New South Head Rd



142-148 New South Head Rd



APPENDIX C

MATERIAL PHOTOGRAPHS



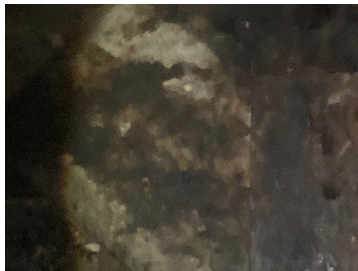
C1 PHOTOGRAPHS

C1.1 ASBESTOS CONTAINING MATERIALS

NO ACCESS			
Photo Ref	169643	Sample No	-
Building	142-146 New South Head Rd		
Level	Sub-Basement		
Room	Sub-floor and soils		
Application	-		
Material	-		
Risk Rating	Inaccessible (limited access)		





ASBESTOS - Confirmed					
Photo Ref	170067	Sample No	WSP-231450		
Building	142-146 New South Head Rd				
Level	Roof Void				
Room	Roof void, central				
Application	Tank and redundant lid				
Material	Compressed sheeting				
Risk Rating	Low				

NO ACCESS			
Photo Ref	169625	Sample No	-
Building	142-146 New South Head Rd		
Level	External		
Room	Underground services		
Application	-		
Material	-		
Risk Rating	Inaccessible		





NO ACCESS			
Photo Ref	169637	Sample No	-
Building	142-146 New South Head Rd		
Level	External		
Room	Grounds, Garden Beds and courtyards		
Application	-		
Material	-		
Risk Rating	Inaccessible		



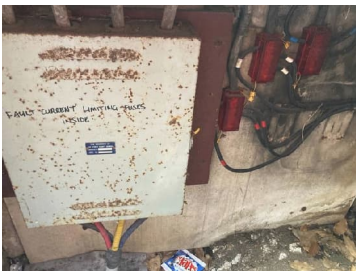


NO ACCESS			
Photo Ref	170420	Sample No	-
Building	142-148 New South Head Rd		
Level	External		
Room	Roof		
Application	-		
Material	-		
Risk Rating	Inaccessible		





ASBESTOS - Confirmed			
Photo Ref	170066	Sample No	WSP-231453
Building	148 New South Head Rd		
Level	External		
Room	HV cupboard		
Application	Wall lining, backing		
Material	Fibre cement sheeting		
Risk Rating	Low		



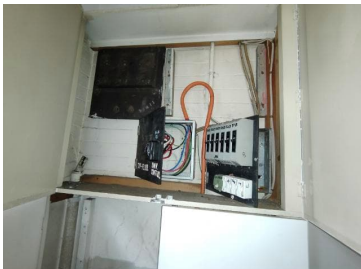
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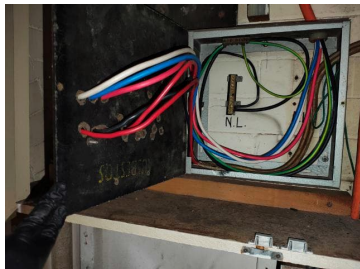
ASBESTOS - Confirmed			
Photo Ref	169659	Sample No	WSP-326698
Building	148 New South Head Rd		
Level	Sub-floor		
Room	Floor void		
Application	Debris/fragment		
Material	Fibre cement sheeting		
Risk Rating	Medium		





ASBESTOS - Confirmed			
Photo Ref	169647	Sample No	WSP-326681
Building	148 New South Head Rd		
Level	Ground Floor		
Room	Room adjacent Sterilization room		
Application	Electrical backing board		
Material	Electrical mounting board		
Risk Rating	Low		





NO ACCESS			
Photo Ref	169661	Sample No	-
Building	148 New South Head Rd		
Level	Ground Floor		
Room	Operation room, fireplace chimney		
Application	-		
Material	-		
Risk Rating	Inaccessible		





ASBESTOS - Confirmed			
Photo Ref	169665	Sample No	WSP-326682
Building	148 New South Head Rd		
Level	Level 1		
Room	Room adjacent Sterilization room		
Application	Movement, electrical backing board		
Material	Electrical mounting board		
Risk Rating	Low		





ASBESTOS - Presumed			
Photo Ref	169200	Sample No	-
Building	148 New South Head Rd		
Level	External		
Room	Power Distribution Box		
Application	Electrical Backing Board		
Material	Electrical mounting board		
Risk Rating	Low		





NO ACCESS			
Photo Ref	169653	Sample No	-
Building	148 New South Head Rd		
Level	Level 1		
Room	Fireplace chimney		
Application	-		
Material	-		
Risk Rating	Inaccessible		





C1.2 NON-ASBESTOS CONTAINING MATERIALS

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169638	Sample No	WSP-231425
Building	142-146 New South Head Rd		
Level	Sub-Floor		
Room	Sub-floor, Perimeter walls		
Application	Damp proof course		
Material	Bituminous material		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169626	Sample No	Ref: WSP-231407
Building	142-146 New South Head Rd		
Level	Ground Floor		
Room	Throughout		
Application	Walls, decorative trim		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169629	Sample No	WSP-231418
Building	142-146 New South Head Rd		
Level	Ground Floor		
Room	Kitchen Store Room		
Application	Walls		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169640	Sample No	Ref: WSP-231410
Building	142-146 New South Head Rd		
Level	Ground Floor		
Room	Comms room and bathroom		
Application	Wall lining and infill		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		



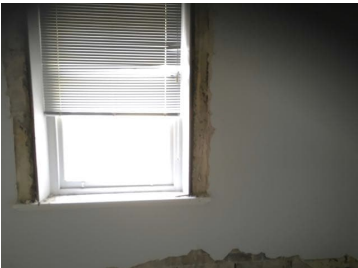


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169630	Sample No	WSP-231411
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Comms/Store Room		
Application	Floor lining		
Material	Composite sandwich panel		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169632	Sample No	WSP-231405
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout		
Application	Exterior facing walls		
Material	Other		
Risk Rating	No Asbestos		



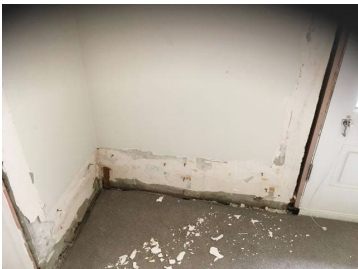


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169634	Sample No	WSP-231415
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Comms/Store Room		
Application	Ceiling, Roof access hatch		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		



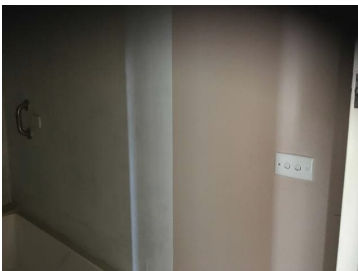
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NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169635	Sample No	WSP-231408
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout		
Application	Throughout, under skirting to walls		
Material	Other		
Risk Rating	No Asbestos		



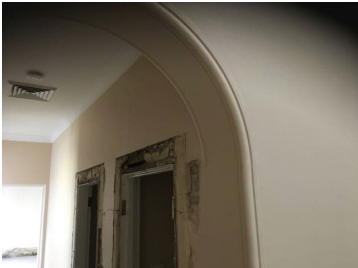


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169636	Sample No	WSP-231410
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Comms/Store Room/Bathroom		
Application	Wall, Infill panel		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169642	Sample No	WSP-231407
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout		
Application	Decorative trim to walls		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169644	Sample No	WSP-231404
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout		
Application	Lathe and plaster partition walls		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169631	Sample No	WSP-231413
Building	142-146 New South Head Rd		
Level	Roof Void		
Room	Roof void, Entry hatch		
Application	Top of ceiling		
Material	Debris		
Risk Rating	No Asbestos		



No Photo Available

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169633	Sample No	NSM
Building	142-146 New South Head Rd		
Level	External		
Room	Entrance		
Application	Switchboard and meterboard		
Material	Electrical mounting board		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169639	Sample No	WSP-231431
Building	142-146 New South Head Rd		
Level	External		
Room	Grounds, North		
Application	Telstra pit		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169641	Sample No	WSP-231422
Building	142-146 New South Head Rd		
Level	External		
Room	Perimeter walls		
Application	Sash timber Windows, window beading		
Material	Mastic sealant		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170414	Sample No	WSP-231478
Building	142-148 New South Head Rd		
Level	External		
Room	Exterior, wall		
Application	Sandstone brick wall		
Material	Mastic, pointing		
Risk Rating	No Asbestos		



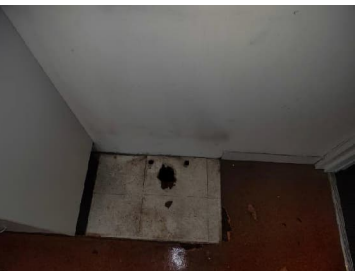


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169664	Sample No	WSP-326699
Building	148 new South head road		
Level	Sub-Basement		
Room	Floor void		
Application	Debris		
Material	Bituminous material		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169646	Sample No	WSP-326680
Building	148 new South head road		
Level	Ground Floor		
Room	Room adjacent Sterilization room		
Application	White vinyl tiles		
Material	Vinyl tile		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169648	Sample No	WSP-326677
Building	148 new South head road		
Level	Ground Floor		
Room	Dr Sara lassamilante visiting room		
Application	Wall vent		
Material	Fibre cement casting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169651	Sample No	WSP-326674
Building	148 new South head road		
Level	Ground Floor		
Room	Dr Sara lassamilante visiting room		
Application	Fireplace lining		
Material	Dust/insulation		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169652	Sample No	WSP-326673
Building	148 new South head road		
Level	Ground Floor		
Room	External quarters living room		
Application	Floor- carpet underlay		
Material	Woven product		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169662	Sample No	WSP-326696
Building	148 new South head road		
Level	Ground Floor		
Room	Movement		
Application	Electrical backing board		
Material	Electrical mounting board		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169668	Sample No	WSP-326704
Building	148 new South head road		
Level	Ground Floor		
Room	Arch entrance		
Application	Decorative coating		
Material	Cement render		
Risk Rating	No Asbestos		



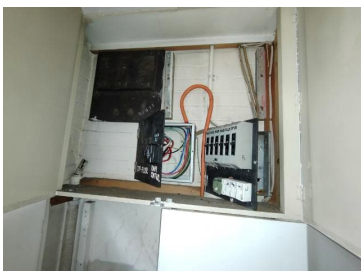


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169669	Sample No	WSP-326679
Building	148 new South head road		
Level	Ground Floor		
Room	Sterilization room		
Application	Floor cream vinyl sheeting		
Material	Vinyl sheeting		
Risk Rating	No Asbestos		



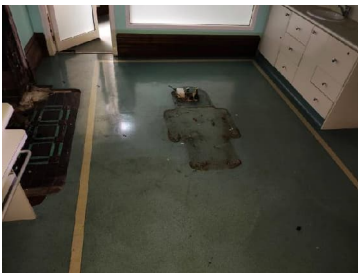


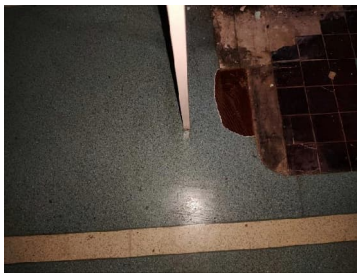
NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169670	Sample No	WSP-326700
Building	148 new South head road		
Level	Ground Floor		
Room	Electrical backing board		
Application	Capacitor		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169672	Sample No	WSP-326676
Building	148 new South head road		
Level	Ground Floor		
Room	Dr Sara lassamilante visiting room		
Application	Floor green vinyl sheeting		
Material	Vinyl sheeting and adhesive		
Risk Rating	No Asbestos		



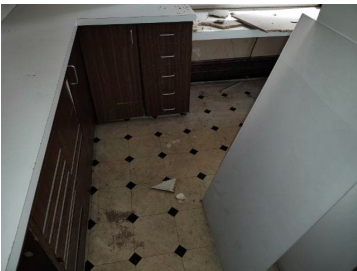


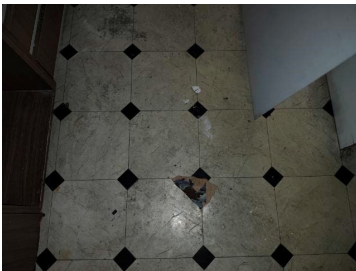
NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169673	Sample No	WSP-326678
Building	148 new South head road		
Level	Ground Floor		
Room	Kitchen		
Application	Padding under sink		
Material	Bituminous material		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169655	Sample No	WSP-326689
Building	148 new South head road		
Level	Level 1		
Room	Storage room adjacent operations room		
Application	Yellow vinyl sheet		
Material	Vinyl sheeting		
Risk Rating	No Asbestos		





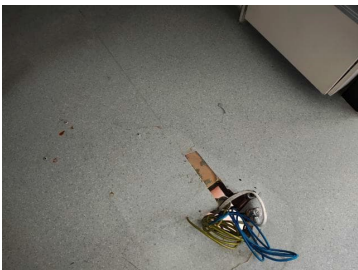
NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169657	Sample No	WSP-326683
Building	148 new South head road		
Level	Level 1		
Room	Room with fireplace		
Application	Design plasterboard at can ceiling lining		
Material	Fibre cement casting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169658	Sample No	WSP-326688
Building	148 new South head road		
Level	Level 1		
Room	Surgery room south		
Application	Floor grey vinyl sheet		
Material	Vinyl sheeting and adhesive		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169663	Sample No	WSP-326690
Building	148 new South head road		
Level	Level 1		
Room	Storage room adjacent operations room		
Application	Sheeting under yellow vinyl		
Material	Vinyl sheeting		
Risk Rating	No Asbestos		





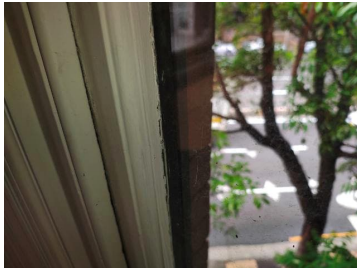
NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169666	Sample No	WSP-336684
Building	148 new South head road		
Level	Level 1		
Room	Storage room adjacent surgery and movement		
Application	Design plaster with hessian		
Material	Cement render		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169667	Sample No	WSP-326687
Building	148 new South head road		
Level	Level 1		
Room	All rooms		
Application	Window putty		
Material	Putty		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169660	Sample No	WSP-326692
Building	148 new South head road		
Level	Roof Void		
Room	Ceiling void dust		
Application	Dust in ceiling void		
Material	Dust		
Risk Rating	No Asbestos		



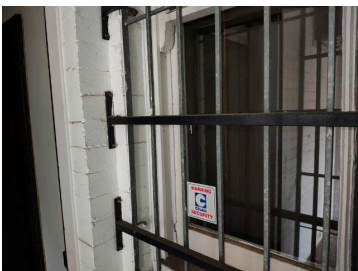


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169656	Sample No	WSP-326693
Building	148 new South head road		
Level	External		
Room	Roof		
Application	Roof tiles		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169671	Sample No	WSP-326701
Building	148 new South head road		
Level	External		
Room	Bolts sealant		
Application	Throughout		
Material	Sealant		
Risk Rating	No Asbestos		





C1.3 SYNTHETIC MINERAL FIBRES

SYNTHETIC MINERAL FIBRE					No Photo Available
Photo Ref	SMF-30222	Sample No	Visual Observation		
Building	142-146 New South Head Rd				
Level	Sub-Basement				
Room	Sub-floor, Perimeter walls				
Application	Air conditioning ductwork - insulation material				
Risk Rating	Low Risk				

SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30221	Sample No	Visual Observation
Building	142-146 New South Head Rd		
Level	Ground Floor		
Room	Kitchen Store Room		
Application	Hot water system tank - insulation material		
Risk Rating	Low Risk		



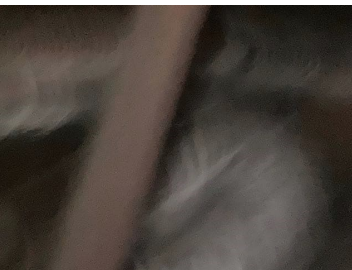


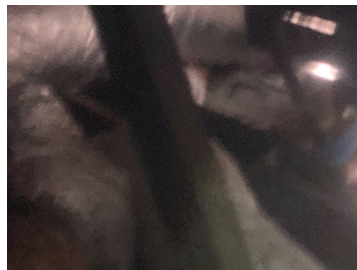
SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30317	Sample No	Visual Observation
Building	142-146 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Ceiling loose insulation		
Risk Rating	Low Risk		



No Photo Available

SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30316	Sample No	Visual Observation
Building	142-146 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Air conditioning ductwork		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30220	Sample No	Visual Observation
Building	142-146 New South Head Rd		
Level	Roof Void		
Room	Roof void		
Application	Air conditioning ductwork - insulation material		
Risk Rating	Low Risk		



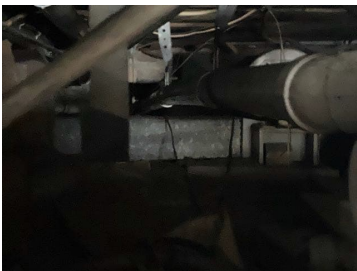
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SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30363	Sample No	Visual Observation
Building	142-146 New South Head Rd		
Level	External		
Room	Storage room north		
Application	Sarking insulation on ceiling		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30318	Sample No	Visual Observation
Building	148 New South Head Rd		
Level	Sub-Basement		
Room	Subfloor		
Application	Plant and equipment- internal insulation		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30230	Sample No	Visual Observation
Building	148 new South head road		
Level	Ground Floor		
Room	Waiting room		
Application	Heater		
Risk Rating	Low Risk		





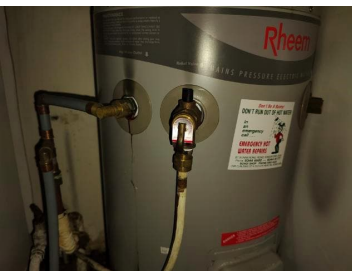
SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30228	Sample No	Visual Observation
Building	148 new South head road		
Level	Ground Floor		
Room	Operation room		
Application	Window air conditioner		
Risk Rating	Low Risk		



