Health Infrastructure NSW

Asbestos and Hazardous Materials Pre-Demolition Assessment

Block C

Wyong Public Hospital

Hamlyn Terrace NSW 2259

21/08/2023

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Asbestos and Hazardous Materials Pre-Demolition Assessment

Prepared for.

Health Infrastructure NSW

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Executive Summary

Tetra Tech Coffey Pty Ltd (Tetra Tech) was commissioned by Health Infrastructure NSW to conduct an asbestos and hazardous materials (hazmat) pre-demolition assessment of targeted areas within Block C of Wyong Public Hospital, located at Hamlyn Terrace NSW 2259 (the site).

The purpose of the hazmat pre-demolition assessment was to identify and assess the health risk posed by hazmat, including asbestos containing materials (ACM) which may be encountered during future demolition/refurbishment works of the building. This is in order to meet the requirements of the relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.

State/Territory legislation and industry guidance requires that information in this report is supplied on the understanding that the area surveyed is scheduled for demolition/refurbishment works, and that identified asbestos and other hazmat will be removed prior to, or as part of these works. Asbestos or other hazmat remaining in situ will need to be detailed in the asbestos and hazmat register and site-specific asbestos management plan designed to control the risks of exposure to hazardous materials.

The following hazardous building materials were identified at the time of the assessment:

Property	Asbestos Containing Materials		Lead Based Paint	Lead Containing Dust	Synthetic Mineral Fibre	Poly-chlorinated Biphenyls	Ozone Depleting Substances
	Non-Friable	Friable					
Block C	✓	✓	✓	✓	✓	✓	✓

Full details of the material assessments can be located within **Appendix A: Asbestos and Hazardous Materials Register**.

Areas of No Access or Limited Access were present and are described in Section 2.2. It should be presumed that hazmat are present in these areas until further inspection can confirm or refute their presence.

A number of other recommendations were made in the body of this report which address the ongoing management of hazardous building materials at this site.

This executive summary must be read in conjunction with this entire report and the limitations contained therein.

1. Introduction

Tetra Tech Coffey Pty Ltd (Tetra Tech) was commissioned by Health Infrastructure NSW to conduct an asbestos and hazardous materials (hazmat) pre-demolition assessment of targeted areas within Block C, of Wyong Public Hospital, located at Hamlyn Terrace NSW 2259 (the Site). Ben McCann and Phoebe Quessy of Tetra Tech conducted the assessment on the 02/08/2023.

1.1. Site Information

The asbestos and hazardous materials pre-demolition assessment was undertaken within targeted areas of Block C of Wyong Public Hospital, Hamlyn Terrace NSW 2259 (the site), as shown in Appendix H.

Table 1: Site Information	
Site:	Block C, Wyong Public Hospital, Hamlyn Terrace NSW 2259
Age (Circa):	1980s to 2000s
Site Description:	Hospital

1.2. Objective and Scope of Works

The objectives/scope of the hazmat assessment was to:

- Identify the presence of the following confirmed and or suspected hazmat building materials within accessible areas of nominated building(s):
  - Asbestos Containing Materials (ACM);
  - Lead Based Paint (LBP);
  - Lead Containing Dust (LCD);
  - Synthetic Mineral Fibres (SMF);
  - Polychlorinated Biphenyls in fluorescent light capacitors (PCBs); and
  - Ozone Depleting Substances (ODSs).
- Collect samples of suspected ACM and/or LBP and LCD, for analysis by a NATA accredited laboratory;
- Visually determine the presence of SMF, PCB-containing light fittings and ODSs;
- Recommend risk management strategies to mitigate risks associated with ACM and other hazmat for removal and ongoing occupancy;
- Prepare a detailed assessment report in alignment with the requirements of relevant State/Territory Regulations, Compliance Codes, Codes of Practice and Guidance Notes, and
- Provide a copy of the assessment report in electronic (PDF) format to Health Infrastructure NSW.

2. Findings

The results of the asbestos and hazardous materials pre-demolition assessment are provided in a register format which is designed to provide readily available information about the presence of hazmat prior to demolition or refurbishment.

2.1. Assessment Findings

The findings of this assessment are presented in tabulated format, including building materials that have been photographed are depicted in **Appendix A: Asbestos and Hazardous Materials Register**.

The following significant key findings are noted:

2.1.1. Asbestos Containing Materials

Location	Material Description	Risk Rating
Internal / Paediatric Unit / Adjacent NUM Room 30083 / Ceiling Space	Dust	High
Internal / Paediatric Unit / Ceiling Space / Attached to Timber Beams Throughout	Fibre Cement Sheet Debris	High
Internal / Paediatric Unit / Central Corridor / Ceiling Space Above Plaster Ceiling, Below Compressed Panels	Fibre Cement Sheet	High
Internal / Paediatric Unit / Adjacent NUM Room 30083 / Ceiling Space	Fibre Cement Sheet Debris	Medium
Internal / Paediatric Unit / Bathroom Adjacent Reception 30084 / High Infill Panel Within Cupboard	Fibre Cement Sheet	Medium
Internal / Paediatric Unit / Southern Room 30089 / Floor Covering	Light Green Vinyl Sheet and Paper Backing	Medium
Internal / Paediatric Unit / Throughout / Below Green Vinyl Sheet	Screed	Medium
Internal / Paediatric Unit / Adjacent NUM Room 30083 / False Ceiling	Fibre Cement Sheet	Medium
Internal / Paediatric Unit / Procedure Room 30073 / Below Green Vinyl Sheet	Paper Backing	Low
Internal / Paediatric Unit / Room 8 30076 / Below Green Vinyl	Paper Backing	Low
Internal / Paediatric Unit / Short Stay Room 30069 / Floor	Paper Backing under Green Vinyl	Low
Internal / Paediatric Unit / South Western Room 30094 / Below Green Vinyl	Light Green Vinyl Sheet and Paper Backing	Low
External / Geriatric Unit Roof / Rooftop Plantroom / Within Eastern Ductwork	Millboard Insulation to Heating Coils	Low
External / Geriatric Unit Roof / Rooftop Plantroom / Within Western Ductwork	Millboard Insulation to Heating Coils	Low
External / Paediatric Unit / Throughout / Window Frames	Mastic Sealant	Low
External / Paediatric Unit / Throughout / Eaves	Fibre Cement Sheet	Low