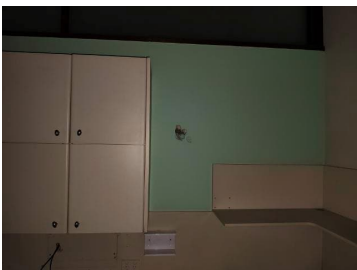


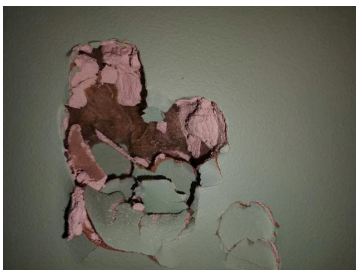
SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30225	Sample No	Visual Observation
Building	148 new South head road		
Level	Ground Floor		
Room	Sterilization room		
Application	Hater		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30224	Sample No	Visual Observation
Building	148 new South head road		
Level	Ground Floor		
Room	Dr Sara lassamilante visiting room		
Application	Insulation batts in walls		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30231	Sample No	Visual Observation
Building	148 new South head road		
Level	Level 1		
Room	Surgery rooms		
Application	Ceiling tiles		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SME-30227	Sample No	Visual Observation
Building	148 new South head road		
Level	Level 1		
Room	Storage room adjacent surgery and movement		
Application	Ceiling tiles		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30226	Sample No	Visual Observation
Building	148 new South head road		
Level	Roof Void		
Room	Ceiling void sarking insulation		
Application	Sarking to the roof and ducting		
Risk Rating	Low Risk		





SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30229	Sample No	Visual Observation
Building	148 new South head road		
Level	External		
Room	Heat pumps		
Application	Heat pumps external		
Risk Rating	Low Risk		

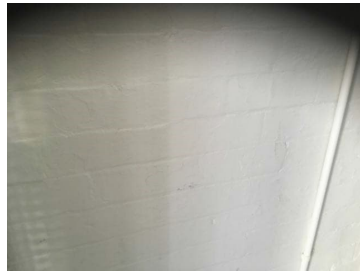




C1.4 LEAD BASED PAINTS

LBP DETECTED			
Photo Ref	LBP-30247	Sample No	Lead Paint Sample WSP-231416
Building	142-146 New South Head Rd		
Level	Ground Floor		
Room	Kitchen Store Room		
Application	Brickwork walls		
Risk Rating	Low Risk		





LBP DETECTED			
Photo Ref	LBP-30249	Sample No	Ref: WSP-231427
Building	142-146 New South Head Rd		
Level	External		
Room	Exterior, Throughout		
Application	Timber frame work		
Risk Rating	Medium Risk		





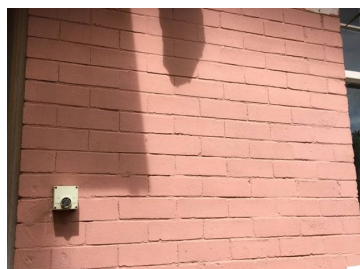
LBP DETECTED			
Photo Ref	LBP-30252	Sample No	Lead Paint Sample WSP-231427
Building	142-146 New South Head Rd		
Level	External		
Room	Perimeter walls		
Application	Timber windows		
Risk Rating	Medium Risk		



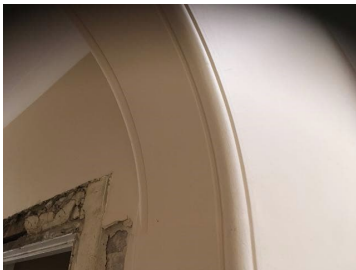


LBP DETECTED			
Photo Ref	LBP-30245	Sample No	Lead Paint Sample WSP-231428
Building	142-146 New South Head Rd		
Level	External		
Room	Throughout		
Application	Perimeter walls		
Risk Rating	Medium Risk		



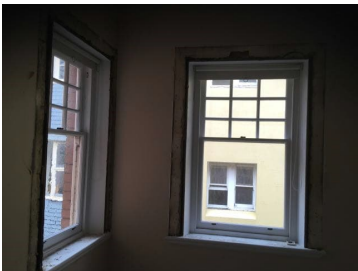


LBP DETECTED			
Photo Ref	LBP-30246	Sample No	Lead Paint Sample WSP-231406
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout		
Application	Walls, decorative trim		
Risk Rating	Low Risk		





LBP DETECTED			
Photo Ref	LBP-30244	Sample No	Lead Paint Sample WSP-231409
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout, Perimeter Walls		
Application	Window frames		
Risk Rating	Low Risk		





LEAD METAL			
Photo Ref	LBP-30349	Sample No	Lead Paint Presumed
Building	142-146 New South Head Rd		
Level	External		
Room	Storage room north		
Application	Lead flashing		
Risk Rating	-		



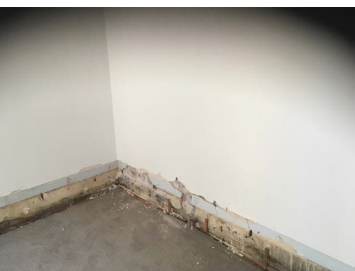


LEAD METAL			
Photo Ref	LBP-30248	Sample No	Lead Paint Presumed
Building	142-146 New South Head Rd		
Level	External		
Room	Various Throughout		
Application	Lead flashing		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30250	Sample No	Lead Paint Sample WSP-231412
Building	142-146 New South Head Rd		
Level	Level 1		
Room	Throughout		
Application	Walls		
Risk Rating	-		



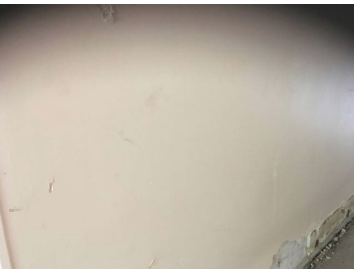


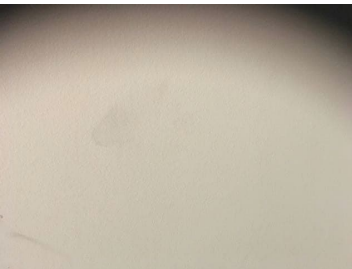
LEAD DUST DETECTED			
Photo Ref	LBP-30251	Sample No	Lead Dust Sample WSP-231414
Building	142-146 New South Head Rd		
Level	Roof Void		
Room	Roof void, timber frame/beam		
Application	Settled dust (swab)		
Risk Rating	High Risk		

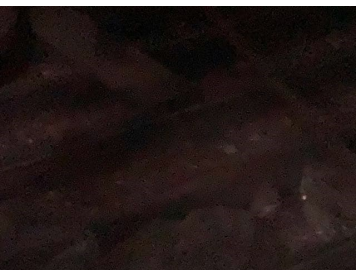




LBP NOT DETECTED			
Photo Ref	LBP-30253	Sample No	Lead Paint Sample WSP-231419
Building	142-146 New South Head Rd		
Level	Ground Floor		
Room	Throughout		
Application	Interior walls		
Risk Rating	-		





LEAD DUST DETECTED					No Photo Available
Photo Ref	LBP-30314	Sample No	Lead Dust Sample WSP-231451		
Building	142-146 New South Head Rd				
Level	Roof Void				
Room	Roof void				
Application	Top of ceiling, settled dust (swab)				
Risk Rating	High risk				

LEAD DUST DETECTED					No Photo Available
Photo Ref	LBP-30313	Sample No	Lead Dust Sample WSP-231452		
Building	142-146 New South Head Rd				
Level	Roof Void				
Room	Roof void				
Application	Top of ceiling, settled dust (swab)				
Risk Rating	High Risk				

LBP DETECTED			
Photo Ref	LBP-30261	Sample No	Lead Paint Sample WSP-326695
Building	148 new South head road		
Level	External		
Room	Walls and columns		
Application	White based paint system		
Risk Rating	Medium Risk		





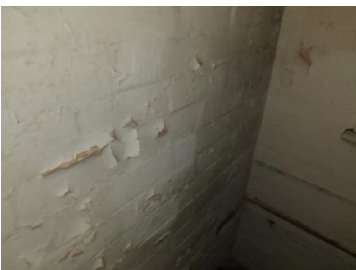
LBP DETECTED			
Photo Ref	LBP-30257	Sample No	Lead Paint Sample WSP-326703
Building	148 new South head road		
Level	External		
Room	Windows throughout		
Application	Grey based paint system		
Risk Rating	Medium Risk		



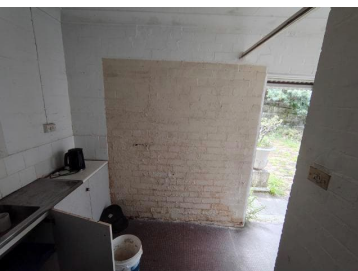


LBP NOT DETECTED			
Photo Ref	LBP-30258	Sample No	Lead Paint Sample WSP - 326671
Building	148 new South head road		
Level	Ground Floor		
Room	External change room		
Application	White based paint		
Risk Rating	-		





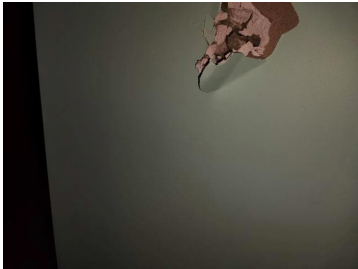
LBP NOT DETECTED			
Photo Ref	LBP-30256	Sample No	Lead Paint Sample WSP-326672
Building	148 new South head road		
Level	Ground Floor		
Room	External kitchen		
Application	Cream based paint - walls		
Risk Rating	-		



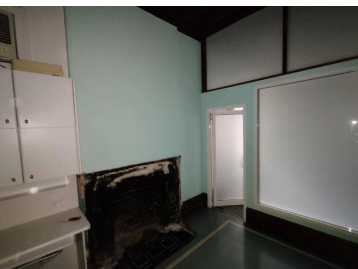


LBP NOT DETECTED			
Photo Ref	LBP-30255	Sample No	Lead Paint Previously Sampled WSP-326675
Building	148 new South head road		
Level	Ground Floor		
Room	Dr Sara lassamilante sun room adjacent visiting room		
Application	Green paint based system		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30254	Sample No	Lead Paint Sample WSP-326675
Building	148 new South head road		
Level	Ground Floor		
Room	Dr Sara lassamilante visiting room		
Application	Green paint based system		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30259	Sample No	Lead Dust Sample WSP-326685
Building	148 new South head road		
Level	Level 1		
Room	Storage room adjacent surgery and movement		
Application	Lead dust above ceiling tiles		
Risk Rating	-		





LEAD DUST DETECTED			
Photo Ref	LBP-30262	Sample No	Lead Dust Sample WSP-326691
Building	148 new South head road		
Level	Roof Void		
Room	Ceiling void sarking insulation		
Application	Dust in roof void		
Risk Rating	High Risk		

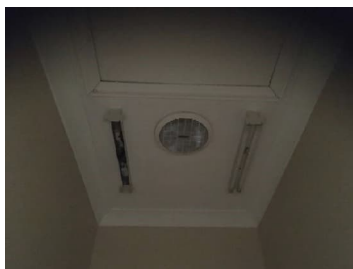


LBP NOT DETECTED			
Photo Ref	LBP-30260	Sample No	Lead Paint Sample WSP-326697
Building	148 new South head road		
Level	External		
Room	Walls throughout		
Application	Pink based paint system		
Risk Rating	-		



C1.5 POLYCHLORINATED BIPHENYLS

PCB FREE			
Photo Ref	PCB-27593	Sample No	Visual Observation
Building	142-146 New South Head Rd		
Room	Comms/Store Room		
Application	Fluorescent light fittings		
Material	CP4.0-06 - ATCO Capacitors, post 1997		
Risk Rating	-		



APPENDIX D

RISK MATRIX



RISK MATRIX

POTENTIAL TO BE DISTURBED

Score	Potential to be disturbed
High (3)	Disturbance may occur during typical occupancy of the building and is likely during maintenance works.
Medium (2)	Disturbance unlikely during typical occupancy of the building however may occur during maintenance works.
Low (1)	Disturbance unlikely during typical occupation of the building.

CONDITION

Score	Condition description
Poor (3)	Obvious damage or deterioration, extensive dust/contamination. Friable asbestos not encapsulated.
Fair (2)	Minor damage or deterioration, not sealed/encapsulated. Friable asbestos encapsulated (e.g. fire door) with no damage to encapsulation.
Good (1)	No obvious damage or deterioration, secured in place, sealed/encapsulated.
Unknown (1)	No access to assess condition.

FRIABILITY

Score	Friability Descriptor
Friable (1)	Material that; (A) is in a powder form or that can be crumbled, pulverised or reduced to powder by hand pressure when dry, and (B) contains asbestos.
Non-friable (0)	Material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.

RISK MATRIX TABLE

Material Condition	Disturbance Potential		
	High (3)	Medium (2)	Low (1)
Poor (3)	>6	5	4
Fair (2)	5	4	3
Good / Unknown (1)	4	3	2

Note – Friable asbestos containing materials also assigned a score of one (1).

Legend

>6	High Risk
4-5	Medium Risk
2-3	Low Risk

APPENDIX E

NATA LABORATORY ANALYTICAL REPORTS





Certificate of Analysis

WSP Australia Pty Limited



WORLD RECOGNISED
ACCREDITATION

Level 28, 680 George Street Sydney
PO Box 20967, World Square
Telephone +61 2 9272 1407
Email ANZLab@wsp.com

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 142-146 & 148 New South Head Road, Edgecliff, NSW

CERTIFICATE NO: SYD-PS218531-188108

CLIENT: Lendlease Development

DATE/S SAMPLED: 11/11/2024 to 12/11/2024

CLIENT ADDRESS: Level 14, Tower Three, International Towers Sydney, Exchange Place, Barangaroo Avenue, Barangaroo NSW 2000

DATE RECEIVED: 14/11/2024

TELEPHONE: 0438 321 555

DATE ANALYSED: 15/11/2024

EMAIL: jock.mitton@lendlease.com

ORDER NUMBER: N/A

CONTACT: Jock Mitton

SAMPLED BY: Kaushik Botta

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	231404	142-146 New South Head Rd, Level 1 Throughout, Lathe and plaster partition walls	Horsehair plaster	20 g	OF, NAD
002	231405	142-146 New South Head Rd, Level 1 Throughout, Exterior facing walls	Render	22 g	OF, NAD
003	231407	142-146 New South Head Rd, Level 1 Throughout, Decorative trim to walls	Render	6 g	NAD
004	231408	142-146 New South Head Rd, Level 1 Throughout, under skirting to walls	Render	2 g	NAD
005	231410	142-146 New South Head Rd, Level 1 Comms/Store Room/Bathroom, Wall, Infill panel	Fibre Cement Sheet	<1 g	OF, NAD
006	231411	142-146 New South Head Rd, Level 1 Comms/Store Room, Floor lining	Millboard	7 g	OF, NAD
007	231413	142-146 New South Head Rd, Roof Void, Entry hatch, Top of ceiling	Dust/Debris	5 g	OF, NAD ¹
008	231415	142-146 New South Head Rd, Level 1 Comms/Store Room, Ceiling, Roof access hatch	Fibre Cement Sheet	1 g	OF, NAD
009	231418	142-146 New South Head Rd, Ground Floor Kitchen Store Room, Walls	Render	2 g	NAD
010	231422	142-146 New South Head Rd, External Perimeter walls, Sash timber Windows, window beading	Caulking Compound	6 g	OF, NAD
011	231425	142-146 New South Head Rd, Sub-Basement Sub-floor, Perimeter walls, Damp proof course	Bituminous Material	3 g	OF, NAD
012	231431	142-146 New South Head Rd, External Grounds, North, Telstra pit	Fibre Cement Sheet	92 g	OF, NAD
013	326673	148 New South Head Rd, Ground Floor External quarters living room, Floor- carpet underlay	Woven Material	2 g	OF, NAD
014	326674	148 New South Head Rd, Ground Floor Dr Sara lassamilante visiting room, Fireplace lining	Dust	1 g	OF, NAD
015	326676	148 New South Head Rd, Ground Floor Dr Sara lassamilante visiting room, Floor green vinyl sheeting	Vinyl Sheet	50 g	SMF, NAD
015A			Adhesive		OF, NAD



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Email ANZLab@wsp.com

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 142-146 & 148 New South Head Road, Edgecliff, NSW
CERTIFICATE NO: SYD-PS218531-188108

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
016	326677	148 New South Head Rd, Ground Floor Dr Sara lassamilante visiting room, Wall vent	Fibre Cement Casting	17 g	NAD
017	326678	148 New South Head Rd, Ground Floor Kitchen, Padding under sink	Bituminous Material	8 g	OF, NAD
017A			Adhesive		OF, NAD
018	326679	148 New South Head Rd, Ground Floor Sterilization room, Floor cream vinyl sheeting	Vinyl Sheet	29 g	SMF, NAD
018A			Adhesive		OF, NAD
019	326680	148 New South Head Rd, Ground Floor Room adjacent Sterilization room, White vinyl tiles	Vinyl Tile	61 g	OF, NAD
019A			Adhesive/Backing		OF, NAD
020	326681	148 New South Head Rd, Ground Floor Room adjacent Sterilization room, Electrical backing board	Electrical Backing Board	3 g	CH
021	326682	148 New South Head Rd, Level 1 Room adjacent Sterilization room, Movement, electrical backing board	Electrical Backing Board	1 g	CH
022	326683	148 New South Head Rd, Level 1 Room with fireplace, Design plasterboard at can ceiling lining	Fibre Cement Casting	20 g	OF, NAD
023	326687	148 New South Head Rd, Level 1 All rooms, Window putty	Putty	<1 g	OF, NAD
024	326688	148 New South Head Rd, Level 1 Surgery room south, Floor grey vinyl sheet	Vinyl Sheet	48 g	OF, NAD
024A			Adhesive		OF, NAD
025	326689	148 New South Head Rd, Level 1 Storage room adjacent operations room, Yellow vinyl sheet	Vinyl Sheet	10 g	SMF, NAD
026	326690	148 New South Head Rd, Level 1 Storage room adjacent operations room, Sheeting under yellow vinyl	Vinyl Sheet	45 g	OF, NAD
026A			Adhesive/Backing		OF, NAD
027	326692	148 New South Head Rd, Roof Void Ceiling void dust, Dust in ceiling void	Dust	21 g	OF, NAD ¹
028	326693	148 New South Head Rd, External Roof, Roof tiles	Roof Tile	38 g	NAD
029	326696	148 New South Head Rd, Ground Floor Movement, Electrical backing board	Electrical Backing Board	<1 g	OF, NAD
030	326698	148 New South Head Rd, Sub-Basement Floor void, Debris	Fibre Cement Sheet	34 g	CH, OF
031	326699	148 New South Head Rd, Sub-Basement Floor void, Debris	Bituminous Material	15 g	OF, NAD
032	326700	148 New South Head Rd, Ground Floor Electrical backing board, Capacitor	Capacitor	46 g	NAD
033	326701	148 New South Head Rd, External Bolts sealant, Throughout	Sealant	1 g	NAD



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ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 142-146 & 148 New South Head Road, Edgecliff,
NSW

CERTIFICATE NO: SYD-PS218531-188108

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
034	326704	148 New South Head Rd, Ground Floor Arch entrance, Decorative coating	Cement Render	1 g	NAD
035	336684	148 New South Head Rd, Level 1 Storage room adjacent surgery and movement, Design plaster with hessian	Cement Render	40 g	OF, NAD

LEGEND:

NAD	- No Asbestos Detected
CH	- Chrysotile Asbestos Detected
A	- Amosite Asbestos Detected
C	- Crocidolite Asbestos Detected
SMF	- Synthetic Mineral Fibres Detected
OF	- Organic Fibres Detected
1	- No asbestos detected at reporting limit of 0.1 g/kg

Approved Identifier

Grace Tuckwell

Approved Signatory

Name: Leigh Paterson

Authorisation Date
Friday, 15 November 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

Sampling is not covered by the scope of accreditation.

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Certificate of Analysis

WSP Australia Pty Limited

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WORLD RECOGNISED
ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 142-146 & 148 New South Head Road, Edgecliff NSW

CERTIFICATE NO: WOL-PS218531 -188296

CLIENT: Lendlease Development

DATE\S SAMPLED: 14/11/2024 to 18/11/2024

CLIENT ADDRESS: Level 14, Tower Three, International Towers
Sydney, Exchange Place, Barangaroo Avenue,
Barangaroo NSW 2000

DATE RECEIVED: 19/11/2024

TELEPHONE: 0438 321 555

DATE ANALYSED: 19/11/2024

EMAIL: jock.mitton@lendlease.com

ORDER NUMBER: N/A

CONTACT: Jock Mitton

SAMPLED BY: Leigh Rampley

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	231450	142-146 New South Head Rd, Roof Void, Central, Tank and redundant lid	Fibre Cement Sheet	7 g	A, C, CH
002	231453	148 New South Head Rd, External HV cupboard, Southeast, Wall lining, backing	Fibre Cement Sheet	15 g	CH
003	231478	142-146 New South Head Rd, Exterior, Wall, Sandstone brick wall, pointing	Pointing	3 g	NAD

LEGEND:

NAD - No Asbestos Detected
CH - Chrysotile Asbestos Detected
A - Amosite Asbestos Detected
C - Crocidolite Asbestos Detected

Approved Identifier

Holly Kitamura

Approved Signatory

Name: Lauren DeRooy

Authorisation Date
Tuesday, 19 November 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

Sampling is not covered by the scope of accreditation.

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CERTIFICATE OF ANALYSIS 366426-A

Client Details

Client	WSP Australia Pty Limited
Attention	Leigh Rampley
Address	GPO Box 5394, Sydney, NSW, 2001

Sample Details

Your Reference	<u>PS218531 / N-00340</u>
Number of Samples	25 Paint, 6 Swab
Date samples received	14/11/2024
Date completed instructions received	15/11/2024

Analysis Details

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

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

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

Report Details

Date results requested by	22/11/2024
Date of Issue	21/11/2024
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Giovanni Agosti, Group Technical Manager

Authorised By

Nancy Zhang, Laboratory Manager

Lead in Paint						
Our Reference	UNITS	366426-A-14	366426-A-15	366426-A-16	366426-A-18	366426-A-19
Your Reference		WSP-231406	WSP-231409	WSP-231412	WSP-231416	WSP-231419
Date Sampled		12/11/2024	12/11/2024	12/11/2024	12/11/2024	12/11/2024
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Lead in paint	%w/w	4.3	0.68	0.054	4.7	0.05

Lead in Paint						
Our Reference	UNITS	366426-A-20	366426-A-21	366426-A-22	366426-A-25	366426-A-26
Your Reference		WSP-231427	WSP-326672	WSP-326675	WSP-326695	WSP-326697
Date Sampled		12/11/2024	11/11/2024	11/11/2024	12/11/2024	12/11/2024
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Lead in paint	%w/w	13	0.052	<0.005	2.8	0.04

Lead in Paint				
Our Reference	UNITS	366426-A-27	366426-A-28	366426-A-31
Your Reference		WSP-326703	WSP-326671	WSP-231428
Date Sampled		12/11/2024	11/11/2024	13/11/2024
Type of sample		Paint	Paint	Paint
Date prepared	-	21/11/2024	21/11/2024	21/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024
Lead in paint	%w/w	0.58	0.03	0.18

Lead in swab						
Our Reference	UNITS	366426-A-17	366426-A-23	366426-A-24	366426-A-29	366426-A-30
Your Reference		WSP-231414	WSP-326685	WSP-326691	WSP-231452	WSP-231451
Date Sampled		12/11/2024	12/11/2024	12/11/2024	14/11/2024	14/11/2024
Type of sample		Swab	Swab	Swab	Swab	Swab
Date prepared	-	19/11/2024	19/11/2024	19/11/2024	19/11/2024	19/11/2024
Date analysed	-	19/11/2024	19/11/2024	19/11/2024	19/11/2024	19/11/2024
Lead in Swabs	µg/swab	6,900	78	2,700	3,500	1,100
Lead in Swabs	mg/m ²	690	7.8	270	350	110

Method ID	Methodology Summary
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.
Metals-020/021/022	Acid digestion of Dust wipes/swabs and /or miscellaneous samples for metals determination by ICP-AES/MS and/or CV-AAS

QUALITY CONTROL: Lead in Paint					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			21/11/2024	26	21/11/2024	21/11/2024		21/11/2024	[NT]
Date analysed	-			21/11/2024	26	21/11/2024	21/11/2024		21/11/2024	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	26	0.04	0.03	29	107	[NT]

QUALITY CONTROL: Lead in swab					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			19/11/2024	[NT]	[NT]	[NT]	[NT]	19/11/2024	[NT]
Date analysed	-			19/11/2024	[NT]	[NT]	[NT]	[NT]	19/11/2024	[NT]
Lead in Swabs	µg/swab	1	Metals-020/021/022	<1	[NT]	[NT]	[NT]	[NT]	91	[NT]
Lead in Swabs	mg/m ²	0.1	Metals-020/021/022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

APPENDIX F

GENERAL INFORMATION ON HAZARDOUS MATERIALS



F1 BACKGROUND

Asbestos is the generic term for a group of naturally occurring mineral fibres with high tensile strength, flexibility, and resistance to thermal, chemical and electrical conditions. On account of these properties, asbestos has been used in many products for strength, heat, friction resistance and as insulation.

There are six types of the fibrous asbestos minerals, in two groups as described below:

- The serpentine asbestos is chrysotile (or white) asbestos. Chrysotile has been the most commonly used form of asbestos.
- Amphibole asbestiforms of which amosite (brown asbestos) and crocidolite (blue asbestos), were the most common types of amphibole asbestos used in building products.

Asbestos fibres enter the body by the inhalation and/or ingestion of airborne particles that can become embedded in tissues of the respiratory or digestive systems. International agencies and national authorities now recognise asbestos to be a human carcinogen. This designation was based on an observation of an increased incidence of lung cancer, mesotheliomas and gastrointestinal cancer in occupationally exposed workers, being consistent across investigators and study populations. Information from animal studies on the inhalation of fibres support these findings, although evidence for carcinogenicity via ingestion is limited.

In recognition of the above-mentioned issues, every effort should be made to eliminate the use of asbestos materials in buildings.

F2 USE OF ASBESTOS PRODUCTS

Asbestos was used extensively in structures such as buildings, processing plants, ships, trains and motor vehicles in the 1950s, 1960s and 1970s. Asbestos cement products are commonplace in building materials and buildings constructed prior to 1990.

Asbestos has been used in hundreds of different building materials. Some of the common building materials include:

- Adhesive sealants and paints.
- Electrical backing boards and internal linings.
- Vinyl floor tiles and vinyl sheets.
- Fibro-cement sheets in wall, ceiling and eave linings (internal & external).
- Fibro-cement internal flues and downpipes
- Bitumen-based water proofing such as malthoid (typically on roofs).

Whilst these materials are known to commonly contain asbestos, not all will. Confirmation must be made by detailed visual inspections coupled with laboratory analysis.

Generally, ACM consists of asbestos fibres bound in a cement matrix. The degree of fibre release and the risk posed by the asbestos will depend on the type of material (e.g. friable or non-friable), its condition and the potential for disturbance. As a result, it is necessary to have in place safe systems of work when working with or near asbestos.

F3 LEGISLATIVE REQUIREMENTS

State and Territory governments around Australia have generally adopted a consistent approach to asbestos management within workplaces. Whilst some minor differences are present from state to state, the following general requirements apply within workplaces:

- The owner of a workplace must determine if ACM are present in the workplace. This is usually undertaken through a visual inspection of the property.
- Upon identifying ACM, a risk assessment must be undertaken and must consider the following:
 - Friability
 - Condition
 - Location
 - Surrounding activities that could disturb the asbestos
- Where ACM is identified, it should be removed if removal is reasonably practicable. Where it is not reasonably practicable to remove, it must, depending on the level of risk, be either repaired, maintained and/or protected from future damage.
- ACM that is to remain in use (i.e. *in-situ*) must, when reasonably practicable, be labelled. An example of a warning label is shown below:

Figure F.1 Example asbestos warning label



- If ACM is found to be damaged, or is in a position where it is likely to be damaged, steps must be taken to prevent it being or becoming an unacceptable risk.
- If the risk of the ACM is found to be elevated, then steps must be taken to minimise the risk to employees / workers and other personnel who attend the workplace.

F4 HEALTH IMPACTS

As ACM is no longer used in Australia, most worker exposures now occur during the removal of asbestos and the renovation and maintenance of buildings and structures containing asbestos; particularly when asbestos is disturbed during activities such as handling, sawing, sanding, grinding, drilling, turning or similar.

The presence of asbestos may constitute a potential hazard; however, risk to health is based on the likelihood that respirable asbestos fibres are inhaled in significant quantities.

The level of risk posed by asbestos is linked to the size and shape of the fibres and the ability of it to penetrate deep into the lungs and become lodged. Fibres that measure less than three (3) microns wide and greater than five (5) microns long are referred to as respirable fibres and may enter the deepest part of the lungs. Larger fibres are deposited in the nose and major airways and can generally be cleared by normal physiological processes.

Once asbestos fibres have been inhaled (particularly respirable fibres) they can become lodged and are harder for our bodies to destroy, breakdown or remove. This is when they pose the greatest potential to cause disease and the likelihood of disease increases as the number of asbestos fibres inhaled increases.

Significant health risks may arise from the inhalation of airborne asbestos fibres, and their passage into the lungs. The risk of cancer increases as fibres diameter decreases and with increased exposure. Cigarette smoking greatly increases the risk of lung cancer in people heavily exposed to asbestos, but has no known association with mesothelioma.

Crocidolite and amosite have the most potent documented effects in producing the highly malignant mesothelioma tumour.

Asbestos fibres reaching the alveoli are handled in different ways. Some are carried out of the lung through the lymphatic system (part of the immune system). Of those fibres that remain some do not cause health effects whilst some may lead to lung changes such those outlined below:

Asbestosis	A form of fibrosis (scarring) of the lungs, which results in breathlessness. Asbestosis is a serious, chronic, non-cancerous respiratory disease. Asbestosis can take between 20 to 40 or longer years to develop.
Lung Cancer	Lung cancer is a disease which consists of uncontrolled cell growth in tissues of the lung. The incidence of lung cancer in people who are directly involved in the mining, milling, manufacturing and use of asbestos and its products is much higher than those who weren't involved in those industries.
Mesothelioma	Mesothelioma is a cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelial cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness. Mesothelioma was once rare, but its incidence is increasing throughout the industrial world because of past exposures to asbestos. Australia has the highest incidence rate in the world.

The primary objective in any asbestos management plan is to eliminate, where possible, exposure to airborne asbestos fibres, or as a minimum, ensure workers are not exposed to fibre concentrations greater than the National Occupational Health and Safety Commission's occupational exposure standards for asbestos. It should be noted, that in situations where asbestos has been incorporated into a stable matrix and airborne dust is not generated, the asbestos-related health risk is negligible.

F5 SYNTHETIC MINERAL FIBRES

Synthetic Mineral Fibres (SMF) are a group of amorphous substances, including Glasswool, Rockwool and Ceramic fibre that have been fiberised by mechanical means, such as spinning or blowing during manufacturing. SMFs are commonly found in false ceiling panels and insulation and are typically identified by visual observation or by Optical Microscope techniques.

In the late 1980s the International Agency for Research on Cancer (IARC) evaluated certain SMF materials as being possibly carcinogenic to humans. The similarity in application and appearance to asbestos has resulted in some community concern regarding the health effects associated with exposure to SMF.

Reference information on SMF and their management is provided in the rescinded National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].

F6 LEAD BASED PAINTS

In the past lead was added to paint as a pigment and to assist with drying, improve durability, resist moisture and retain a fresh appearance. Lead carbonate (white lead) was once the principal white pigment in paints for houses and public buildings. Paint with lead pigment was manufactured up until the late 1960s, and in 1969 the National Health and Medical Research Council's Uniform Paint Standard was amended to restrict the lead content in domestic paint. The use of lead in paint as a significant component was phased out in Australia by the early 1980s.

Many older Australian buildings still contain lead-based paint, even though it may be covered with layers of more recent paint. Lead-based paint was used mainly on exterior surfaces, and to a lesser degree on interior doors and door and window architraves, especially in undercoats and primers, where concentrations of up to 20 percent lead content were used. Interior walls were not commonly painted with paint containing white lead pigment, although some colours did contain red, orange and yellow lead pigments.

Other areas that may contain lead include lead flashing and lead backing in electrical components. Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Lead paint removal poses two potential avenues of transmission. Firstly, by inhalation or ingestion by workers and public near the works, and secondly by the deposition of particles on nearby footpaths, streets or soil where they may be re-suspended, tracked into houses or buildings where it can be inhaled or ingested.

Lead based paints are to be managed in accordance with the Australian Standard *Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings* (AS4361.2:2017).

F7 POLYCHLORINATED BIPHENYLS

Polychlorinated biphenyl (PCBs) compounds are synthetic organic compounds that were used in transformer oils, capacitor oils, hydraulic and heat-exchange fluids, lubricating oils, cutting oils, fluorescent light fittings, ceiling fans, dishwashers, clothes dryers, vacuum pumps, electric motors and washing machines. PCBs are highly stable chemicals with good insulating properties; they do not degrade appreciably over time or with exposure to high temperatures, acids or alkalis. It is these properties that made PCBs attractive for use in electrical devices. They were first used in about 1929 and were commonly used from the 1950s to the 1970s.

Fluorescent light-fittings containing capacitors can be compared with details contained in the ANZECC Identification of PCB Containing Capacitors database (1997).

It is considered that Australian electrical equipment manufactured since 1970 is unlikely to contain PCBs. Imports of PCBs to Australia were banned since 1986 once it became known that PCBs could harm human health and contaminate the environment.

APPENDIX G

APPLICABLE LEGISLATION AND REFERENCES



G1 LEGISLATION

PRIMARY ASBESTOS LEGISLATION	ASBESTOS SURVEY REQUIREMENTS	ASBESTOS RESURVEY REQUIREMENTS	REPORTING REQUIREMENTS	MANAGEMENT AND LABELLING/SIGNAGE REQUIREMENTS	OTHER REQUIREMENTS
Work Health and Safety Act 2011 Work Health and Safety Regulations 2017 Supported by: Code of Practice – How to Manage and Control Asbestos in the Workplace (2022) Code of Practice – How to Safely Remove Asbestos (2022)	A PCBU must, for work place buildings/structures that are constructed prior to December 31, 2003 Survey to identify and locate any ACMs; and Compile and keep at the workplace a site specific Asbestos Register. If ACM is identified at the work place, an AMP is to be compiled for the management of the identified ACM. The Asbestos Register and the AMP must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.	Re-inspections of identified ACM is determined on a case-by-case basis depending on the risk situation and should be informed by and conducted in accordance with the site specific AMP.	The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey. The Asbestos Register must be maintained and also updated if: — The AMP is under review — Further ACM is identified and/or — ACM is removed, disturbed or encapsulated. The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place. The AMP must be maintained and updated: — When the Asbestos Register is under review — If asbestos is removed, disturbed or encapsulated — If the AMP is no longer adequate for managing the ACM — If a Health and Safety Officer requests a review and/or at least — Once every 5 years.	Generally, health monitoring is not required except for workers involved in asbestos removal works. Training is required for persons involved in asbestos removal work or carrying out asbestos related works. All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item. Before refurbishment or demolition: — Ensure Asbestos Register is current — Undertake necessary inspections. A licensed asbestos removalist is required unless: ACM <10 m² and non-friable and then by a competent person.	WHS Regulation 419 requires that a PCBU must not carry out, or direct or allow a worker to carry out, work involving asbestos; excepting as is applicable: — Managing risk — Sampling, identification and analysis — Maintenance — Removal/disposal — Other exemptions per s.419 (3).

WSP

G2 REFERENCES

- NOHSC. (April 2005a). *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition*. National Occupational Health & Safety Commission, Australian Government.
- Standards Australia. (April 1994). *Safety Signs for the Occupational Environment*. Australian Standard.
- Standards Australia. (February 2009). *Selection, use and maintenance of respiratory protective equipment*.
- Standards Australia. (February 2012). *Respiratory protective devices*. Australian / New Zealand Standard, Joint Technical Committee QR-011.
- Standards Australia. (September 2001). *Demolition of structures*. Australian Standard, Committee BD-059.

ABOUT US

WSP is one of the world's leading engineering professional services consulting firms. We are dedicated to our local communities and propelled by international brainpower. We are technical experts and strategic advisors including engineers, technicians, scientists, planners, surveyors, environmental specialists, as well as other design, program and construction management professionals. We design lasting Property & Buildings, Transportation & Infrastructure, Resources (including Mining and Industry), Water, Power and Environmental solutions, as well as provide project delivery and strategic consulting services. With 36,000 talented people in more than 500 offices across 40 countries, we engineer projects that will help societies grow for lifetimes to come.



HAZARDOUS MATERIALS SURVEY REPORT

138-140 NEW SOUTH HEAD ROAD EDGECLIFF, NSW 2027



Status of hazardous materials at 138-140 New South Head Road



WARNING: Hazardous materials identified at the Site.

Refer to the report in its entirety for details of identified hazardous materials and the associated limitations (e.g. areas unable to be assessed).