External / Paediatric Unit / Throughout / Old Ambulance Carport, Ceiling	Fibre Cement Sheet	Low
Internal / Cancer Care Unit / Electrical Distribution Cupboard / Fire Doors	Fire Door Core	Low
Internal / Cancer Care Unit / Electrical Distribution Cupboard / Switchboard	HRC Fuses	Low
Internal / Cancer Care Unit / Western Corridor / Adjacent Electrical Distribution Cupboard, Doors	Fire Door Core	Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Within Ductwork Throughout	Millboard Insulation to Heating Coils	Low
Internal / Paediatric Unit / Ceiling Space / Central Area, Floor to Plant Areas	Compressed Cement Sheet	Low
Internal / Paediatric Unit / Ceiling Space / Switchboard	Bituminous Backing Board	Low
Internal / Throughout / All Areas / Fire Doors Unlabelled or Dated Pre Dec 2003	Fire Door Core	Low
Internal / Paediatric Unit / Ceiling Space / Ductwork Throughout	Millboard Insulation to Heating Coils	Low

2.1.2. Lead Based Paint

Location	Material Description	Risk Rating
External / Paediatric Unit / Eastern Side / to Timber	Yellow Paint	Very Low

2.1.3. Lead Containing Dust

Location	Material Description	Risk Rating
Internal / Geriatric Unit / Rooftop Plant Rooms / Northern Side Throughout	Dust	Low
Internal / Geriatric Unit / Rooftop Plant Rooms / South Side Throughout	Dust	Low
Internal / Geriatric Unit Ground Level / Ceiling Space / Throughout All Surfaces	Accumulated Dust	Low
Internal / Paediatric Unit / Ceiling Space / Throughout	Dust	Low

2.1.4. Synthetic Mineral Fibres

Location	Material Description	Risk Rating
External / Geriatric Unit Roof / Rooftop Plantroom / Pipework Throughout	Internal Insulation	Low
External / Geriatric Unit Roof / Rooftop Plantroom / Ductwork Throughout	Internal Insulation	Very Low
Internal / Cancer Care Unit / Cleaners Room / Hot Water Heater	Internal Insulation	Very Low
Internal / Cancer Care Unit / East and West Sides / Ceiling	Compressed Ceiling Tiles	Very Low
Internal / Cancer Care Unit / East and West Sides / Ceiling Space	Insulation Material to Pipework	Very Low
Internal / Cancer Care Unit / East and West Sides / Flexible Ductwork	Internal Insulation	Very Low
Internal / Cancer Care Unit / East and West Sides / Pipework Throughout Ceiling Space	External Insulation	Very Low
Internal / Cancer Care Unit / East and West Sides / Throughout Ceiling Space	Sarking Insulation	Very Low
Internal / Cancer Care Unit / East and West Sides / Throughout Ceiling Space	Insulation Batts	Very Low
Internal / Cancer Care Unit / Kitchen / Boiler Below Sink	Internal Insulation	Very Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Ceiling Throughout	Sarking Insulation	Very Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Flexible Ductwork Throughout	Internal Insulation	Very Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Pipework Throughout	External Insulation	Very Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Rigid Ductwork Throughout	External Insulation	Very Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Throughout Floor	Insulation Batts	Very Low
Internal / Geriatric Unit / Rooftop Plant Rooms / Walls Throughout	Sarking Insulation	Very Low
Internal / Geriatric Unit Ground Level / Ceiling Space / Flexible Ductwork Throughout	Insulation Material	Very Low
Internal / Geriatric Unit Ground Level / Ceiling Space / Pipework Throughout	Insulation Material	Very Low

Internal / Geriatric Unit Ground Level / Ceiling Space / Throughout	Sarking Insulation	Very Low
Internal / Geriatric Unit Ground Level / Throughout / Hallways and Rooms	Compressed Ceiling Tiles	Very Low
Internal / Paediatric Unit / Ceiling Space / Flexible Ductwork Throughout	Insulation Material	Very Low
Internal / Paediatric Unit / Ceiling Space / Pipework Throughout	External Insulation	Very Low
Internal / Paediatric Unit / Ceiling Space / Throughout	Sarking Insulation	Very Low
Internal / Paediatric Unit / Ceiling Space / Throughout	Insulation Batts	Very Low
Internal / Paediatric Unit / Central Corridor / Hot Water Heater, Above Sink	Internal Insulation	Very Low
Internal / Paediatric Unit / Kitchen 30074 / Hot Water Heater, Above Sink	Internal Insulation	Very Low

2.1.5. Polychlorinated Biphenyls

Location	Material Description	Risk Rating
External and Internal / Paediatric Unit / Throughout / Light Fittings	Ballast(s) and Capacitors	Very Low

2.1.6. Ozone Depleting Substances

Location	Material Description	Risk Rating
External / Paediatric Unit / South Side / Daikin AC unit	Unknown Refrigerant	Very Low
Paediatric Unit / South Side / Daikin AC unit	Unknown Refrigerant	Very Low

2.2. Access Restrictions

Where no access or limited access areas have been identified it should be presumed that hazmat are present in these areas until further investigation can confirm or refute their presence.

Destructive sampling was not undertaken in areas that were still being used by the hospital, including the Cancer Ward areas within the Geriatric Unit.