Question today *Imagine tomorrow* Create for the future

Hazardous Materials Survey Report
138-140 New South Head Road Edgecliff, NSW, 2027
LENDLEASE DEVELOPMENT

WSP
Level 27, 680 George Street
Sydney, NSW
2000 Australia
wsp.com

REV	DATE	DETAILS
A1	26 November 2024	Initial Draft Report Issued to Client
A2	2 December 2024	Final Report Issued to Client

	NAME	DATE	SIGNATURE
Prepared by:	Kaushik Botta	22 November 2024	
Reviewed by:	Leigh Rampley	26 November 2024	
Approved by:	Daniel Abela	26 November 2024	

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APPENDIX G	APPLICABLE LEGISLATION AND REFERENCES

GLOSSARY

Report / Register – Risk Assessment Glossary

Primary Location/Room	The primary location description of the material described in the hazardous materials register (e.g. Main Office).
Secondary Location/Application	Means the use or application of the material described in the asbestos register (e.g. wall lining, floor covering, soffit lining, pipe lagging, etc.).
Material/Product Description	Refers to the type of known/suspected ACM identified (e.g. vinyl tile, fibre cement sheeting, fibrous insulation, etc.). Does not refer to the use or application of the material. This is covered in 'Secondary Location/Application'.
Friable (Asbestos)	Means asbestos-containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.
Non-Friable (Bonded Asbestos)	Material containing asbestos that is not friable asbestos, includes materials containing asbestos fibres reinforced with a bonding compound.
Condition (Good)	Condition of a material where: — The material has no evidence of any significant damage/deterioration. — The material is in, or is close to, 'as new' condition.
Condition (Fair)	Condition of a material where: — There is some minor damage or wear throughout the extent of the material. — There is some obvious damage or significant wear but only in localised areas.
Condition (Poor)	Condition of a material where: — The material exhibits consistent damage or wear throughout the extent of the material. — Major or significant damage is evident, even if only in localised areas. — Any non-fixed material (e.g. debris).
Disturbance (Low)	The potential for disturbance is low when: — Activities in the area where the hazardous material is located are unlikely to result in damage or deterioration of the material. — The material is completely isolated from normal day to day activities. — The material is completely protected from nearby activities by an enclosure or encapsulation.
Disturbance (Medium)	The potential for disturbance is medium when: — Activities in the area have a potential to mildly impact upon the material and the activities are infrequent — The material is protected from activities by an enclosure or encapsulation, however the protection is not comprehensive.
Disturbance (High)	The potential for disturbance is high when: — Activities undertaken in the area are likely to result in immediate damage to identified hazardous materials — Activities in the area, whilst typically of low impact, happen on a regular basis and are likely to result in deterioration or damage to the material in the short to medium term.

Report Glossary

Airborne asbestos	Any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
Asbestos	The asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
Asbestos Cement (AC)	Products consisting of sand aggregate and cement reinforced with asbestos fibres (e.g. asbestos cement pipes and flat or corrugated asbestos cement sheets).
Asbestos containing material (ACM)	Any material, object, product or debris that contains asbestos.
Asbestos contaminated dust or debris (ACD)	Dust or debris that has settled within a workplace and is (or is assumed to be) contaminated with asbestos.
Asbestos removal work	Work involving the removal of asbestos or ACM, friable asbestos removal work or non-friable asbestos removal work.
Asbestos removalist	A person conducting a business or undertaking who carries out asbestos removal work.
Asbestos-related work	Work involving asbestos.
Competent person	A person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work.
Dust and debris	Visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.
Hazard	Anything in the workplace that has the potential to harm people and the environment.
Inaccessible areas	Areas that are difficult to access, such as wall cavities and the interiors of plant and equipment.
In-situ asbestos	Asbestos or ACM fixed or installed in a structure, equipment or plant but does not include naturally occurring asbestos.
NATA-accredited laboratory	A testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.
Person conducting a business or undertaking (PCBU)	A person conducts a business or undertaking is one who meets the definition outlined in Section 5 of the WHS Act.
Person with control	In relation to premises, a person who has control of premises used as a workplace. The person with control may be: — The owner of the premises — A person who has, under any control or lease, an obligation to maintain or repair the premises — A person who is occupying the premises — A person who can make decisions about work undertaken at the premises.
Respirable asbestos	An asbestos fibre that: — Is less than 3 microns (µm) wide — Is more than 5 µm long — Has a length to width ratio of more than 3:1.
Risk	Refers to the level of risk posed by the ACM based on its condition, friability, potential for disturbance (accessibility) and other factors such as proposed demolition/refurbishment works. Refer to the Risk Matrix in Appendix D
Sealed	Refers to whether the ACM is encapsulated with a sealant (such as paint, wall paper, etc.), concealing its exposed surfaces.

Airborne asbestos	Means any fibres of asbestos small enough to be made airborne. For the purposes of monitoring airborne asbestos fibres, only respirable fibres are counted.
Asbestos	Means the asbestiform varieties of mineral silicates belonging to the serpentine or amphibole groups of rock-forming minerals, including actinolite asbestos, grunerite (or amosite) asbestos (brown), anthophyllite asbestos, chrysotile asbestos (white), crocidolite asbestos (blue) and tremolite asbestos.
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Asbestos contaminated dust or debris (ACD)	Means dust or debris that has settled within a workplace and is (or assumed to be) contaminated with asbestos.
Asbestos removal work	Means work involving the removal of asbestos or ACM, friable asbestos removal work or non-friable asbestos removal work.
Asbestos removalist	Means a person conducting a business or undertaking who carries out asbestos removal work.
Asbestos-related work	Means work involving asbestos.
Competent person	Means a person possessing adequate qualifications, such as suitable training and sufficient knowledge, experience and skill, for the safe performance of specific work.
Condition (Fair)	Means: — There is some minor damage or wear throughout the extent of the material — There is some obvious damage or significant wear but only in localised areas.
Condition (Good)	Means: — The material has no evidence of any significant damage/deterioration — The material is in, or is close to, 'as new' condition.
Condition (Poor)	Means: — The material exhibits consistent damage or wear throughout the extent of the material — Major or significant damage is evident, even if only in localised areas — Any non-fixed material (e.g. debris).
Disturbance (High)	Means: — Activities undertaken in the area are likely to result in immediate damage to identified hazardous materials — Activities in the area, whilst typically of low impact, happen on a regular basis and are likely to result in deterioration or damage to the material in the short to medium term.

Disturbance (Low)	Means: — Activities in the area where the hazardous material is located is unlikely to result in damage or deterioration of the material — The material is completely isolated from normal day to day activities — The material is completely protected from nearby activities by an enclosure or encapsulation.
Disturbance (Medium)	Means: — Activities in the area have a potential to mildly impact upon the material and the activities are infrequent — The material is protected from activities by an enclosure or encapsulation, however the protection is not comprehensive.
Dust and debris	Means visible particles, fragments or chunks of material, large and heavy enough to have settled in the work area, that are likely to have originated from ACM.
Friable (Asbestos)	Means asbestos-containing material which, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.
Hazard	Anything in the workplace that has the potential to harm people.
Inaccessible areas	Means areas which are difficult to access, such as wall cavities and the interiors of plant and equipment.
In-situ asbestos	Means asbestos or ACM fixed or installed in a structure, equipment or plant but does not include naturally occurring asbestos.
Material/Product Description	Refers to the type of known/suspected ACM identified (e.g. vinyl tile, fibre cement sheeting, fibrous insulation, etc). Does not refer to the use or application of the material. This is covered in 'Application (secondary location)'.
NATA-accredited laboratory	Means a testing laboratory accredited by the National Association of Testing Authorities (NATA), Australia, or recognised by NATA either solely or with someone else.
Non-Friable (Bonded Asbestos)	Means material containing asbestos that is not friable asbestos, includes materials containing asbestos fibres reinforced with a bonding compound.
Person conducting a business or undertaking (PCBU)	A person conducts a business or undertaking is one who meets with the definition outlined in Section 5 of the WHS Act.
Person with control	Means, in relation to premises, a person who has control of premises used as a workplace. The person with control may be: — The owner of the premises — A person who has, under any control or lease, an obligation to maintain or repair the premises — A person who is occupying the premises — A person who is able to make decisions about work undertaken at the premises.
Primary Location/Room	Means the primary location description of the material described in the hazardous materials register (e.g. Main Office).

Respirable asbestos	Means an asbestos fibre that: — Is less than 3 microns (µm) wide — Is more than 5 microns (µm) long — Has a length to width ratio of more than 3:1.
Risk	Refers to the level of risk posed by the ACM based on its condition, friability, potential for disturbance (accessibility) and other factors such as proposed demolition/refurbishment works. Refer to the Risk Matrix in Appendix A .
Sealed	Refers to whether or not the ACM is encapsulated with a sealant such as paint, wall paper, etc. concealing its exposed surfaces.
Secondary Location/Application	Means the use or application of the material described in the asbestos register (e.g. wall lining, floor covering, soffit lining, pipe lagging, etc).

ABBREVIATIONS

A	Amosite Asbestos (brown Asbestos)
AC	Asbestos cement (Asbestos-containing fibrous cement material)
ACD	Asbestos contaminated dust or debris
ACM	Asbestos containing material
AMP	Asbestos management plan
ARCP	Asbestos removal control plan
ASCC	Australian Safety & Compensation Council
C	Crocidolite Asbestos (blue Asbestos)
CH	Chrysotile Asbestos (white Asbestos)
EPA	Environment Protection Authority
FC	Fibre cement (usually sheeting)
Fibres/mL	Countable fibres per millilitre of air sampled
L/min	Litres per minute of air
LAA	Licensed asbestos assessor
NAD	No Asbestos Detected
NATA	National Association of Testing Authorities, Australia
NOHSC	National Occupational Health and Safety Commission
ODS	Ozone Depleting Substance
OH&S	Occupational health and safety (also, refer to WH&S)
PAM	Presumed Asbestos material
PCB	Polychlorinated biphenyls
PCBU	Person conducting a business or undertaking
PPE	Personal protective equipment
RPE	Respiratory protective equipment
SMF	Synthetic Mineral Fibre
SWMS	Safe work method statement
WH&S	Workplace health and safety

EXECUTIVE SUMMARY

WSP Australia Pty Ltd (WSP) was engaged by Lendlease Development (referred to as the 'Client') to undertake a hazardous materials survey of 138-140 New South Head Road, located at Edgecliff, NSW, 2027 (referred to as the 'Site'). The area is to undergo major redevelopment, and the Site is to be demolished.

SITE NAME	138-140 New South Head Road
SITE ADDRESS	Edgecliff, NSW 2027
SURVEYOR NAME	Kaushik Botta and Leigh Rampley
SURVEY DATE	13 November 2024 to 19 November 2024 (not inclusive)

The Client's objective is to comply with applicable legislative and the State Significant Development Guidelines - Safety Environmental Assessment Requirements (SSD – SEAR's) clause requirement by providing a hazardous materials survey of a building proposed to be demolished or altered so that they can be safely removed and lawfully disposed of, as required. The hazardous materials targeted as part of the survey were:

- Asbestos-Containing Materials (ACM)
- Lead-based paints (LBP)
- Lead in dust
- Synthetic mineral fibres (SMF)
- Polychlorinated biphenyl (PCB)

The scope of services for this inspection comprised a detailed visual inspection of all accessible areas on the Site (buildings, structures and plant). Representative samples were collected from materials suspected of being ACM or lead containing. All data generated from the survey was used to create an hazardous materials register (Appendix A) and assesses the risk associated with identified hazardous material (refer to risk matrix in Appendix D).

FINDINGS

The following table summarises asbestos/hazardous materials identified or presumed (assumed) during the Site inspections. Refer to Section 6. for recommendations

MATERIAL	IDENTIFIED/PRESUMED	RISK RANGE*		
138-140 New South Head Rd				
Friable ACM	No	-	to	-
Non-friable ACM^	Yes	Low	to	High
Synthetic Mineral Fibres	Yes	Low	to	Low
Lead Based Paints	Yes	Medium	to	High
Lead in Dust	Yes	High	to	High
PCBs	Yes	Low	to	Low

*No high-risk asbestos materials were identified during the Site inspection. The risk arising from potential exposure to hazardous materials must be managed in accordance with the *NSW WHS Regulation clause 49* during demolition works.

^Non-friable ACM may become friable due to a process (removal) and from degraded substrates.

1 INTRODUCTION

WSP Australia Pty Ltd (WSP) was engaged by Lendlease Development (referred to as the 'Client') to undertake a hazardous materials survey of 138-140 New South Head Road, located at Edgecliff, NSW, 2027. (referred to as the 'Site'). The area is to undergo major redevelopment, and the Site is to be demolished.

This report presents the findings of the inspection conducted on 13 November 2024 to 19 November 2024 (not inclusive).

No one section or part of a section of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including the asbestos register and sample results.

1.1 OBJECTIVE

The Client's objective is to comply with applicable legislative and the State Significant Development Guidelines - Safety Environmental Assessment Requirements (SSD – SEAR's) clause requirement by providing a hazardous materials survey of a building proposed to be demolished or altered so that the materials can be safely removed and lawfully disposed of, as required.

1.2 SCOPE OF WORK

WSP's completed scope of work is summarised below:

- Attended Site to undertake building (structure and plant) survey inspections in safely accessible areas
- Collected representative asbestos and lead samples, where safe to do so, to:
 - Confirm the presence/absence of asbestos or lead materials
 - Assess the condition and potential for disturbance of hazardous materials encountered; and
 - Determine the approximate extent and quantities of hazardous materials
- Hazardous materials were photographed
- The Site survey encompassed all accessible Site buildings, features, services, ceilings, roofing and areas of the Site. Where areas were inaccessible or samples could not be collected, this was noted.

1.3 SURVEY TYPE

The demolition and refurbishment survey was undertaken by visual inspection and through intrusive investigations and destructive sampling, where safe to do so, and analysis of those areas of the site accessible at the time of the survey. Intrusive/Destructive Survey Inspections are normally undertaken at the time of (or immediately prior to) the refurbishment or demolition works being undertaken. This type of survey is fully intrusive using destructive investigation techniques and sampling regimes, therefore as a consequence, the potential exists for the disturbance for any asbestos and other hazardous materials present. This type of survey requires more personal protection measures being undertaken for the surveyor.

All safely accessible external and internal areas of the Site structures and plant were inspected. The inspection included general building areas, occupied areas, ceiling spaces, sub floors, roof spaces, plant equipment and platform areas. Where it was not possible to collect a sample of a suspect material, records were included in the hazardous materials register as "assumed/presumed material". All site specific inaccessible areas were noted.

2 SITE INFORMATION

2.1 SITE DETAILS

WSP was engaged to complete an hazardous materials survey of the following Site.

Table 2.1 Site details

SITE NAME	138-140 New South Head Road
SITE ADDRESS	Edgecliff, NSW 2027
MAJOR SITE STRUCTURES	138-140 New South Head Rd
APPROXIMATE AGE OF SITE	1919

2.2 SITE DESCRIPTION

Details of the buildings are presented below:

Table 2.2 Building description

Building	Building Description	Approximate Building Age
138-140 New South Head Rd	The Knightsbridge complex. Is a three-storey residential unit block building, plus roof and basement levels. Constructed of Concrete slab, rendered brickwork walls, timber frame and metal/membrane roof.	1919

The building was in a decrepit state with severe water damage, mould growth and evidence of degradation. It was vacant and electrics isolated. Rubbish observed dumped around the property, with unauthorised access/squatting.

The inspection was intrusive, with destructive investigations in representative areas, and was limited to the building(s) listed above. Hazardous materials located in inaccessible areas, or located in areas that posed an unacceptable risk to health and safety (e.g. live electrical areas, confined spaces, etc.) and security, were not inspected or sampled during the survey.

3 HAZARDOUS MATERIALS RISK ASSESSMENT

To assess the health risk posed by the presence of ACMs, SMF, lead based paint, and PCBs, the following factors must be considered:

3.1 ACM & SMF RISK ASSESSMENT FACTORS

These factors include:

- Condition of the material. This is described as being either good (not been damaged or have not deteriorated), medium (minor deterioration or damage) or poor (materials which have been extensively damaged, or their condition has deteriorated over time);
- Proximity of air plenums and direct air stream;
- Friability of the material (ease with which the material can be crumbled) listed as either friable or non-friable;
- Requirement for access for building or maintenance operations and accessibility (low, medium or high);
- Likelihood of disturbance of the material;
- Exposed surface areas and;
- Environmental conditions.

These aspects are in turn judged upon; (i) potential for fibre generation; and, (ii) the potential for exposure. When these factors have indicated that there is a possibility of exposure to airborne fibres, appropriate recommendations for repair, maintenance or abatement of the asbestos containing materials are made.

3.2 LEAD BASED PAINT RISK ASSESSMENT FACTORS

Risk assessment factors include:

- Concentration of lead in paint;
- Condition of the paint.
- Deterioration/damage (peeling, flaking);
- Proximity of air plenums, direct air stream and sensitive receptors such as foodstuffs;
- Ease with which the paint can be disturbed/removed;
- Requirement for access for building or maintenance operations and accessibility (low, medium or high); and
- Magnitude of exposed surface areas.

These aspects are in turn judged upon the potential for exposure. When these factors have indicated that there is a possibility of exposure to lead-based paint/dust, appropriate recommendations for the repair, maintenance, abatement and removal of the paint are made.

3.3 POLYCHLORINATED BIPHENYLS (PCBS) RISK ASSESSMENT FACTORS

Risk assessment factors include:

- The manufacture age and location of the capacitor;
- The condition of the capacitor (visible leaks/spills of fluid);
- Potential of exposure to the PCBs from contact with capacitors;
- Ease with which the capacitors can be accessed and;
- The requirement for access to light fittings for building or maintenance operations and accessibility (low, medium or high).

As above, these aspects are in turn judged upon the potential for exposure. When risk factors have indicated a possibility of exposure to PCBs, appropriate recommendations for the removal and disposal of the capacitors are made.

3.4 DUST

Risk assessment factors include:

- Dust loading;
- Surface area/spaces;
- Likelihood of disturbance of the material;
- Environmental conditions; and;
- Inherent risk.

Dust has a high disturbance potential and high risk of exceeding exposure standards as can easily become airborne.

4 SURVEY METHODOLOGY

4.1 SITE INSPECTION

The Site inspection involved a thorough and systematic walkthrough of the buildings and structures. Access was made only where safe access by solid floors, decking, walkways, protected catwalks or ladders was available. Minimal to no disturbance of any equipment was undertaken as part of the survey as all plant, electrical installations, pipe-work and associated equipment were considered live at the time of the survey. No soil investigation or soil sampling was undertaken as part of the survey.

The identification of hazardous materials involved a combination of visual inspection of the accessible areas of the building/structure and the collection of small representative samples (where required as sample collection is not always a requirement during asbestos surveys) of the suspect materials for analytical confirmation. Where identical suspect materials were detected at different locations, visual confirmation only may have been made rather than additional sample collection.

Observations recorded for known and suspected hazardous materials included details of the:

- Location
 - Condition
 - Potential for disturbance/accessibility
 - Friability
 - Quantity/extent.
-

4.2 ASBESTOS SAMPLE ANALYSIS

Representative samples of materials suspected of containing asbestos were collected and analysed by WSP's in-house NATA accredited laboratory. The identification of asbestos fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. This is detailed in Australian Standard 4964-2004 'Method for the qualitative identification of asbestos in bulk samples'. Asbestos samples were only collected for analysis where the safety of personnel would not be compromised. Sampling was conducted in accordance with WSP's in-house survey guide.

4.3 COLLECTION OF DATA

Following the hazardous materials inspection survey and any subsequent sample analysis, all data collected was tabulated to form a hazardous materials register that includes risk ratings, location, and representative photos.

4.4 INACCESSIBLE AREAS

Hazardous materials located in inaccessible areas, or located in areas that pose an unacceptable risk to health and safety (e.g. live electrical areas) and security, were not inspected or sampled during the survey. Common locations where access may be limited or missing are listed below:

- Inside voids concealed within a building structure that cannot be accessed without major demolition
- Roofs, ceiling spaces and other height restricted areas that cannot be accessed without specialised equipment
- Within confined spaces
- Energised services/utilities, including gas, water and electrical
- Unsafe structures

The following table summarises inaccessible areas identified during the Site inspection.

Table 4.1 Summary of inaccessible areas at time of inspection

INACCESSIBLE AREAS	DETAILS
138-140 New South Head Rd, External Underground services	Out of scope below ground
138-140 New South Head Rd, Externals Metal Roof	Height restriction
138-140 New South Head Rd, Sub- floor, beneath ground floor	Crawl space, no access sighted

4.5 IDENTIFICATION OF MATERIAL

4.5.1 ASBESTOS CONTAINING MATERIALS (ACM)

Representative samples of materials suspected to contain asbestos were collected and analysed at WSP Australia's NATA Accredited Laboratory. The identification of asbestos fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. This is detailed in Australian Standard 4964-2004 '*Method for the qualitative identification of asbestos in bulk samples*'. Asbestos samples were only collected for analysis where the safety of personnel would not be compromised. Sampling was conducted in accordance with the WSP Australia's standing operating procedures.

4.5.2 LEAD-BASED PAINTS

Representative samples of paint suspected to be lead based were collected and analysed at external NATA Accredited Laboratory. Laboratory analysis of lead based paints is used to achieve a reportable weight by weight percentage of lead throughout the paint layers and is reported against AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings lead containing paint system level of 0.1 per cent (w/w) of the dried film.

The analysis of the physical samples is achieved by digestion of the sample for determination of lead content by one of two methods, atomic absorption spectroscopy (AAS) or inductively coupled plasma emission spectrometry (ICP-AES). Collection of lead-based paint samples was only conducted where the safety of personnel would not be compromised. Sampling was conducted in accordance with the WSP Australia's in house survey guide and AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings.

Sampling methodology will consider the various paint coats and record these layers accordingly, these observations will be referred to alongside the analytical sample results to acknowledge that lead paint layers of varying lead content will affect the analytically observed lead weight concentration recorded from the sample. To this end, where multiple lead paint layers have been visually recorded but analytically determined lead percentage of the collective paint layers is below actionable limits, the paint undercoats may still be determined as hazardous due to its dilution in the sample by the non-lead topcoats. Sampling methodology may also consist of the use of a lead paint chemical colorimetric test reagent that can provide an instantaneous result of lead presence within specific layers. This testing will however be used in conjunction with a physical sample to determine the lead concentration as above.

4.5.3 LEAD CONTAINING DUST

In the absence of regulatory guidelines, WSP has adopted guidelines from AS/NZS 4361.2:2017, Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings. This has been justified in WSP's technical memo TM01/18 "Lead in Dust Guidance Levels" dated 9th July 2018. The adopted guidelines for commercial facilities are listed in the table below.

Table 4.2 Adopted lead containing dust surface loading guidelines for commercial facilities

Commercial Facilities Areas	Concentration
Ceiling dust	8 mg/m ²
Interior surfaces	5 mg/m ²
Floors and eating areas	1 mg/m ²

These surface contamination reference limits should be used as a guideline to assist in the evaluation and control of workplace housekeeping standards and not as defined lines between safe and un-safe levels. Wherever possible, surface dust loading levels should be as low as reasonably achievable (ALARA). The ALARA principal is recommended to keep any potential hazardous material exposures as much below the guidelines as practicable

4.5.4 SYNTHETIC MINERAL FIBRES (SMF) MATERIALS

If representative samples of materials suspected to contain asbestos were collected and analysed at WSP Australia's in-house NATA Accredited Laboratory, SMF can also be identified. The identification of SMF fibres is based on using Polarised Light Microscopy supplemented with Dispersion Staining techniques. Alternatively, our experienced surveyor visually identified and recorded the presence of synthetic mineral fibre products onsite.

4.5.5 POLYCHLORINATED BIPHENYLS (PCBS)

Where access was available, and power was isolated representative examples of each major type of fluorescent light fittings were examined to determine which lights were fitted with PCB containing ballast capacitors. The details of the brand, model of each capacitor and capacity were recorded and checked against with the ANZECC database of known PCB capacitors and PCB free capacitors.

The Australian and New Zealand Environment Conservation Council 'Polychlorinated Biphenyls Management Plan, November 1996' outlines the National Strategy for the management of PCBs.

The document defines PCB materials and wastes as follows:

Table 4.3 PCB Concentration Classification

PCB CONCENTRATION	WASTE CLASSIFICATION
<2 mg/kg	PCB free
2 mg/kg to <50 mg/kg	Non-scheduled PCB material or waste
>50 mg/kg	Scheduled PCB material or waste
>100,000 (10%)	Concentrated PCB material

5 RESULTS / FINDINGS

All data generated from the survey was used to create an hazardous materials register (Appendix A) with photographs of site structures (Appendix B) and documented materials. A risk assessment was completed for known and suspected hazardous materials using the risk matrix presented in Appendix D.

This section summarises findings from the survey.

Table 5.1 Summary of identified or presumed (assumed) asbestos or hazardous containing materials

MATERIAL	IDENTIFIED/PRESUMED	RISK RANGE*		
138-140 New South Head Rd				
Friable ACM	No	-	to	-
Non-friable ACM^	Yes	Low	to	High
Synthetic Mineral Fibres	Yes	Low	to	Low
Lead Based Paints	Yes	Medium	to	High
Lead in Dust	Yes	High	to	High
PCBs	Yes	Low	to	Low

*No high-risk asbestos materials were identified during the Site inspection. The risk arising from potential exposure to hazardous materials must be managed in accordance with the *NSW WHS Regulation clause 49* during demolition works.

^Non-friable ACM may become friable due to a process (removal) and from degradation.

Due to the condition of the building and degradation, hazardous materials part of building fabric may be subject to deterioration and delamination once disturbed.

6 RECOMMENDATIONS

6.1 GENERAL RECOMMENDATIONS

To ensure that identified hazardous materials are appropriately managed, WSP recommends the following:

- Refer to the hazardous materials register and specific management actions to remove/maintain identified hazardous materials to ensure that health and environmental risks are appropriately managed.
- Inaccessible areas should be assumed to contain hazardous materials and managed accordingly until such time that this can be assessed by a competent person.
- All Assumed Positive ACM should be treated as asbestos and all requirements for removal asbestos must be followed, until such time as proven otherwise with testing has confirmed that it is not or does not contain asbestos.
- All Safe Work Method Statements (SWMS) must identify hazardous materials on site as part of demolition works and any safe systems of work put into place to manage the risk.
- The survey was undertaken using limited destructive methods and intrusive methods. There may remain a potential for hazardous materials to be concealed within the building structure(s) where it would only be possible to locate during controlled demolition or dismantling. Accordingly, caution should be exercised where subsequent demolition or dismantling of the structure(s) is required.
- If Unexpected finds and/or any suspected materials are identified during works, stop work, restrict area, engage a qualified hygienist (Such as WSP) to sample materials and test in a NATA registered laboratory for the presence of hazardous materials.
- Activities near hazardous materials should be restricted to minimise the potential for damaging hazardous materials.
- Ensure a current copy of the hazardous materials register is kept on Site, and readily available to personnel, employees and any contractors likely to encounter hazardous materials.
- Implement control measures to minimise dust disturbance and ingestion/inhalation pathways for dust containing lead.
- Further investigation is required for the items where limited access was available and the extent of the hazard was not determined (e.g. subfloor areas). Sampling and analysis of these areas is required to remedial plan (technical specification for removal).
- Prior to works that may disturb accumulated dust a risk assessment should be undertaken and at a minimum housekeeping and hygiene controls should be implemented such as dust suppression, use of PPE including nitrile gloves and suitable decontamination such as hand washing.

6.2 REMOVAL RECOMMENDATIONS:

- A technical specification for removal of hazardous materials should be developed to form a scope of work, and to provide guidance on the remediation/removal works to be undertaken and clearance to be achieved in a safe manner, as well as to set legislative requirements for stakeholders.
- Remove all identified and presumed hazardous materials that will be disturbed by the scheduled demolition works (as far as reasonably practical) by an appropriately licensed/experienced abatement contractor prior, where required.
- Disposal receipts should be obtained from the removal contractor as evidence that the waste has been taken to an appropriate landfill facility and disposed of lawfully.

6.2.1 ASBESTOS:

- Engage a licensed asbestos removal contractor (LARC) to undertake removal/remediation works of any ACMs that will be disturbed by the proposed works under controlled conditions prior to refurbishment or demolition works. A Class A (friable) LARC must be engaged for friable asbestos removal works.
- All removal works must be undertaken in accordance with *NSW WHS Regulations* and the *Code of Practice How to safely remove asbestos*.
- Engage an independent asbestos hygienist (competent person or licensed asbestos assessor) to undertake asbestos fibre air monitoring during and after the remedial/removal works and a visual inspection at the completion of the removal works, where required. Following the clearance inspection a clearance certificate must be issued prior to the area being reoccupied for demolition or other work. A LAA must be engaged for asbestos hygiene works associated with Class A (friable) LARC works.
- All licensed asbestos removal work must be notified to the state regulator in writing at least five days before licensed asbestos removal work commences as stated in the *NSW WHS Regulations*.
- The Licensed Asbestos removalist must obtain the asbestos register of the workplace before commencing licensed asbestos removal work. The register must be reviewed and if necessary revised if asbestos removal work is being conducted to be sufficient for asbestos remediation/removal to be undertaken.
- All associated asbestos waste must be disposed of lawfully in accordance with the waste disposal procedures and personal decontamination must be carried out in accordance with *NSW WHS Regulations*, *Code of Practice How to safely remove asbestos* and the *Environmental Protection guidelines*.

6.2.2 HAZMAT:

- Removal of contaminated dust and lead based paint may be undertaken by an appropriately experienced lead abatement contractor, WSP recommend a Class A (LARC) for such works, however, using suitable controls and PPE in accordance with *AS/NZS 4361.2:2017 Guide to hazardous materials paint management – Part 2: Lead paint in residential, public or commercial buildings*.
- The contractor should assess if “Lead Risk Work” is to be undertaken and whether the work is likely to cause lead levels in the worker’s blood to exceed healthy levels. Lead Risk Work must be notified to the state regulator in writing at least seven days before the work commences as stated in the *NSW WHS Regulations*.
- Lead waste must be handled appropriately and disposed of according to the relevant state or territory waste regulations.
- Remove under controlled conditions all items identified as containing Polychlorinated Biphenyls. Capacitors and electrical components items must be de-energised by a licensed electrician. Appropriately experienced contractors should use appropriate Personal Protective Equipment (PPE) including face shield, gloves, skin and eye protection.
- Appropriately dispose of items identified as containing Polychlorinated Biphenyls in accordance with waste and environmental protection guidelines.
- Remove SMF under controlled conditions, by an appropriately experienced contractor in accordance with the requirements of the *Code of Practice for the Safe Use of Synthetic Mineral Fibres NOHSC:2006(1990)*. Contractors should use appropriate Personal Protective Equipment (PPE) including skin, eye and respiratory protection.

WSP may assist with the implementation of any of the above recommendations.

7 GENERAL MANAGEMENT GUIDELINES

7.1 HAZARDOUS BUILDING MATERIALS MANAGEMENT PLAN

To assist in the management of hazardous materials and to ensure compliance with relevant regulations, it is recommended that a separate Hazardous Materials Management Plan be prepared, which should include information regarding:

- Roles and responsibilities
- Prohibitions
- Management plan and register reviews
- Labelling
- Demolition and refurbishment works
- Remediation works
- Incidents and emergencies
- Record keepings

Hazardous materials outlined in this report are not to be disturbed (e.g. brushed, sanded or tooled in any way) to prevent the generation of dust and minimise the potential health risks.

7.2 ASBESTOS GENERAL MANAGEMENT GUIDELINES

WSP Australia has provided the following recommendations as a general guide for the safe removal of asbestos containing materials in accordance with the requirements of *NSW WHS Regulations and SafeWork NSW How to Safely Remove Asbestos, Code of Practice 2022*.

If friable asbestos is identified the following is recommended:

- Access be restricted to areas where friable asbestos is present, and a management plan be implemented to control the risk of human exposure. Where practicable, positively identified asbestos containing materials should be labelled to indicate the presence of asbestos.
- Any persons wishing to access areas where presumed friable asbestos exists are to undertake a suitable and sufficient Risk Assessment prior to doing so, the results of which may include the use of appropriate Personal Protective Equipment (PPE) such as disposable coveralls and respiratory protection.
- Consideration should be given to engaging a qualified and experienced asbestos consultant to conduct a program of asbestos air monitoring in/around area containing friable asbestos to document airborne asbestos levels and help assess the exposure risk to occupants.
- Consideration should be given to engaging a qualified and experienced asbestos consultant to conduct a program of settled dust sampling/analysis to more accurately assess the extent of asbestos contamination that may be present.

If non-friable asbestos such as fibre cement sheeting (flat and corrugated), pipes and visually identified electrical distribution boards are identified, the following is recommended:

- All damaged / poor condition ACM should have access restricted and make safe works conducted to seal exposed damaged areas. A management plan is to be implemented to control the risk of human exposure to damaged asbestos materials. Where practicable, positively identified asbestos containing materials should be labelled to indicate the presence of asbestos.
- All non-friable ACM in an in-tact condition may remain in-situ provided they are not drilled, ground or otherwise disturbed. If damaged, broken pieces are to be removed as soon as practicable. As part of good ongoing management we recommend regular inspections of ACM left in-situ to check the condition of these materials.
- Any areas of the workplace that contain ACM including plant, equipment and components should be signposted with appropriate warning signs to ensure that asbestos is not unknowingly disturbed without the correct precautions being taken. These signs should be placed at all the main entrances to the work areas where asbestos is present and should conform with *Australian Standard 1319-1994 Safety Signs for the Occupational Environment*.
- This document should be held as an Asbestos Register of the areas inspected and updated as indicated in Section 2.1 or earlier where ACM have been disturbed or a risk assessment indicates the need for re-assessment. All occupiers of the workplace are to be provided with a copy of this register and all updates to it.
- In order to comply with the applicable legislation (Appendix H), implement a hazardous materials management plan. A suitably qualified and experienced consultant can advise and assist in developing an appropriate management plan.
- Prior to renovation or demolition works a refurbishment/demolition building materials survey should be undertaken by a suitable qualified and experience consultancy, such as WSP. A Refurbishment and/or Demolition Survey is required under the *AS2601 (2001): The Demolition of Structures*.
- Prior to the commencement of any specific asbestos removal works, a site and material specific asbestos removal control plan must be developed by a competent person such as a licenced asbestos assessor or licensed asbestos removal contractor.
- All persons engaged in asbestos removal work should wear appropriate PPE including respiratory protective equipment (RPE) conforming with the requirements of AS/NZS 1716:2012, *Respiratory Protective Devices* and AS/NZS 1715:2009, *Selection, Use and Maintenance of Respiratory Protective Equipment*. Protective disposable coveralls must be chosen that provide particle-tight protection (Type 5) and limited splash-tight protection (Type 6). Disposable coveralls should not have external pockets or Velcro fastenings.
- All removal work and asbestos disposal should be carried out in accordance with the applicable legislation (Appendix H).
- All fibre air monitoring shall be carried out by a competent person or licenced asbestos assessor with NATA accreditation in accordance with National Occupational Health and Safety Commission (NOHSC), Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres [NOHSC:3003(2005)], NOHSC, Australia.
- Personal decontamination must be undertaken each time workers leave the asbestos work area and at the completion of the asbestos removal work. Personal decontamination should be undertaken within the nominated decontamination area. The extent of decontamination required is dependent upon the type of asbestos being removed. If friable asbestos is being removed, then a three-stage wet decontamination unit shall be required. If it is noted that non-friable ACM is being removed this may be undertaken in a nominated dry decontamination area.
- A clearance inspection of the work area shall be undertaken at the completion of the asbestos removal works by a licenced asbestos assessor.

7.3 GENERAL LEAD PAINT / DUST MANAGEMENT

If lead containing paints and / or lead in dust are identified the following management controls are recommended:

- Lead paint in poor, flaking condition must be remediated as soon as reasonably practicable.
- Paint in good condition may remain in situ provided it is not disturbed and maintained in a good condition.

All lead paint removal/stabilisation must be undertaken in accordance with AS/NZS 4361.2:2017, *Guide to Hazardous Paint Management, Part 2: Lead paint in residential, public and commercial buildings*. It should be noted that this document does not replace AS/NZS 4361.2:2017. Rather it provides general advice to assist with the creation of a site-specific document to facilitate the safe removal/stabilisation of lead paint works.

This document provides general guidance for the removal of lead based paint systems via various methods commonly employed such as the use of a chemical strippers and the stabilisation of flaking lead based paints via scraping and wet sanding. Reference is made to a particular brand name of chemical stripper; however, this advice does not replace information provided by the manufacturer and one should always refer to the products guidance and relevant Australian legislation, standards, MSDS and guidance material.

In addition, it provides guidance for decontamination procedures. Disposal requirements and provisions for lead air monitoring and clearance inspections.

While it may not be practicable to remove lead based paints, it is important to ensure they are appropriately managed to minimise risks. To achieve this WSP recommends the following management measures be implemented in relation to the handling of any suspected lead based paints:

- Do not disturb lead based paints. If activities are likely to disturb lead based paints, their use should only be permitted with appropriate controls in place.
- Keep children and pets away from lead based paints and make sure they don't eat or play with paint debris.
- Do not burn lead paint or timber that is coated with paint containing lead.
- Ensure demolition staff are aware of the safety issues associated with lead and encourage good hygiene practices, with facilities to be available for hand washing before eating.
- Air monitoring can be considered to provide assurance to regulators and personnel that activities are not generating airborne lead dust.
- Should any lead exposure be suspected, health surveillance monitoring can be undertaken. If this is necessary, having baseline health surveillance results (blood lead testing) for comparison purposes would be beneficial and this should be considered in consultation with the occupational hygienist prior to commencing any refurbishment / demolition activities.