No inspection can be guaranteed to locate all asbestos and hazmat in specific locations. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

2.2.1. No Access Areas

The following areas were not accessible at the time of the assessment:

- Within live electrics, plant and ductwork throughout;
- Areas outside the scope of assessment;
- Internal, paediatric unit electrical cupboard – locked;
- Behind ceramic tiles;
- Below ceramic tiles;
- Above set ceilings;
- Below floor coverings in occupied areas; and
- Heights above 3m;

2.2.2. Limited Access Areas

Access to the following areas was limited at the time of the assessment:

- Ceiling voids, limited to manholes;
- Ceiling void plant rooms limited to walkways;
- Wall voids;
- Below floor;
- Beneath floor coverings;
- Subfloor spaces;
- Risers;
- Formwork to concrete slabs; and
- Roof.

3. Recommendations

The following recommendations are provided with respect to hazmat identified during the assessment of the site. This assessment only covers the parts of the site that have been accessed and been assessed in accordance with the approved scope.

3.1. Asbestos Containing Materials

The preference will always be to eliminate the asbestos hazards from the site and if it is practicable for the occupier to do so then asbestos removal should always be considered. ACM on site, which were found to be in a bonded and stable condition, may be managed in situ and periodically inspected if removal is not practicable.

If managed in situ, all identified or presumed ACM should be appropriately labelled, where possible, and regularly inspected to assess their condition and potential changes to health risk.

Prior to any demolition, partial demolition, renovation or refurbishment, ACM likely to be disturbed by those works should be removed in accordance with relevant codes of practices, compliance codes and legislation.

3.1.1. Asbestos Control Measures

- If the ACM is friable, in a poor/unstable condition and accessible with risk to health from exposure, immediate access restrictions should be applied, and removal is required as soon as practicable using a licensed contractor.

- If the ACM is friable, accessible but in a stable condition, removal is preferred. However, if removal is not immediately practicable, short-term control measures (i.e. restrict access, sealing, enclosure etc) may be employed until removal can be facilitated.
- If the ACM is non-friable and, in a poor/unstable condition, disturbance should be minimised. Removal or encapsulation may be appropriate controls. ACM which are found in localised areas and identified as damaged, consisting of small qualities of non-friable cement debris may not require the highest removal priority. The removal priority may be lowered due to a low risk of disturbance. Further confirmation can be obtained via asbestos fibre air monitoring where the result is found to be < 0.01 fibre/mL.
- For the instances above and further assessment of the risk, airborne fibre monitoring is recommended and can assist with decisions on the most appropriate, and urgency of, control measures.
- Where ACM is in a good, stable condition, ongoing maintenance and periodic inspection would be appropriate control measures.
- Remaining ACM identified or presumed should be appropriately labelled where possible. Those items should be regularly inspected to ensure they are not deteriorating and resulting in a potential risk to health.
- An asbestos management plan (AMP) should be created and maintained for all ACM that remain at the site to assist the persons conducting a business or undertaking (PCBU) with the management of these materials. The AMP must ensure that suitable control measures are implemented to prevent site personnel and others from being exposed to airborne asbestos fibres.
- Schedule periodic reassessment of ACM remaining on-site to monitor their aging/deterioration so that the PCBU can be alerted if any ACM require encapsulation or removal.
- Prior to any demolition or refurbishment works, all asbestos and hazardous materials identified and likely to be disturbed by demolition or refurbishment works should be removed in accordance with the legislative requirements and relevant codes of practice or compliance codes.
- During future demolition works, if any materials that are not referenced in this report and are suspected of containing asbestos are encountered, then works must cease and an asbestos hygienist should be notified to determine whether the material contains asbestos.

The recommendations, conclusions or stability of asbestos materials contained in this report shall not abrogate a person of their responsibility to work in accordance with statutory requirements, codes of practice, guidelines, material safety data sheets, work instructions or reasonable work practices.

3.2. Lead Based Paint

- Any works that are likely to disturb lead based paint surface should be undertaken in accordance with the Australian Standard (AS4361.2:2017), Guide to hazardous paint management – Part 2: Lead paint in residential, public and commercial buildings.
- Prior to any disturbance of lead based paint a comprehensive risk assessment is to be conducted.
- Any loose and peeling lead based paint should be stabilised (using hand-held scrapers, drop cloths and wet misting where appropriate) and the paint chips disposed of as hazardous waste.
- Any remediation works that may generate dust or fumes (i.e. sanding, burning) must be performed under controlled conditions by a suitably resourced and experienced hazardous material/waste abatement contractor (e.g. a Class A licensed asbestos removal contractor).

3.3. Lead Containing Dust

- Any work processes involving lead containing dust must be undertaken in a manner to ensure that no worker is exposed to lead at concentrations above the workplace exposure standard (WES) of 0.05mg/m^3 over an eight-hour day.

- Prior to any disturbance of lead containing dust a comprehensive risk assessment is to be conducted.
- Lead containing dust removal works should include the use of high efficiency particulate air (HEPA) filtered vacuum cleaners and wet wiping techniques by a licensed contractor under controlled lead-containing dust conditions in conjunction with air monitoring and clearances by a competent hygienist.

3.4. Synthetic Mineral Fibres

- SMF materials that are likely to be disturbed during any proposed demolition/refurbishment works should be handled in accordance with The National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)].

3.5. Polychlorinated Biphenyls

- It may not be considered feasible to inspect every light fitting within a premise as information available in the public domain on the identification of PCB-containing capacitors is limited. However, all metal capacitors should be treated as containing PCB unless determined otherwise
- All capacitors containing or suspected as PCB or the fluorescent light fittings likely to be disturbed during future works should be removed prior to any future demolition, partial demolition, renovation or refurbishment in accordance with Department of Occupational Health, Safety and Welfare, *Safe Handling of PCB in Fluorescent Light Capacitors* – 1993 and with the *Polychlorinated Biphenyls Management Plan, Revised Edition April* 2003.

3.6. Ozone Depleting Substances

- Removal of refrigerants should be undertaken prior to any future demolition, partial demolition, renovation or refurbishment, where ODS's are likely to be disturbed. A licensed contractor who will recycle and reuse the refrigerant should decommission CFC and HCFC based equipment that is being disposed of in accordance with Association of Fluorocarbon Consumers and Manufacturers, The Australian Refrigeration and Air Conditioning Code of Good Practice – 1992 and the Australian Commonwealth Government Ozone Protection Act – 1989.

3.7. Training

Information, instruction and training must be provided to workers, contractors and others who may come into contact with hazardous materials in a workplace, either directly or indirectly.

Depending on the circumstances this hazardous materials awareness training may include:

- The purpose of the training;
- The health risks of hazardous materials;
- The types, uses and likely occurrence of hazardous materials on site, in plant and/or equipment in the workplace;
- The trainee's roles and responsibilities for hazmat management;
- Where the asbestos and hazardous materials register is located and how it can be accessed;
- The timetable for removal of hazmat from the workplace;
- The processes and procedures to be followed to prevent exposure, including exposure from any accidental release of hazmat into the workplace;

- Where applicable, the correct use of maintenance and control measures, protective equipment and work methods to minimise the risks from hazmat, limit the exposure of workers and limit the spread of hazmat outside any work area;
- The National Exposure Standard (NES) and control levels for hazmat; and
- The purpose of any air monitoring or health surveillance that may occur.

Should any further suspect asbestos and/or hazmat become evident during future disturbance/ refurbishment works which have not been addressed in this report, Tetra Tech should be contacted immediately so that a WHS consultant can confirm the status of the suspect material/s.

Tetra Tech is able to assist with all aspects of Risk Management for removal of asbestos and other hazardous materials resulting from these findings

Appendix A: Asbestos and Hazardous Materials Register

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Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
External	Geriatric Unit Ground Level / South Eastern Side / on Floor, Adjacent Stairs to Roof	Fibre Cement Sheet Debris	Asbestos	A25448	No Asbestos Detected	-	1 m²	-	-	-	-	1
External	Geriatric Unit Ground Level / South Western Side / Floor	Fibre Cement Sheet Debris	Asbestos	A25447	No Asbestos Detected	-	1 m²	-	-	-	-	2
External	Geriatric Unit Ground Level / Throughout / Awning	Fibre Cement Sheet	Asbestos	Previously Sampled 1J127382-011-GERI-001 and A25441	No Asbestos Detected	-	15 m²	-	-	-	-	3
External	Geriatric Unit Roof / Rooftop Plantroom / Ductwork Throughout	Mastic Sealant	Asbestos	A25453	No Asbestos Detected	-	100 m²	-	-	-	-	4
External	Geriatric Unit Roof / Rooftop Plantroom / Floor	Bituminous Membrane	Asbestos	Previously Sampled J127382-011-GERI-004	No Asbestos Detected	-	200 m²	-	-	-	-	5
External	Geriatric Unit Roof / Rooftop Plantroom / to Walls	Construction Joint Mastic	Asbestos	A25437	No Asbestos Detected	-	2 m	-	-	-	-	6

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
External	Geriatric Unit Roof / Rooftop Plantroom / Within Eastern Ductwork	Millboard Insulation adjacent to Heating Coils	Asbestos	754-SYDEN329755 Block C168A4	Suspected Asbestos	Friable	~10 m²	Unknown	Low	5 Yearly Reinspection	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	7
External	Geriatric Unit Roof / Rooftop Plantroom / Within Western Ductwork	Millboard Insulation adjacent to Heating Coils	Asbestos	754-SYDEN329755 Block C168A3	Suspected Asbestos	Friable	~ 10 m²	Unknown	Low	5 Yearly Reinspection	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	8
External	Paediatric Unit / Throughout / Window Frames	Mastic Sealant	Asbestos	A12291	Chrysotile Asbestos Detected	Non-Friable	10 m	Fair	Low	5 Yearly Reinspection	Sampled on the eastern side. Remove windows whole without direct disturbance to caulking under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor. If scraping out of caulking is undertaken as the removal method (i.e. material is being crumbled, pulverized, rendered to a powder), this should be done under friable asbestos removal conditions by a Class A (friable) licensed asbestos removal contractor.	9
External	Paediatric Unit / Northern Side / Wall	Mastic to Expansion Joint (lighter)	Asbestos	A25429	No Asbestos Detected	-	5 m	-	-	-	-	10

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
External	Paediatric Unit / Northern Side / Wall	Mastic to Expansion Joint (darker)	Asbestos	A25430	No Asbestos Detected	-	5 m	-	-	-	-	11
External	Paediatric Unit / South Side / Infill Panel Above Window	Fibre Cement Sheet	Asbestos	A25440	No Asbestos Detected	-	1 m²	-	-	-	-	12
External	Paediatric Unit / South Side / Ramp	Expansion Joint	Asbestos	A25438	No Asbestos Detected	-	10 m	-	-	-	-	13
External	Paediatric Unit / Throughout / Cladding around Windows and Awnings	Fibre Cement Sheet	Asbestos	A25421	No Asbestos Detected	-	30 m²	-	-	-	-	14
External	Paediatric Unit / Throughout / Eaves	Fibre Cement Sheet	Asbestos	Previously Sampled NAA 91935-stage 1-07	Chrysotile Asbestos Detected	Non-Friable	30 m²	Stable	Low	5 Yearly Reinspection	Maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	15
External	Paediatric Unit / Throughout / Old Ambulance Carport, Ceiling	Fibre Cement Sheet	Asbestos	Previously Sampled NAA 91935 - Stage 1-04	Chrysotile Asbestos Detected	Non-Friable	40 m²	Stable	Low	5 Yearly Reinspection	Maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor in accordance with relevant State	16