7.3.1 LEAD PAINT CLEARANCE

- Following the completion of the lead based paint removal works the occupational hygiene consultant will be required to undertake a thorough visual inspection of the work area and transit route.
- If removal works are not to the satisfaction of the occupational hygiene consultant, removal contractors will be required to re-enter the work area and rectify any issues arising from the inspection.
- AS/NZS 4361.2:2017 states that following the completion of works and the appropriate clean-up of the area, samples of dust can be collected and sent for analysis to determine if there has been a significant impact on the property and surrounding area from works undertaken and if the building is safe to reoccupy. Clearance dust samples can be collected and compared with the surface dust loading levels detailed within Table 4.1.
- Only following satisfactory clearance inspection, air monitoring and dust sampling, will removal works be deemed as completed.
- A final inspection of the work site will be required by the occupational hygiene consultant following removal of enclosure and equipment to ensure no debris or dust remains onsite.

7.4 GENERAL SMF MANAGEMENT GUIDELINES

All SMF removal should be done in accordance with the National Occupational Health and Safety Commission *National Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC: 2006 (1990)]. Some of the practices recommended are as follows:

- The work area should be designated by using barricade tape and signs where workable. Persons not involved in the removal should not be within 3 metres of the designated area.
- Waste shall be placed in plastic bags or other containers which prevent fibre and/or dust emission, and disposed of in accordance with local waste disposal authority requirements.
- PPE including goggles, half-face P2 respirator, gloves, long sleeve and loose fitting clothing should be worn.

7.5 GENERAL PCB MANAGEMENT GUIDELINES

To manage the potential risks associated with PCBs should any be identified, WSP recommends the following:

- A certified and experienced electrician, aware of the hazards associated with PCBs and able to identify suspect PCB containing materials, should be used to isolate electricity and advise on the removal requirements.
- If any suspect PCB containing materials are suspected, the presence of PCBs should be further assessed against the 1997 ANZECC *Identification of PCB-Containing Capacitors*. Information Booklet to identify PCB-containing capacitors.
- If PCB containing materials are confirmed to exist, the appropriate PPE (disposable suits, nitrile gloves, full face shield and hair protection) should be worn in case materials (e.g. capacitors) are damaged and potentially leaking PCBs. PCB containing materials should be carefully removed so as not to further damage them and prevent leakage and cross contamination.
- Removal staff are to be aware of the safety issues associated with PCBs and encourage good hygiene practices after handling PCBs with facilities to be available for washing.
- Any identified PCB-containing materials and PPE are to be placed in strong sealed polyethylene bags and then sealed in a sturdy metal drum with an absorbent material added to absorb any leaking PCB. All drums should be labelled '**PCB Waste**' and be appropriately stored and disposed.

8 LIMITATION STATEMENT

This Report is provided by WSP Australia Pty Limited (*WSP*) for Lendlease Development (*Client*) in response to specific instructions from the Client and in accordance with WSP's fee proposal dated 11 October 2024 Rev002 and executed agreement (Medium Professional Services Contract) with the Client dated 15 November 2024 (*Agreement*).

8.1 PERMITTED PURPOSE

This Report is provided by WSP for the purpose described in the Agreement and no responsibility is accepted by WSP for the use of the Report in whole or in part, for any other purpose (*Permitted Purpose*).

8.2 QUALIFICATIONS AND ASSUMPTIONS

The services undertaken by WSP in preparing this Report were limited to those specifically detailed in the Report and are subject to the scope, qualifications, assumptions and limitations set out in the Report or otherwise communicated to the Client.

Except as otherwise stated in the Report and to the extent that statements, opinions, facts, conclusion and / or recommendations in the Report (*Conclusions*) are based in whole or in part on information provided by the Client and other parties identified in the report (*Information*), those Conclusions are based on assumptions by WSP of the reliability, adequacy, accuracy and completeness of the Information and have not been verified. WSP accepts no responsibility for the Information.

Where the survey identifies that hazardous materials are on Site, the Conclusions are indicative of the presence of hazardous materials and cannot be regarded as absolute without further extensive sampling, outside the scope of the services set out in the Agreement. Site conditions, including the extent and visibility of hazardous materials, can change with time. On all sites, varying degrees of non-uniformity of conditions are encountered and the presence of hazardous materials which are not visually apparent at the time of inspection, may not be detected. No monitoring, common testing or sampling technique provides results that are totally representative of the presence or non-presence of hazardous materials at the Site. Site conditions, including subsurface conditions can change with time due to natural and anthropogenic causes.

Only material that was physically accessible at the time of inspection was sampled. Consequently, not all hazardous material may have been located at the Site. The survey identifying hazardous materials on Site should be reviewed prior to demolition or refurbishment as a more detailed destructive survey may be required prior to demolition or refurbishment works. Care should be taken during normal Site works, refurbishment or demolition works when entering previously inaccessible areas. If suspect material is encountered, works should cease in the area until samples have been collected and analysed by competent personnel.

It is impossible to locate all hazardous materials during an inspection. This is due to such factors as (without limitation):

- Time, budget and constraints requested by the Client;
- Access restrictions;
- The need to avoid causing physical damage to fixtures or structures on the Site;
- The need to minimise hazardous materials exposures to building occupants;
- The need to minimise inconvenience when the Site is in use (e.g. occupied) whilst an inspection is being conducted; and / or
- The availability of relevant building / plant construction plans.

Hazardous materials that could be routinely encountered in the normal day-to-day activities occurring on the Site have been identified and assessed, however there is no guarantee that the Site is free of hazardous materials, since future activities may reveal hazardous materials in areas inaccessible or unknown to WSP.

Within the limitations referred to above, the preparation of this Report has been undertaken and performed in a professional manner in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by reputable consultants. No other warranty, expressed or implied, is made.

WSP has prepared the Report without regard to any special interest of any person other than the Client when undertaking the services described in the Agreement or in preparing the Report.

8.3 USE AND RELIANCE

This Report should be read in its entirety and must not be copied, distributed or referred to in part only. The Report must not be reproduced without the written approval of WSP. WSP will not be responsible for interpretations or conclusions drawn. This Report (or sections of the Report) should not be used as part of a specification for a project or for incorporation into any other document without the prior agreement of WSP.

WSP is not (and will not be) obliged to provide an update of this Report to include any event, circumstance, revised Information or any matter coming to WSP's attention after the date of this Report, unless this has been agreed with the Client. The passage of time; manifestations of latent conditions; or the impact of future events (including (without limitation) changes in policy, legislation, guidelines, scientific knowledge; and changes in interpretation of policy by statutory authorities); may require further investigation or subsequent re-evaluation of the Conclusions.

This Report can only be relied upon for the Permitted Purpose and may not be relied upon for any other purpose. The Report does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise. It is the responsibility of the Client to accept (if the Client so chooses) the Conclusions and implement any recommendations in an appropriate, suitable and timely manner. WSP does not (and will not) accept liability arising out of or in connection with any health or safety risks associated with hazardous materials.

In the absence of express written consent of WSP, no responsibility is accepted by WSP for the use of the Report in whole or in part by any party other than the Client for any purpose whatsoever. Without the express written consent of WSP, any use which a third party makes of this Report or any reliance on (or decisions to be made) based on this Report is at the sole risk of those third parties without recourse to WSP. Third parties should make their own enquiries, rely on the results of their own site inspections, and / or obtain independent advice in relation to any matter dealt with or conclusions expressed in the Report.

8.4 DISCLAIMER

No warranty, undertaking or guarantee whether expressed or implied, is made with respect to the data reported or the conclusions drawn. To the fullest extent permitted at law, WSP, its related bodies corporate and its officers, employees and agents assumes no responsibility and will not be liable to any third party for, or in relation to any losses, damages or expenses (including any indirect, consequential or punitive losses or damages or any amounts for loss of profit, loss of revenue, loss of opportunity to earn profit, loss of production, loss of contract, increased operational costs, loss of business opportunity, site depredation costs, business interruption or economic loss) of any kind whatsoever, suffered or incurred by a third party.

APPENDIX A

HAZARDOUS MATERIALS REGISTER



A1 HAZARDOUS MATERIALS REGISTER

A1.1 ASBESTOS-CONTAINING MATERIALS

138-140 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Management Recommendations	Photo reference
Basement	Switchroom	Switchboard, switches	Reinforced plastic	WSP-231442	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169791
Basement	Switchroom	Stored item, fibro	Fibre cement sheeting	WSP-231441	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169794
Basement	Switchroom	Switch and meter electrical boards	Timber backing boards	Non-Suspect Material	-	-	-	-	-	-	-	No Action Required	169795
Basement	Switchroom	Stored item, decorative coving	Plaster mix	WSP-231440	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169796
Basement	Unit	Shower, wall coating behind tiles	Render	WSP-231435	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169792
Ground Floor	Unit 2	Bedroom north wall	Fibre cement sheeting	WSP-326735	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169998
Ground Floor	Unit 1	Toilet ceiling lining	Fibre cement sheeting	WSP-326734	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170000
Level 1	Unit 4	Throughout wall vents	Cement/plaster casting	WSP-326711	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169997
Level 1	Unit 4	Bedroom west wall	Fibre cement sheeting	WSP-326705	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169999
Level 1	Unit 4	Bedroom wall linings	Fibre cement sheeting	WSP-231482	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	
Level 1	Unit 4	Movement floor underlay under tiles	Fibrous sheeting	WSP-326725	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170004
Level 2	Unit 5	Drawing room east wall lining	Fibre cement sheeting	WSP-326729	Chrysotile	20 m²	Yes	Non-Friable	Fair	Medium	Medium	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170002
Level 2	Unit 5	Kitchen floor covering (underlay) under ceramic tiles	Vinyl sheeting	WSP-326709	Chrysotile	15 m²	No	Non-Friable	Good	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170005

138-140 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Management Recommendations	Photo reference
Level 2	Unit 5	Kitchen wall lining	Fibre cement sheeting	WSP-326728	Chrysotile	15 m²	Yes	Non-Friable	Fair	Medium	Medium	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works.	170001
Level 2	Unit 6	All windows, behind frames weatherproof lining	Bituminous membrane	WSP-326726	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170003
Level 2	Unit 6	Bedroom wall linings-north, south and west	Fibre cement sheeting	WSP-326715	Chrysotile	25 m²	Yes	Non-Friable	Poor	High	High	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works. Render substrate is badly degraded.	169802
Level 2	Unit 5	Front door, Fire door core	Vermiculite	WSP-231483	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170501
All floors	Units 1,3,4,6	Front door, Fire door core	Vermiculite	Ref: WSP-231483	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	170502
All Floors	Units 1 and 3	Kitchen floor covering (underlay) under ceramic tiles	Vinyl sheeting	Ref: WSP-326709	Chrysotile	20 m²	No	Non-Friable	Good	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works	170857
All Floors	Throughout	Ceilings, decorative coving	Plaster mix	Ref: WSP-231440	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	
Roof	Penthouse	Floor underlay, under ceramic tile	Bituminous membrane	WSP-326727	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169996
External	Exterior	Wall render	Screed	WSP-231439	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169788
External	Exterior	Below windows, Shingles	Timber	Non Suspect Material	-	-	-	-	-	-	-	No Action Required	169789
External	Exterior	Perimeter timber windows	Mastic - caulking	WSP-231445	Not Detected	-	-	-	-	-	No Asbestos	No Action Required	169790
Subfloor	Subfloor, beneath ground floor	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170500
External	Underground services	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	169793

138-140 New South Head Rd													
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Labelled	Friability	Condition	Disturbance Potential	Risk Rating	Comments / Management Recommendations	Photo reference
External	Exterior/Metal Roof	-	-	-	-	-	-	-	-	-	Inaccessible	Further Investigation Required.	170421
Roof	Penthouse	External wall	Fibre cement sheeting	WSP-326719	Chrysotile + Amosite + Crocidolite	20 m²	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works	169799
Roof	Penthouse	Toilet behind shower tiles and base	Fibre cement sheeting	WSP-326716	Chrysotile	10 m²	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works	169800
Roof	Penthouse	Kitchen walls south and north	Fibre cement sheeting	WSP-326718	Chrysotile	8 m²	Yes	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works	169801
Roof	Penthouse	Toilet wall lining	Fibre cement sheeting	WSP-326717	Chrysotile	10 m²	No	Non-Friable	Fair	Low	Low	Remove under controlled conditions by Licensed Asbestos Removal Contractor prior to refurbishment or demolition works	169803
Roof	Roof floor external	Slab roof underlay	Roof felt/fibrous sheeting	WSP-326707	Not Detected	25 m²	-	-	-	-	No Asbestos	No Action Required	169797
Roof	Roof floor external	Roof flooring/covering	Vinyl	WSP-326706	Not Detected	25 m²	-	-	-	-	No Asbestos	No Action Required	169798

*Bold text indicates material contains a positive analysis result or status for asbestos

A1.2 SYNTHETIC MINERAL FIBRES

138-140 New South Head Rd										
Level	Primary location / room	Secondary location / application	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
All	All floors, kitchen	Hot water unit - insulation material	Visual Observation	SMF	8 units	Good	Low	Low Risk	Wear appropriate PPE with dust suppression during removal	SMF-30238

A1.3 LEAD BASED PAINTS

138-140 New South Head Rd											
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
External	Exterior	Exterior walls	Yellow	Lead Paint Sample WSP-231446	LBP Detected 0.58%w/w	>1000 m²	Poor	High	High Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30272
Basement	Unit	Bathroom/kitchen walls	Dark Green	Lead Paint Sample WSP-231436	LBP Detected 6.3%w/w	50 m²	Poor	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30273
External	Exterior	Metal work	Grey	Lead Paint Sample WSP-231443	LBP Detected 0.16%w/w	100 m²	Poor	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30271
External	Exterior	Timber framework	White	Lead Paint Sample WSP-231444	LBP Detected 1.3%w/w	100 m²	Poor	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30277
Basement	Unit	Walls and ceiling	White	Lead Paint Sample WSP-231434	LBP Not Detected 0.03%w/w	-	-	-	-	-	LBP-30274
External	Basement	Walls	Pink	Lead Paint Sample WSP-231437	LBP Detected 3.9%w/w	100 m²	Poor	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30276
External	Exterior	Timber door and framework	White	Lead Paint Sample WSP-231438	LBP Not Detected 0.085%w/w	10 m²	-	-	-	-	LBP-30278
Stairwell	Lobby	Ceiling	White	Lead Paint Sample WSP-231448	LBP Not Detected 0.005%w/w	100 m²	-	-	-	-	LBP-30275
Stairwell	Stairs	Floor	Maroon	Lead Paint Sample WSP-231449	LBP Not Detected 0.04%w/w	100 m²	-	-	-	-	LBP-30279
Level 2	Unit 6	Movement grey based paint system	Grey	Lead Paint Sample WSP-326713	LBP Detected 0.11%w/w	10 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30281

138-140 New South Head Rd											
Level	Primary location / room	Secondary location / application	Material	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Level 2	Unit 6	Kitchen wall yellow based paint system	Yellow	Lead Paint Sample WSP-326714	LBP Detected 6.2%w/w	20 m²	Fair	Medium	Medium Risk	Hazardous Waste. Remove by experienced lead abatement contractor.	LBP-30284
Roof	Roof	Lead flashing	-	-	Lead Metal	-	-	-	-	-	LBP-30280
Roof	Roof	Beam lining- Lead flashing	-	-	Lead Metal	-	-	-	-	-	LBP-30285
Level 2	Unit 5	Bathtub white based paint system	White	Lead Paint Sample WSP-326708	LBP Not Detected 0.01%w/w	4 m²	-	-	-	-	LBP-30282
Roof	Roof floor external	Black paint system	Black	Lead Paint Sample WSP-326720	LBP Not Detected 0.01%w/w	25 m²	-	-	-	-	LBP-30283

*Bold text indicates paint system contains a positive analysis result or status for confirmed lead >0.1% parameter

A1.4 LEAD IN DUST

138-140 New South Head Rd										
Level	Primary location / room	Secondary location / application	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Level 1	Unit 3	Ceiling space, Accumulated Dust	Lead Dust Sample WSP-326731	Lead Dust Detected 12 mg/m²	10 m² Total void area ≈ 100 m²	Poor	High	High Risk	Remediate by experienced lead abatement contractor prior to refurbishment or demolition works.	LBP-30306
All levels	Throughout	Suspected due to deteriorated lead paint systems	Not Sampled	Presumed Lead Dust	≈ 100 m²	Poor	High	High Risk	Remediate by experienced lead abatement contractor prior to refurbishment or demolition works.	

*Bold text indicates sample contains a positive analysis for lead concentration exceeding the acceptable value (adopted levels) and the dust should be treated as lead contaminated/impacted.