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
											Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	
Internal	Cancer Care Unit / Doorway 2011 / Fire Doors	Fire Door Core	Asbestos	754-SYDEN329755 Block C168A12	No Asbestos Suspected	-	2 Units	-	-	-	Date of manufacture 2010's. Suspected negative due to age and appearance.	17
Internal	Cancer Care Unit / Doorway 2011 / Fire Doors	Fire Door Core	Asbestos	754-SYDEN329755 Block C168A9	No Asbestos Suspected	-	2 Units	-	-	-	Date of manufacture 2010's. Suspected negative due to age and appearance.	18
Internal	Cancer Care Unit / Electrical Distribution Cupboard / Fire Doors	Fire Door Core	Asbestos	754-SYDEN329755 Block C168A1	Suspected Asbestos	Friable	2 Units	Stable	Low	5 Yearly Reinspection	Date of manufacture 2001. Confirm status and remove under controlled friable asbestos removal conditions by a Class A (friable) licensed asbestos removal contractor. Prior to any intrusion or removal, sampling is to be conducted by a suitably trained hygienist/LAA (if state requirement) and test at a NATA accredited facility for verification of internal core system.	19
Internal	Cancer Care Unit / Electrical Distribution Cupboard / Switchboard	HRC Fuses	Asbestos	754-SYDEN329755 Block C168A8	Suspected Asbestos	Friable	10 Units	Unknown	Low	5 Yearly Reinspection	Confirm status and maintain in current condition if to remain in-situ in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	20

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Cancer Care Unit / Western Corridor / Adjacent Electrical Distribution Cupboard, Doors	Fire Door Core	Asbestos	754-SYDEN329755 Block C168A2	Suspected Asbestos	Friable	2 Units	Stable	Low	5 Yearly Reinspection	Date of manufacture 2001. Confirm status and remove under controlled friable asbestos removal conditions by a Class A (friable) licensed asbestos removal contractor. Prior to any intrusion or removal, sampling is to be conducted by a suitably trained hygienist/LAA (if state requirement) and test at a NATA accredited facility for verification of internal core system.	21
Internal	Geriatric Unit / Rooftop Plant Rooms / Central Plant Areas on Southern Side	Compressed Cement Sheet	Asbestos	A25451	No Asbestos Detected	-	20 m²	-	-	-	-	22
Internal	Geriatric Unit / Rooftop Plant Rooms / Various Locations Throughout	Fibre Cement Sheet	Asbestos	Previously Sampled J127382-011-GERI-005	No Asbestos Detected	-	200 m²	-	-	-	-	23
Internal	Geriatric Unit / Rooftop Plant Rooms / Within Ductwork Throughout	Millboard Insulation adjacent to Heating Coils	Asbestos	754-SYDEN329755 Block C168A5	Suspected Asbestos	Friable	6 m²	Unknown	Low	5 Yearly Reinspection	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	24
Internal	Geriatric Unit Ground Level / Ceiling Space Above Doors to	Vermiculite	Asbestos	A25444	No Asbestos Detected	-	2 m²	-	-	-	-	25

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
	Cancer Unit / to Structural Beams											
Internal	Geriatric Unit Ground Level / Meeting Room / to Beams	Vermiculite	Asbestos	A25443	No Asbestos Detected	-	2 m²	-	-	-	-	26
Internal	Geriatric Unit Ground Level / Throughout / Below Light Blue Vinyl Sheet	Screed	Asbestos	A25446	No Asbestos Detected	-	500 m²	-	-	-	-	27
Internal	Geriatric Unit Ground Level / Throughout / Floor Covering Throughout Rooms	Blue Vinyl Sheet	Asbestos	A25445	No Asbestos Detected	-	500 m²	-	-	-	-	28
Internal	Geriatric Unit Ground Level / Throughout / Floor Coverings	White Vinyl Sheet	Asbestos	A25442	No Asbestos Detected	-	200 m²	-	-	-	-	29
Internal	Geriatric Unit Ground Level / Western Side / Window Frames	Mastic Sealant	Asbestos	A12292	No Asbestos Detected	-	50 m	-	-	-	-	30
Internal	Paediatric Unit / Adjacent NUM Room 30083 / Ceiling Space	Dust	Asbestos	A25436	Chrysotile Asbestos Detected	Friable	300 m²	Poor	High	As soon as reasonably practicable	Presumed to be present throughout ceiling space. Restrict access and remove under controlled friable asbestos removal conditions as soon as practicable by a Class A (friable) licensed asbestos removal	31

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
											contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	
Internal	Paediatric Unit / Adjacent NUM Room 30083 / Ceiling Space	Fibre Cement Sheet Debris	Asbestos	Previously Sampled NAA 91935-Stage 1-08.1	Chrysotile Asbestos Detected	Non-Friable	1 m²	Poor	Medium	As soon as reasonably practicable	Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	32
Internal	Paediatric Unit / Adjacent NUM Room 30083 / Original Ceiling Within Ceiling Space	Fibre Cement Sheet	Asbestos	Previously Sampled NAA 91935-Stage 1-08	Chrysotile Asbestos Detected	Non-Friable	10 m²	Poor	Medium	As soon as reasonably practicable	Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	33
Internal	Paediatric Unit / Bathroom Adjacent Reception 30084 / High Infill Panel Within Cupboard	Fibre Cement Sheet	Asbestos	A25428	Chrysotile Asbestos Detected	Non-Friable	1 m²	Fair	Medium	As soon as reasonably practicable	Encapsulate exposed sections, label as containing asbestos and maintain in a good condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	34
Internal	Paediatric Unit / Ceiling Space / Attached to Timber Beams Throughout	Fibre Cement Sheet Debris	Asbestos	A25423	Chrysotile Asbestos Detected	Friable	10 m²	Poor	High	As soon as reasonably practicable	Sampled from external access hatch. Restrict access and isolate area. Encapsulate exposed sections under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in	35

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
											accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	
Internal	Paediatric Unit / Ceiling Space / Central Area, Floor to Plant Areas	Compressed Cement Sheet	Asbestos	Previously Sampled NAA 91935-Stage 1-05	Chrysotile Asbestos Detected	Non-Friable	20 m²	Fair	Low	5 Yearly Reinspection	Maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	36
Internal	Paediatric Unit / Ceiling Space / Ductwork Throughout	Mastic	Asbestos	A25433	No Asbestos Detected	-	50 m²	-	-	-	-	37
Internal	Paediatric Unit / Ceiling Space / Switchboard	Bituminous Backing Board	Asbestos	754-SYDEN329755 Block C168A7	Suspected Asbestos	Non-Friable	1 Unit	Stable	Low	5 Yearly Reinspection	Could not access. Confirm status and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	38
Internal	Paediatric Unit / Ceiling Space / North Side, adjacent External Access Hatch	Dust	Asbestos	A25422	No Asbestos Detected	-	500 m²	-	-	-	Sampled from external access hatch.	39

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Paediatric Unit / Central Corridor / Ceiling Space Above Plaster Ceiling, Below Compressed Panels	Fibre Cement Sheet	Asbestos	A25435	Chrysotile Asbestos Detected	Non-Friable	10 m²	Poor	High	5 Yearly Reinspection	Full extent unknown, accessed from central hallway man hole, ceiling above adjacent utility room. Restrict access and remove under controlled friable asbestos removal conditions as soon as practicable by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	40
Internal	Paediatric Unit / Procedure Room 30073 / Below Green Vinyl Sheet	Paper Backing	Asbestos	A25424	Chrysotile Asbestos Detected	Friable	20 m²	Stable	Low	5 Yearly Reinspection	Maintain in current condition if to remain in-situ in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	41
Internal	Paediatric Unit / Room 8 30076 / Below Green Vinyl	Paper Backing	Asbestos	A25432	Chrysotile Asbestos Detected	Friable	5 m²	Stable	Low	5 Yearly Reinspection	Full extent unknown. Maintain in current condition if to remain in-situ in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	42
Internal	Paediatric Unit / Room Adjacent Exit 30079 / Walls to Telecom Pit	Compressed Cement Sheet	Asbestos	A25431	No Asbestos Detected	-	5 m²	-	-	-	-	43

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Paediatric Unit / Short Stay Room 30069 / Floor	Paper Backing under Green Vinyl	Asbestos	A25427	Chrysotile Asbestos Detected	Friable	100 m²	Stable	Low	5 Yearly Reinspection	Maintain in current condition if to remain in-situ in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	44
Internal	Paediatric Unit / South Western Room 30094 / Below Green Vinyl	Light Green Vinyl Sheet and Paper Backing	Asbestos	A25426	Chrysotile Asbestos Detected	Friable	20 m²	Stable	Low	5 Yearly Reinspection	Maintain in current condition if to remain in-situ in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	45
Internal	Paediatric Unit / Southern Room 30089 / Floor Covering	Light Green Vinyl Sheet and Paper Backing	Asbestos	A25439	Chrysotile Asbestos Detected	Friable	2 m²	Fair	Low	5 Yearly Reinspection	Damaged in sections. Encapsulate exposed sections, label as containing asbestos and maintain in a good condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	46

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Paediatric Unit / Throughout / Below Green Vinyl Sheet	Screed	Asbestos	A25425	Chrysotile Asbestos Detected	Friable	500 m²	Stable	Low	5 Yearly Reinspection	Presumed to be present throughout the building under new. Maintain in current condition if to remain in-situ in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	47
Internal	Paediatric Unit / Throughout / Floor Covering	Green Vinyl Sheet	Asbestos	A25434	No Asbestos Detected	-	500 m²	-	-	-	-	48
Internal	Throughout / All Areas / Fire Doors Dated Post 2003	Fire Door Core	Asbestos	754-SYDEN329755 Block C168A11	No Asbestos Suspected	-	~10 Units	-	-	-	Suspected negative due to age and appearance.	49
Internal	Throughout / All Areas / Fire Doors Unlabelled or Dated Pre December 2003	Fire Door Core	Asbestos	754-SYDEN329755 Block C168A10	Suspected Asbestos	Friable	~10 Units	Stable	Low	5 Yearly Reinspection	Confirm status and remove under controlled friable asbestos removal conditions by a Class A (friable) licensed asbestos removal contractor. Prior to any intrusion or removal, sampling is to be conducted by a suitably trained hygienist/LAA (if state requirement) and test at a NATA accredited facility for verification of internal core system.	50

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
External	Geriatric Unit Roof / Rooftop Plantroom / Air Conditioning Ductwork Throughout	Grey (Light) Paint	Lead Paint	A25452	Lead Detected (0.02% w/w)	-	100 m²	-	-	-	Flaking paint. <0.1% lead content, not lead-containing paint as described in AS 4361.2, Guide to hazardous paint management - 2017 Part 2: Lead paint in residential, public and commercial buildings.	51
External	Paediatric Unit / Eastern Side / to Timber	Yellow Paint	Lead Paint	L16574	Lead Detected (1.8% w/w)	-	5 m	Fair	Very Low	-	>0.1% lead content, maintain in current condition, over paint with a lead-free paint as part of ongoing maintenance. Remove under controlled conditions in accordance with AS 4361.2, Guide to hazardous paint management - 2017 Part 2: Lead paint in residential, public and commercial buildings prior to renovation or demolition works. Conduct a risk assessment to determine the level of remediation controls required.	52
Internal	Paediatric Unit / Throughout / Doors and Frames	Aqua Paint	Lead Paint	L16571	Lead Detected (<0.005% w/w)	-	20 m²	-	-	-	<0.1% lead content, not lead-containing paint as described in AS 4361.2, Guide to hazardous paint management - 2017 Part 2: Lead paint in residential, public and commercial buildings.	53
Internal	Paediatric Unit / Throughout / Doors and Frames	White Paint	Lead Paint	L16572	Lead Detected (0.005% w/w)	-	20 m²	-	-	-	<0.1% lead content, not lead-containing paint as described in AS 4361.2, Guide to hazardous paint management - 2017 Part 2: Lead paint in residential, public and commercial buildings.	54
Internal	Paediatric Unit / Throughout / Doors and Frames	Blue (Dark) Paint	Lead Paint	L16573	Lead Detected (0.04% w/w)	-	30 m²	-	-	-	<0.1% lead content, not lead-containing paint as described in AS 4361.2, Guide to hazardous paint management - 2017 Part 2: Lead paint in residential, public and commercial buildings.	55