A1.5 POLYCHLORINATED BIPHENYLS

138-140 New South Head Road											
Level	Primary location / room	Secondary location / application	Capacitor	Sample number	Result	Extent (approx.)	Condition	Disturbance Potential	Risk Rating	Comments / Removal Recommendations	Photo reference
Level 2	Unit 6	Kitchen fluorescent light fitting	Plessey TYPE APF 235 NCR 3.5uF	Visual Observation	PCB material or waste	1 unit	Good	Low	Low Risk	Non-scheduled PCB material or waste	PCB-27598

APPENDIX B

SITE / BUILDING PHOTOGRAPHS



B1 SITE / BUILDING PHOTOGRAPHS

138-140 New South Head Rd



138-140 New South Head Rd



138-140 New South Head Rd – Knightsbridge Complex



APPENDIX C

MATERIAL PHOTOGRAPHS



C1 PHOTOGRAPHS

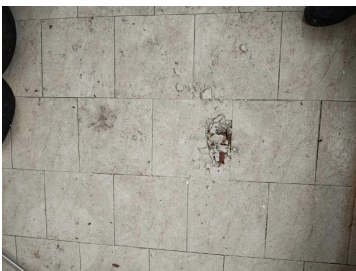
C1.1 ASBESTOS CONTAINING MATERIALS

ASBESTOS - Confirmed			
Photo Ref	170002	Sample No	WSP-326729
Building	138-140 New South Head Rd		
Level	Level 2		
Room	Unit 5		
Application	Drawing room east wall lining		
Material	Fibre cement sheeting		
Risk Rating	Medium		





ASBESTOS - Confirmed			
Photo Ref	170005	Sample No	WSP-326709
Building	138-140 New South Head Rd		
Level	Level 2		
Room	Unit 5		
Application	Kitchen floor vinyl sheeting under tiles		
Material	Vinyl sheeting		
Risk Rating	Low		





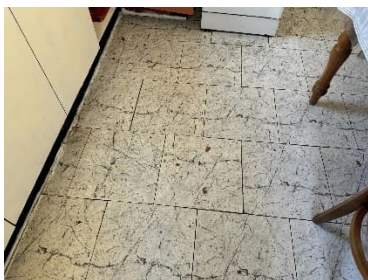
ASBESTOS - Confirmed			
Photo Ref	170001	Sample No	WSP-326728
Building	138-140 New South Head Rd		
Level	Level 2		
Room	Unit 5		
Application	Kitchen wall lining		
Material	Fibre cement sheeting		
Risk Rating	Medium		





ASBESTOS - Confirmed			
Photo Ref	170857	Sample No	Ref: WSP-326709
Building	138-140 New South Head Rd		
Level	Ground floor and Level 1		
Room	Units 1 and 3		
Application	Kitchen, underlay		
Material	Vinyl sheeting		
Risk Rating	Low		





NO ACCESS			
Photo Ref	169793	Sample No	-
Building	138-140 New South Head Rd		
Level	External		
Room	Underground services		
Application	-		
Material	-		
Risk Rating	Inaccessible		





NO ACCESS			
Photo Ref	170421	Sample No	-
Building	138-140 New South Head Rd		
Level	External, Roof		
Room	Exterior		
Application	-		
Material	-		
Risk Rating	Inaccessible		



No Photo Available

NO ACCESS			
Photo Ref	170500	Sample No	-
Building	138-140 New South Head Rd		
Level	Subfloor		
Room	Subfloor		
Application	-		
Material	-		
Risk Rating	Inaccessible		





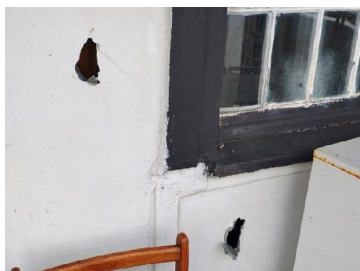
ASBESTOS - Confirmed			
Photo Ref	169802	Sample No	WSP-326715
Building	138-140 New South Head Road		
Level	Level 2		
Room	Unit 6		
Application	Bedroom wall linings		
Material	Fibre cement sheeting		
Risk Rating	High		



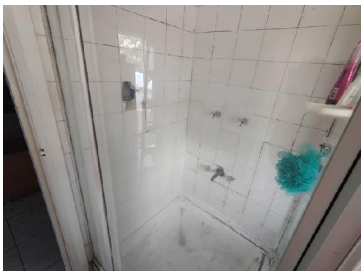


ASBESTOS - Confirmed			
Photo Ref	169799	Sample No	WSP-326719
Building	138-140 New South Head Road		
Level	Roof		
Room	Penthouse		
Application	External wall		
Material	Fibre cement sheeting		
Risk Rating	Low		





ASBESTOS - Confirmed			
Photo Ref	169800	Sample No	WSP-326716
Building	138-140 New South Head Road		
Level	Roof		
Room	Pent house		
Application	Toilet behind shower tiles and base		
Material	Fibre cement sheeting		
Risk Rating	Low		





ASBESTOS - Confirmed			
Photo Ref	169801	Sample No	WSP-326718
Building	138-140 New South Head Road		
Level	Roof		
Room	Penthouse		
Application	Kitchen walls south and north		
Material	Fibre cement sheeting		
Risk Rating	Low		





ASBESTOS - Confirmed			
Photo Ref	169803	Sample No	WSP-326717
Building	138-140 New South Head Road		
Level	Roof		
Room	Penthouse		
Application	Toilet wall lining		
Material	Fibre cement sheeting		
Risk Rating	Low		





C1.2 NON-ASBESTOS CONTAINING MATERIALS

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169791	Sample No	WSP-231442
Building	138-140 New South Head Rd		
Level	Sub-Floor		
Room	Switchroom		
Application	Switchboard, switches		
Material	Reinforced plastics		
Risk Rating	No Asbestos		



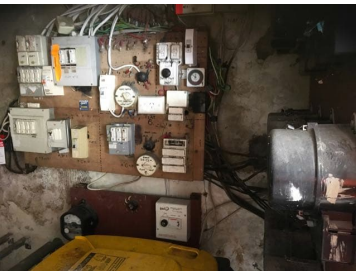


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169794	Sample No	WSP-231441
Building	138-140 New South Head Rd		
Level	Sub-Floor		
Room	Switchroom		
Application	Stored item, fibro		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169795	Sample No	NSM
Building	138-140 New South Head Rd		
Level	Sub-Floor		
Room	Switchroom		
Application	Switch and meter electrical boards		
Material	Timber		
Risk Rating	-		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169796	Sample No	WSP-231440
Building	138-140 New South Head Rd		
Level	Sub-Floor		
Room	Switchroom		
Application	Stored item, decorative coving		
Material	Other		
Risk Rating	No Asbestos		



No Photo Available

NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169792	Sample No	WSP-231435
Building	138-140 New South Head Rd		
Level	Basement		
Room	Unit		
Application	Shower, wall coating behind tiles		
Material	Screed		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169998	Sample No	WSP-326735
Building	138-140 New South Head Rd		
Level	Ground Floor		
Room	Unit 2		
Application	Bedroom north wall		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170000	Sample No	WSP-326734
Building	138-140 New South Head Rd		
Level	Ground Floor		
Room	Unit 1		
Application	Toilet ceiling lining		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		



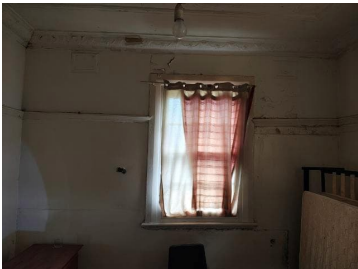


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169997	Sample No	WSP-326711
Building	138-140 New South Head Rd		
Level	Level 1		
Room	Unit 4		
Application	Throughout wall vents		
Material	Cement casting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169999	Sample No	WSP-326705
Building	138-140 New South Head Rd		
Level	Level 1		
Room	Unit 4		
Application	Bedroom west wall		
Material	Fibre cement sheeting		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170004	Sample No	WSP-326725
Building	138-140 New South Head Rd		
Level	Level 1		
Room	Unit 4		
Application	Movement floor paper back under tiles		
Material	Other		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170003	Sample No	WSP-326726
Building	138-140 New South Head Rd		
Level	Level 2		
Room	Unit 6		
Application	All windows weatherproof lining		
Material	Bituminous material		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169996	Sample No	WSP-326727
Building	138-140 New South Head Rd		
Level	Roof		
Room	Pent house		
Application	Bitumen layer under ceramic tile		
Material	Bituminous material		
Risk Rating	No Asbestos		



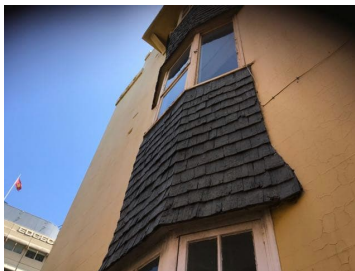


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169788	Sample No	WSP-231439
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Wall render		
Material	Screed		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169789	Sample No	NSM
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Below windows, Shingles		
Material	Timber		
Risk Rating	-		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169790	Sample No	WSP-231445
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Perimeter timber windows		
Material	Mastic		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169797	Sample No	WSP-326707
Building	138-140 New South Head Road		
Level	Roof		
Room	Roof floor external		
Application	Roof exterior		
Material	Roof felt		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	169798	Sample No	WSP-326706
Building	138-140 New South Head Road		
Level	Roof		
Room	Roof floor external		
Application	Roof flooring		
Material	Other		
Risk Rating	No Asbestos		



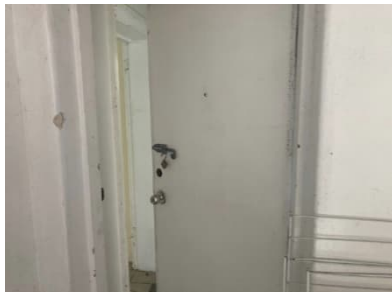


NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170501	Sample No	WSP-231483
Building	138-140 New South Head Road		
Level	Level 2		
Room	Unit 5		
Application	Front door, Fire door core		
Material	Vermiculite		
Risk Rating	No Asbestos		





NON-ASBESTOS CONTAINING MATERIAL			
Photo Ref	170502	Sample No	Ref: WSP-231483
Building	138-140 New South Head Road		
Level	All		
Room	Units		
Application	Front door, Fire door core		
Material	Vermiculite		
Risk Rating	No Asbestos		





C1.3 SYNTHETIC MINERAL FIBRES

SYNTHETIC MINERAL FIBRE			
Photo Ref	SMF-30238	Sample No	Visual Observation
Building	138-140 New South Head Rd		
Level	All		
Room	Unit		
Application	Hot water unit - insulation material		
Risk Rating	Low Risk		





C1.4 LEAD BASED PAINTS

LBP DETECTED			
Photo Ref	LBP-30272	Sample No	Lead Paint Sample WSP-231446
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Exterior walls		
Risk Rating	High Risk		



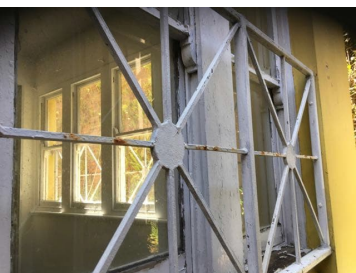


LBP DETECTED			
Photo Ref	LBP-30273	Sample No	Lead Paint Sample WSP-231436
Building	138-140 New South Head Rd		
Level	Basement		
Room	Unit		
Application	Shower walls		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30271	Sample No	Lead Paint Sample WSP-231443
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Metal work		
Risk Rating	Medium Risk		



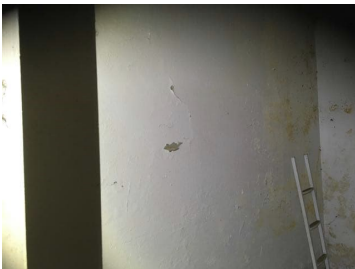


LBP DETECTED			
Photo Ref	LBP-30277	Sample No	Lead Paint Sample WSP-231444
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Timber frame work		
Risk Rating	Medium Risk		





LBP NOT DETECTED			
Photo Ref	LBP-30274	Sample No	Lead Paint Sample WSP-231434
Building	138-140 New South Head Rd		
Level	Basement		
Room	Unit		
Application	Walls and ceiling		
Risk Rating	-		





LBP DETECTED			
Photo Ref	LBP-30276	Sample No	Lead Paint Sample WSP-231437
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Walls		
Risk Rating	Medium Risk		





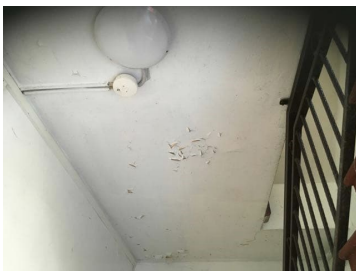
LBP NOT DETECTED			
Photo Ref	LBP-30278	Sample No	Lead Paint Sample WSP-231438
Building	138-140 New South Head Rd		
Level	External		
Room	Exterior		
Application	Timber door and frame work		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30275	Sample No	Lead Paint Sample WSP-231448
Building	138-140 New South Head Rd		
Level	Stairwell		
Room	Lobby		
Application	Ceiling		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30279	Sample No	Lead Paint Sample WSP-231449
Building	138-140 New South Head Rd		
Level	Stairwell		
Room	Stairs		
Application	Floor		
Risk Rating	-		





LEAD IN DUST DETECTED			
Photo Ref	LBP-30306	Sample No	Lead Dust Sample WSP-326731
Building	138-140 New South Head Rd		
Level	Roof Void		
Room	Unit 3, ceiling space		
Application	Dust		
Risk Rating	High		





LBP DETECTED			
Photo Ref	LBP-30281	Sample No	Lead Paint Sample WSP-326713
Building	138-140 New South Head Road		
Level	Level 2		
Room	Unit 6		
Application	Movement grey based paint system		
Risk Rating	Medium Risk		





LBP DETECTED			
Photo Ref	LBP-30284	Sample No	Lead Paint Sample WSP-326714
Building	138-140 New South Head Road		
Level	Level 2		
Room	Unit 6		
Application	Kitchen wall yellow based paint system		
Risk Rating	Medium Risk		





LEAD METAL			
Photo Ref	LBP-30280	Sample No	Lead Paint Presumed
Building	138-140 New South Head Road		
Level	Roof		
Room	Roof		
Application	Lead flashing		
Risk Rating	-		



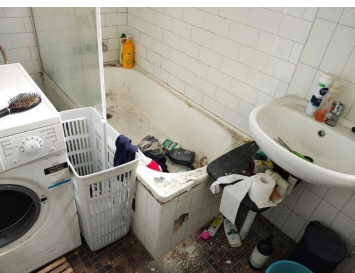


LEAD METAL			
Photo Ref	LBP-30285	Sample No	Lead Paint Presumed
Building	138-140 New South Head Road		
Level	Roof		
Room	Roof		
Application	Lead flashing		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30282	Sample No	Lead Paint Sample WSP-326708
Building	138-140 New South Head Road		
Level	Level 2		
Room	Unit 5		
Application	Bathtub white based paint system		
Risk Rating	-		





LBP NOT DETECTED			
Photo Ref	LBP-30283	Sample No	Lead Paint Sample WSP-326720
Building	138-140 New South Head Road		
Level	Roof		
Room	Roof floor external		
Application	Black paint system		
Risk Rating	-		





C1.5 POLYCHLORINATED BIPHENYLS

PCB MATERIAL OR WASTE			
Photo Ref	PCB- 27598	Sample No	Visual Observation
Building	138-140 New South Head Road		
Room	Unit 6 Kitchen		
Application	fluorescent light fitting		
Material	Capacitor - Plessey		
Risk Rating	Low Risk		





APPENDIX D

RISK MATRIX



RISK MATRIX

POTENTIAL TO BE DISTURBED

Score	Potential to be disturbed
High (3)	Disturbance may occur during typical occupancy of the building and is likely during maintenance works.
Medium (2)	Disturbance unlikely during typical occupancy of the building however may occur during maintenance works.
Low (1)	Disturbance unlikely during typical occupation of the building.

CONDITION

Score	Condition description
Poor (3)	Obvious damage or deterioration, extensive dust/contamination. Friable asbestos not encapsulated.
Fair (2)	Minor damage or deterioration, not sealed/encapsulated. Friable asbestos encapsulated (e.g. fire door) with no damage to encapsulation.
Good (1)	No obvious damage or deterioration, secured in place, sealed/encapsulated.
Unknown (1)	No access to assess condition.

FRIABILITY

Score	Friability Descriptor
Friable (1)	Material that; (A) is in a powder form or that can be crumbled, pulverised or reduced to powder by hand pressure when dry, and (B) contains asbestos.
Non-friable (0)	Material containing asbestos that is not friable asbestos, including material containing asbestos fibres reinforced with a bonding compound.

RISK MATRIX TABLE

Material Condition	Disturbance Potential		
	High (3)	Medium (2)	Low (1)
Poor (3)	>6	5	4
Fair (2)	5	4	3
Good / Unknown (1)	4	3	2

Note – Friable asbestos containing materials also assigned a score of one (1).

Legend

>6	High Risk
4-5	Medium Risk
2-3	Low Risk

APPENDIX E

NATA LABORATORY ANALYTICAL REPORTS





Certificate of Analysis

WSP Australia Pty Limited

104 Market Street Wollongong
Telephone +61 2 4298 2600
Email ANZlab@wsp.com



WORLD RECOGNISED
ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 138-140 New South Head Road, Edgecliff NSW
CERTIFICATE NO: WOL-PS218531 -188152
CLIENT: Lendlease Development
DATE/S SAMPLED: 13/11/2024 to 14/11/2024
CLIENT ADDRESS: Level 14, Tower Three, International Towers
Sydney, Exchange Place, Barangaroo Avenue,
Barangaroo NSW 2000
DATE RECEIVED: 15/11/2024
TELEPHONE: 0438 321 555
DATE ANALYSED: 19/11/2024
EMAIL: jock.mitton@lendlease.com
ORDER NUMBER: N/A
CONTACT: Jock Mitton
SAMPLED BY: Leigh Rampley, Kaushik Botta

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	231435	Basement Unit, Shower, Wall coating behind tiles	Screed	<1 g	NAD
002	231440	Sub-Basement Switchroom, Stored item, Decorative coving	Plaster	12 g	SMF, NAD
003	231441	Sub-Basement Switchroom, Stored item, Fibro	Fibre Cement Sheet	3 g	OF, NAD
004	231442	Sub-Basement Switchroom, Switchboard, Switches	Reinforced Plastic	50 g	NAD
005	231445	Exterior, Perimeter timber windows	Mastic	8 g	NAD
006	326706	Roof floor external, Roof flooring	Vinyl	50 g	NAD
007	326707	Roof floor external, Roof exterior	Fibrous Sheeting	3 g	SMF, NAD
008	326709	Level 2 Unit 5, Kitchen floor vinyl sheeting under tiles	Vinyl Sheet & Backing	8 g	CH
009	326711	Level 1 Unit 4, Throughout wall vents	Plaster	10 g	NAD
010	326705	Level 1 Unit 4, Bedroom west wall	Plaster	18 g	OF, NAD
011	326715	Level 2 Unit 6, Bedroom west wall	Fibre Cement Sheet	20 g	CH
012	326716	Roof Penthouse, Toilet behind shower tiles and base	Fibre Cement Sheet	7 g	CH
013	326717	Roof Penthouse, Toilet walls	Fibre Cement Sheet	14 g	CH, OF
014	326718	Roof Penthouse, Kitchen walls south and north	Fibre Cement Sheet	22 g	CH, OF
015	326719	Roof Penthouse, External wall	Fibre Cement Sheet	13 g	A, C, CH
016	326725	Level 1 Unit 4, Movement floor paper back under tiles	Fibrous Sheeting	7 g	OF, NAD
017	326726	Level 2 Unit 6, All windows weatherproof lining	Bituminous Material	9 g	SMF, NAD
018	326727	Roof Penthouse, Bitumen layer under ceramic tile	Bituminous Material	12 g	OF, NAD
019	326728	Level 2 Unit 5, Kitchen walls	Fibre Cement Sheet	7 g	CH, OF
020	326729	Level 2 Unit 5, Drawing room east wall	Fibre Cement Sheet	40 g	CH, OF
021	326734	Ground Floor Unit 1, Toilet ceiling lining	Fibre Cement Sheet	9 g	OF, NAD
022	326735	Ground Floor Unit 2, Bedroom north wall	Fibre Cement Sheet	52 g	OF, NAD



Certificate of Analysis

WSP Australia Pty Limited

104 Market Street Wollongong
Telephone +61 2 4298 2600
Email ANZlab@wsp.com



WORLD RECOGNISED
ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 138-140 New South Head Road, Edgecliff NSW

CERTIFICATE NO: WOL-PS218531 -188152

<u>Lab No</u>	<u>Sample ID</u>	<u>Location</u>	<u>Description</u>	<u>Approximate Dimensions</u>	<u>Identification Type</u>
023	231439	Exterior, Wall render	Screed	<1 g	NAD

LEGEND:

NAD	- No Asbestos Detected
CH	- Chrysotile Asbestos Detected
A	- Amosite Asbestos Detected
C	- Crocidolite Asbestos Detected
SMF	- Synthetic Mineral Fibres Detected
OF	- Organic Fibres Detected

Approved Identifier

Holly Kitamura

Approved Signatory

Name: Lauren DeRooy

Authorisation Date
Tuesday, 19 November 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

Sampling is not covered by the scope of accreditation.