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Geriatric Unit / Rooftop Plant Rooms / Northern Side Throughout	Dust	Lead Dust	L25449	Lead Detected (420 mg/kg)	-	100 m²	Poor	Low	-	<1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Manage in-situ, conduct a risk assessment to determine the level of remediation controls required prior to any activities including refurbishment or demolition that may disturb the dust.	56
Internal	Geriatric Unit / Rooftop Plant Rooms / South Side Throughout	Dust	Lead Dust	A25450	Lead Detected (160 mg/kg)	-	100 m²	Poor	Low	-	<1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Manage in-situ, conduct a risk assessment to determine the level of remediation controls required prior to any activities including refurbishment or demolition that may disturb the dust.	57
Internal	Geriatric Unit Ground Level / Ceiling Space / Throughout All Surfaces	Accumulated Dust	Lead Dust	Previously Sampled J127382-011-GERI-LD-001	Lead Detected (14 mg/kg)	-	300 m²	Poor	Low	-	<1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Manage in-situ, conduct a risk assessment to determine the level of remediation controls required prior to any activities including refurbishment or demolition that may disturb the dust.	58
Internal	Paediatric Unit / Ceiling Space / Throughout	Dust	Lead Dust	L16585	Lead Detected (90 mg/kg)	-	500 m²	Poor	Low	-	<1,500 mg/kg for industrial or commercial sites based on the soil contamination criteria of the National Environment Protection Measure 1999. Manage in-situ, conduct a risk assessment to determine the level of remediation controls required prior to any	59

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
											activities including refurbishment or demolition that may disturb the dust.	
External	Geriatric Unit Roof / Rooftop Plantroom / Ductwork Throughout	Internal Insulation	SMF	754-SYDEN329755 Block C168S8	Suspected SMF	-	200 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	60
External	Geriatric Unit Roof / Rooftop Plantroom / Pipework Throughout	Internal Insulation	SMF	754-SYDEN329755 Block C168S9	Suspected SMF	-	50 m	-	Low	-	Encapsulate exposed sections under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	61
Internal	Cancer Care Unit / Cleaners Room / Hot Water Heater	Internal Insulation	SMF	754-SYDEN329755 Block C168S2	Suspected SMF	-	1 Unit	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	62
Internal	Cancer Care Unit / East and West Sides / Ceiling	Compressed Ceiling Tiles	SMF	754-SYDEN329755 Block C168S3	Suspected SMF	-	50 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	63
Internal	Cancer Care Unit / East and West Sides / Ceiling Space	Insulation Material to Pipework	SMF	754-SYDEN329755 Block C168S26	Suspected SMF	-	40 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	64

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Cancer Care Unit / East and West Sides / Flexible Ductwork	Internal Insulation	SMF	754-SYDEN329755 Block C168S5	Suspected SMF	-	50 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	65
Internal	Cancer Care Unit / East and West Sides / Pipework Throughout Ceiling Space	External Insulation	SMF	754-SYDEN329755 Block C168S6	Suspected SMF	-	20 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	66
Internal	Cancer Care Unit / East and West Sides / Throughout Ceiling Space	Sarking Insulation	SMF	754-SYDEN329755 Block C168S7	Suspected SMF	-	50 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	67
Internal	Cancer Care Unit / East and West Sides / Throughout Ceiling Space	Insulation Batts	SMF	754-SYDEN329755 Block C168S4	Suspected SMF	-	50 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	68
Internal	Cancer Care Unit / Kitchen / Boiler Below Sink	Internal Insulation	SMF	754-SYDEN329755 Block C168S1	Suspected SMF	-	1 Unit	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	69
Internal	Geriatric Unit / Rooftop Plant Rooms / Ceiling Throughout	Sarking Insulation	SMF	754-SYDEN329755 Block C168S10	Suspected SMF	-	200 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	70

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Geriatric Unit / Rooftop Plant Rooms / Flexible Ductwork Throughout	Internal Insulation	SMF	754-SYDEN329755 Block C168S13	Suspected SMF	-	50 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	71
Internal	Geriatric Unit / Rooftop Plant Rooms / Pipework Throughout	External Insulation	SMF	754-SYDEN329755 Block C168S15	Suspected SMF	-	50 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	72
Internal	Geriatric Unit / Rooftop Plant Rooms / Rigid Ductwork Throughout	External Insulation	SMF	754-SYDEN329755 Block C168S11	Suspected SMF	-	100 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	73
Internal	Geriatric Unit / Rooftop Plant Rooms / Throughout Floor	Insulation Batts	SMF	754-SYDEN329755 Block C168S14	Suspected SMF	-	200 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	74
Internal	Geriatric Unit / Rooftop Plant Rooms / Walls Throughout	Sarking Insulation	SMF	754-SYDEN329755 Block C168S12	Suspected SMF	-	100 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	75
Internal	Geriatric Unit Ground Level / Ceiling Space / Flexible Ductwork Throughout	Insulation Material	SMF	754-SYDEN329755 Block C168S17	Suspected SMF	-	100 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	76