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Certificate of Analysis

WSP Australia Pty Limited

Level 28, 680 George Street Sydney
PO Box 20967, World Square
Telephone +61 2 9272 1407
Email ANZLab@wsp.com



WORLD RECOGNISED
ACCREDITATION

ABN 80 078 004 798

Accredited for compliance with ISO/IEC:
17025 - Testing (No. 17199)

LOCATION: 138-140 New South Head Road, Edgecliff NSW **CERTIFICATE NO:** SYD-PS218531-188927

CLIENT: Lendlease Development **DATE\S SAMPLED:** 2/12/2024

CLIENT ADDRESS: Level 14, Tower Three, International Towers
Sydney, Exchange Place, Barangaroo Avenue,
Barangaroo NSW 2000 **DATE RECEIVED:** 2/12/2024

TELEPHONE: 0438 321 555 **DATE ANALYSED:** 2/12/2024

EMAIL: jock.mitton@lendlease.com **ORDER NUMBER:** N-00339

CONTACT: Jock Mitton **SAMPLED BY:** Leigh Rampley

TEST METHOD: Qualitative identification of asbestos fibres in bulk and soil samples at WSP Corporate Laboratories by polarised light microscopy, including dispersion staining, and trace analysis, in accordance with AS4964 (2004) Method for the qualitative identification of asbestos in bulk samples and WSP's Laboratory Procedure (LP3 - Identification of Asbestos Fibres).

Lab No	Sample ID	Location	Description	Approximate Dimensions	Identification Type
001	WSP-231482	Level 1, Unit 4, Bedroom, wall linings	Fibre Cement Sheet	2 g	OF, NAD
002	WSP-231483	Level 2, Unit 5, Front door, Fire door core	Vermiculite	1 g	NAD

LEGEND:

NAD - No Asbestos Detected
CH - Chrysotile Asbestos Detected
A - Amosite Asbestos Detected
C - Crocidolite Asbestos Detected
OF - Organic Fibres Detected

Approved Identifier

Melanie Reed

Approved Signatory

Name: Lauren DeRooy

Authorisation Date
Monday, 2 December 2024

Notes:

If no asbestos is detected in vinyl tiles, mastics, sealants, epoxy resins and ore samples, then confirmation by another independent analytical technique is advised due to the nature of the samples.

The results contained within this report relate only to the sample(s) analysed.

Sampling is not covered by the scope of accreditation.

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CERTIFICATE OF ANALYSIS 366426

Client Details

Client	WSP Australia Pty Limited
Attention	Leigh Rampley
Address	GPO Box 5394, Sydney, NSW, 2001

Sample Details

Your Reference	<u>PS218531 / N-00339</u>
Number of Samples	26 Paint, 6 Swab
Date samples received	14/11/2024
Date completed instructions received	15/11/2024

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date results requested by	22/11/2024
Date of Issue	21/11/2024
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Giovanni Agosti, Group Technical Manager

Authorised By

Nancy Zhang, Laboratory Manager

Lead in Paint						
Our Reference	UNITS	366426-1	366426-2	366426-3	366426-4	366426-6
Your Reference		WSP-231446	WSP-326713	WSP-326714	WSP-326720	WSP-231434
Date Sampled		13/11/2024	13/11/2024	13/11/2024	13/11/2024	13/11/2024
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Lead in paint	%w/w	0.58	0.11	6.2	0.01	0.03

Lead in Paint						
Our Reference	UNITS	366426-7	366426-8	366426-9	366426-10	366426-11
Your Reference		WSP-231436	WSP-231437	WSP-231438	WSP-231443	WSP-231444
Date Sampled		13/11/2024	13/11/2024	13/11/2024	13/11/2024	13/11/2024
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024	21/11/2024	21/11/2024
Lead in paint	%w/w	6.3	3.9	0.085	0.16	1.3

Lead in Paint				
Our Reference	UNITS	366426-12	366426-13	366426-32
Your Reference		WSP-231448	WSP-231449	WSP-326708
Date Sampled		13/11/2024	13/11/2024	13/11/2024
Type of sample		Paint	Paint	Paint
Date prepared	-	21/11/2024	21/11/2024	21/11/2024
Date analysed	-	21/11/2024	21/11/2024	21/11/2024
Lead in paint	%w/w	0.005	0.04	0.01

Lead in swab		
Our Reference	UNITS	366426-5
Your Reference		WSP-326731
Date Sampled		14/11/2024
Type of sample		Swab
Date prepared	-	19/11/2024
Date analysed	-	19/11/2024
Lead in Swabs	µg/swab	120
Lead in Swabs	mg/m ²	12

Method ID	Methodology Summary
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.
Metals-020/021/022	Acid digestion of Dust wipes/swabs and /or miscellaneous samples for metals determination by ICP-AES/MS and/or CV-AAS

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			21/11/2024	1	21/11/2024	21/11/2024		21/11/2024	[NT]
Date analysed	-			21/11/2024	1	21/11/2024	21/11/2024		21/11/2024	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	1	0.58	0.82	34	103	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	6	21/11/2024	21/11/2024		[NT]	[NT]
Date analysed	-			[NT]	6	21/11/2024	21/11/2024		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	[NT]	6	0.03	0.03	0	[NT]	[NT]

QUALITY CONTROL: Lead in swab					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-2	[NT]
Date prepared	-			19/11/2024	[NT]	[NT]	[NT]	[NT]	19/11/2024	[NT]
Date analysed	-			19/11/2024	[NT]	[NT]	[NT]	[NT]	19/11/2024	[NT]
Lead in Swabs	µg/swab	1	Metals-020/021/022	<1	[NT]	[NT]	[NT]	[NT]	91	[NT]
Lead in Swabs	mg/m ²	0.1	Metals-020/021/022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	
The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.	
Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2	

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

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

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

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

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

APPENDIX F

GENERAL INFORMATION ON HAZARDOUS MATERIALS



F1 BACKGROUND

Asbestos is the generic term for a group of naturally occurring mineral fibres with high tensile strength, flexibility, and resistance to thermal, chemical and electrical conditions. On account of these properties, asbestos has been used in many products for strength, heat, friction resistance and as insulation.

There are six types of the fibrous asbestos minerals, in two groups as described below:

- The serpentine asbestos is chrysotile (or white) asbestos. Chrysotile has been the most commonly used form of asbestos.
- Amphibole asbestiforms of which amosite (brown asbestos) and crocidolite (blue asbestos), were the most common types of amphibole asbestos used in building products.

Asbestos fibres enter the body by the inhalation and/or ingestion of airborne particles that can become embedded in tissues of the respiratory or digestive systems. International agencies and national authorities now recognise asbestos to be a human carcinogen. This designation was based on an observation of an increased incidence of lung cancer, mesotheliomas and gastrointestinal cancer in occupationally exposed workers, being consistent across investigators and study populations. Information from animal studies on the inhalation of fibres support these findings, although evidence for carcinogenicity via ingestion is limited.

In recognition of the above-mentioned issues, every effort should be made to eliminate the use of asbestos materials in buildings.

F2 USE OF ASBESTOS PRODUCTS

Asbestos was used extensively in structures such as buildings, processing plants, ships, trains and motor vehicles in the 1950s, 1960s and 1970s. Asbestos cement products are commonplace in building materials and buildings constructed prior to 1990.

Asbestos has been used in hundreds of different building materials. Some of the common building materials include:

- Adhesive sealants and paints.
- Electrical backing boards and internal linings.
- Vinyl floor tiles and vinyl sheets.
- Fibro-cement sheets in wall, ceiling and eave linings (internal & external).
- Fibro-cement internal flues and downpipes
- Bitumen-based water proofing such as malthoid (typically on roofs).

Whilst these materials are known to commonly contain asbestos, not all will. Confirmation must be made by detailed visual inspections coupled with laboratory analysis.

Generally, ACM consists of asbestos fibres bound in a cement matrix. The degree of fibre release and the risk posed by the asbestos will depend on the type of material (e.g. friable or non-friable), its condition and the potential for disturbance. As a result, it is necessary to have in place safe systems of work when working with or near asbestos.

F3 LEGISLATIVE REQUIREMENTS

State and Territory governments around Australia have generally adopted a consistent approach to asbestos management within workplaces. Whilst some minor differences are present from state to state, the following general requirements apply within workplaces:

- The owner of a workplace must determine if ACM are present in the workplace. This is usually undertaken through a visual inspection of the property.
- Upon identifying ACM, a risk assessment must be undertaken and must consider the following:
 - Friability
 - Condition
 - Location
 - Surrounding activities that could disturb the asbestos
- Where ACM is identified, it should be removed if removal is reasonably practicable. Where it is not reasonably practicable to remove, it must, depending on the level of risk, be either repaired, maintained and/or protected from future damage.
- ACM that is to remain in use (i.e. *in-situ*) must, when reasonably practicable, be labelled. An example of a warning label is shown below:

Figure F.1 Example asbestos warning label



- If ACM is found to be damaged, or is in a position where it is likely to be damaged, steps must be taken to prevent it being or becoming an unacceptable risk.
- If the risk of the ACM is found to be elevated, then steps must be taken to minimise the risk to employees / workers and other personnel who attend the workplace.

F4 HEALTH IMPACTS

As ACM is no longer used in Australia, most worker exposures now occur during the removal of asbestos and the renovation and maintenance of buildings and structures containing asbestos; particularly when asbestos is disturbed during activities such as handling, sawing, sanding, grinding, drilling, turning or similar.

The presence of asbestos may constitute a potential hazard; however, risk to health is based on the likelihood that respirable asbestos fibres are inhaled in significant quantities.

The level of risk posed by asbestos is linked to the size and shape of the fibres and the ability of it to penetrate deep into the lungs and become lodged. Fibres that measure less than three (3) microns wide and greater than five (5) microns long are referred to as respirable fibres and may enter the deepest part of the lungs. Larger fibres are deposited in the nose and major airways and can generally be cleared by normal physiological processes.

Once asbestos fibres have been inhaled (particularly respirable fibres) they can become lodged and are harder for our bodies to destroy, breakdown or remove. This is when they pose the greatest potential to cause disease and the likelihood of disease increases as the number of asbestos fibres inhaled increases.

Significant health risks may arise from the inhalation of airborne asbestos fibres, and their passage into the lungs. The risk of cancer increases as fibres diameter decreases and with increased exposure. Cigarette smoking greatly increases the risk of lung cancer in people heavily exposed to asbestos, but has no known association with mesothelioma.

Crocidolite and amosite have the most potent documented effects in producing the highly malignant mesothelioma tumour.

Asbestos fibres reaching the alveoli are handled in different ways. Some are carried out of the lung through the lymphatic system (part of the immune system). Of those fibres that remain some do not cause health effects whilst some may lead to lung changes such those outlined below:

Asbestosis	A form of fibrosis (scarring) of the lungs, which results in breathlessness. Asbestosis is a serious, chronic, non-cancerous respiratory disease. Asbestosis can take between 20 to 40 or longer years to develop.
Lung Cancer	Lung cancer is a disease which consists of uncontrolled cell growth in tissues of the lung. The incidence of lung cancer in people who are directly involved in the mining, milling, manufacturing and use of asbestos and its products is much higher than those who weren't involved in those industries.
Mesothelioma	Mesothelioma is a cancer of the outer covering of the lung (the pleura) or the abdominal cavity (the peritoneum). It is usually fatal. Mesothelioma is caused by the inhalation of needle-like asbestos fibres deep into the lungs where they can damage mesothelial cells, potentially resulting in cancer. The latency period is generally between 35 and 40 years, but it may be longer, and the disease is very difficult to detect prior to the onset of illness. Mesothelioma was once rare, but its incidence is increasing throughout the industrial world because of past exposures to asbestos. Australia has the highest incidence rate in the world.

The primary objective in any asbestos management plan is to eliminate, where possible, exposure to airborne asbestos fibres, or as a minimum, ensure workers are not exposed to fibre concentrations greater than the National Occupational Health and Safety Commission's occupational exposure standards for asbestos. It should be noted, that in situations where asbestos has been incorporated into a stable matrix and airborne dust is not generated, the asbestos-related health risk is negligible.

F5 SYNTHETIC MINERAL FIBRES

Synthetic Mineral Fibres (SMF) are a group of amorphous substances, including Glasswool, Rockwool and Ceramic fibre that have been fiberised by mechanical means, such as spinning or blowing during manufacturing. SMFs are commonly found in false ceiling panels and insulation and are typically identified by visual observation or by Optical Microscope techniques.

In the late 1980s the International Agency for Research on Cancer (IARC) evaluated certain SMF materials as being possibly carcinogenic to humans. The similarity in application and appearance to asbestos has resulted in some community concern regarding the health effects associated with exposure to SMF.

Reference information on SMF and their management is provided in the rescinded National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].

F6 LEAD BASED PAINTS

In the past lead was added to paint as a pigment and to assist with drying, improve durability, resist moisture and retain a fresh appearance. Lead carbonate (white lead) was once the principal white pigment in paints for houses and public buildings. Paint with lead pigment was manufactured up until the late 1960s, and in 1969 the National Health and Medical Research Council's Uniform Paint Standard was amended to restrict the lead content in domestic paint. The use of lead in paint as a significant component was phased out in Australia by the early 1980s.

Many older Australian buildings still contain lead-based paint, even though it may be covered with layers of more recent paint. Lead-based paint was used mainly on exterior surfaces, and to a lesser degree on interior doors and door and window architraves, especially in undercoats and primers, where concentrations of up to 20 percent lead content were used. Interior walls were not commonly painted with paint containing white lead pigment, although some colours did contain red, orange and yellow lead pigments.

Other areas that may contain lead include lead flashing and lead backing in electrical components. Lead in any form is toxic to humans when ingested or inhaled, with repeated transmission of particles cumulating in lead poisoning. Lead paint removal poses two potential avenues of transmission. Firstly, by inhalation or ingestion by workers and public near the works, and secondly by the deposition of particles on nearby footpaths, streets or soil where they may be re-suspended, tracked into houses or buildings where it can be inhaled or ingested.

Lead based paints are to be managed in accordance with the Australian Standard *Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings* (AS4361.2:2017).

F7 POLYCHLORINATED BIPHENYLS

Polychlorinated biphenyl (PCBs) compounds are synthetic organic compounds that were used in transformer oils, capacitor oils, hydraulic and heat-exchange fluids, lubricating oils, cutting oils, fluorescent light fittings, ceiling fans, dishwashers, clothes dryers, vacuum pumps, electric motors and washing machines. PCBs are highly stable chemicals with good insulating properties; they do not degrade appreciably over time or with exposure to high temperatures, acids or alkalis. It is these properties that made PCBs attractive for use in electrical devices. They were first used in about 1929 and were commonly used from the 1950s to the 1970s.

Fluorescent light-fittings containing capacitors can be compared with details contained in the ANZECC Identification of PCB Containing Capacitors database (1997).

It is considered that Australian electrical equipment manufactured since 1970 is unlikely to contain PCBs. Imports of PCBs to Australia were banned since 1986 once it became known that PCBs could harm human health and contaminate the environment.

APPENDIX G

APPLICABLE LEGISLATION AND REFERENCES



G1 LEGISLATION

PRIMARY ASBESTOS LEGISLATION	ASBESTOS SURVEY REQUIREMENTS	ASBESTOS RESURVEY REQUIREMENTS	REPORTING REQUIREMENTS	MANAGEMENT AND LABELLING/SIGNAGE REQUIREMENTS	OTHER REQUIREMENTS
Work Health and Safety Act 2011 Work Health and Safety Regulations 2017 Supported by: Code of Practice – How to Manage and Control Asbestos in the Workplace (2022) Code of Practice – How to Safely Remove Asbestos (2022)	A PCBU must, for work place buildings/structures that are constructed prior to December 31, 2003 Survey to identify and locate any ACMs; and Compile and keep at the workplace a site specific Asbestos Register. If ACM is identified at the work place, an AMP is to be compiled for the management of the identified ACM. The Asbestos Register and the AMP must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.	Re-inspections of identified ACM is determined on a case-by-case basis depending on the risk situation and should be informed by and conducted in accordance with the site specific AMP.	The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey. The Asbestos Register must be maintained and also updated if: — The AMP is under review — Further ACM is identified and/or — ACM is removed, disturbed or encapsulated. The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place. The AMP must be maintained and updated: — When the Asbestos Register is under review — If asbestos is removed, disturbed or encapsulated — If the AMP is no longer adequate for managing the ACM — If a Health and Safety Officer requests a review and/or at least — Once every 5 years.	Generally, health monitoring is not required except for workers involved in asbestos removal works. Training is required for persons involved in asbestos removal work or carrying out asbestos related works. All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item. Before refurbishment or demolition: — Ensure Asbestos Register is current — Undertake necessary inspections. A licensed asbestos removalist is required unless: ACM <10 m² and non-friable and then by a competent person.	WHS Regulation 419 requires that a PCBU must not carry out, or direct or allow a worker to carry out, work involving asbestos; excepting as is applicable: — Managing risk — Sampling, identification and analysis — Maintenance — Removal/disposal — Other exemptions per s.419 (3).

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G2 REFERENCES

- NOHSC. (April 2005a). *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition*. National Occupational Health & Safety Commission, Australian Government.
- Standards Australia. (April 1994). *Safety Signs for the Occupational Environment*. Australian Standard.
- Standards Australia. (February 2009). *Selection, use and maintenance of respiratory protective equipment*.
- Standards Australia. (February 2012). *Respiratory protective devices*. Australian / New Zealand Standard, Joint Technical Committee QR-011.
- Standards Australia. (September 2001). *Demolition of structures*. Australian Standard, Committee BD-059.

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