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Geriatric Unit Ground Level / Ceiling Space / Pipework Throughout	Insulation Material	SMF	754-SYDEN329755 Block C168S18	Suspected SMF	-	100 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	77
Internal	Geriatric Unit Ground Level / Ceiling Space / Throughout	Sarking Insulation	SMF	754-SYDEN329755 Block C168S16	Suspected SMF	-	500 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	78
Internal	Geriatric Unit Ground Level / Throughout / Hallways and Rooms	Compressed Ceiling Tiles	SMF	754-SYDEN329755 Block C168S19	Suspected SMF	-	500 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	79
Internal	Paediatric Unit / Ceiling Space / Flexible Ductwork Throughout	Insulation Material	SMF	754-SYDEN329755 Block C168S23	Suspected SMF	-	100 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	80
Internal	Paediatric Unit / Ceiling Space / Pipework Throughout	External Insulation	SMF	754-SYDEN329755 Block C168S24	Suspected SMF	-	100 m	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	81
Internal	Paediatric Unit / Ceiling Space / Throughout	Sarking Insulation	SMF	754-SYDEN329755 Block C168S22	Suspected SMF	-	500 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	82

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
Internal	Paediatric Unit / Ceiling Space / Throughout	Insulation Batts	SMF	754-SYDEN329755 Block C168S25	Suspected SMF	-	500 m²	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	83
Internal	Paediatric Unit / Central Corridor / Hot Water Heater, Above Sink	Internal Insulation	SMF	754-SYDEN329755 Block C168S21	Suspected SMF	-	1 Unit	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	84
Internal	Paediatric Unit / Kitchen 30074 / Hot Water Heater, Above Sink	Internal Insulation	SMF	754-SYDEN329755 Block C168S20	Suspected SMF	-	1 Unit	-	Very Low	-	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	85
External and Internal	Paediatric Unit / Throughout / Light Fittings	Ballast(s) and Capacitors	PCB	754-SYDEN329755 Block C168P1	Suspected PCB	-	2 Units	-	Very Low	-	PCB-containing capacitors are suspected due to age & appearance of electrical fittings. Remove and dispose of in accordance with the Polychlorinated Biphenyls Management Plan, Revised Edition April 2003.	86
External	Cancer Care Unit Ground Level / East Side / Mitsubishi AC Unit	R410A Hydrofluorocarbon (HFC)	ODS	754-SYDEN329755 Block C168O2	Non ODS Refrigerant	-	2 Units	-	-	-	Hydrofluorocarbon (HFC) non ozone depleting substances.	87
External	Cancer Care Unit Ground Level / South Side / Mitsubishi AC Unit	R410A Hydrofluorocarbon (HFC)	ODS	754-SYDEN329755 Block C168O1	Non ODS Refrigerant	-	1 Unit	-	-	-	Hydrofluorocarbon (HFC) non ozone depleting substances.	88

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
External	Geriatric Unit Roof / Rooftop Plantroom / Mitsubishi AC units	R410A Hydrofluorocarbon (HFC)	ODS	754-SYDEN329755 Block C168O3	Non ODS Refrigerant	-	3 Units	-	-	-	Hydrofluorocarbon (HFC) non ozone depleting substances.	89
External	Geriatric Unit Roof / Rooftop Plantroom / Temperzone AC Units	R410A Hydrofluorocarbon (HFC)	ODS	754-SYDEN329755 Block C168O4	Non ODS Refrigerant	-	2 Units	-	-	-	Hydrofluorocarbon (HFC) non ozone depleting substances.	90
External	Paediatric Unit / Northern Side / Mitsubishi AC Unit	Unknown Refrigerant	ODS	754-SYDEN329755 Block C168O5	Suspected ODS	-	1 Unit	-	Very Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	91
External	Paediatric Unit / South Side / Daikin AC unit	Unknown Refrigerant	ODS	754-SYDEN329755 Block C168O6	Suspected ODS	-	1 Unit	-	Very Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	92
Internal	Paediatric Unit / Electrical Cupboard	-	No Access	754-SYDEN329755 Block CNA1	-	-	-	-	-	-	Locked - no key. No or limited access potential hazardous materials present within inaccessible areas.	93
Internal	Paediatric Unit / Ceiling Space / Ductwork Throughout	Millboard Insulation adjacent to Heating Coils	Asbestos	754-SYDEN329755 Block C168A13	Suspected Asbestos	Friable	~10 m²	Unknown	Low	5 Yearly Reinspection	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor in	94

Area	Location	Material Description	Hazard	Reference No.	Result	Friable	Quantity	Condition	Risk Rating	Reinspect Date	Recommendations	Line ID
											accordance with relevant State Regulations, Compliance Codes, Codes of Practice and Guidance Notes.	

Appendix B: Laboratory Analysis Certificate

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Bulk Identification Report

Job No: 754-SYDEN329755 Bulk ID Report Block C Wyong Hospital 08082023
Client: Health Infrastructure
Client Address: Level 30, Grosvenor Place 225 George Street, Sydney, NSW 2000, Australia
Contact: Bonnie Butcher
E-mail: Bonnie.Butcher@colliers.com
Date Sampled: 2-04/08/2023
Date Analysed: 8 & 9-08-2023
Date Authorised: 09-08-23
Sampled By: Phoebe Quessy & Ben McCann
Site: Block C Wyong Hospital

Accredited for compliance with ISO/IEC 17025 - Testing
Accreditation No:2220
Corporate Site No:16909

Please note: Where you have provided the samples for analysis, Tetra Tech Coffey Pty Ltd does not take any responsibility for the quality of the such samples. This report relates exclusively to the samples analysed by Tetra Tech Coffey Pty Ltd and as such only the samples submitted or collected for analysis have been considered in presenting these results. The data and results contained in this report are not representative of the site, product or source material as a whole. Tetra Tech Coffey Pty Ltd does not make any warranty or representation in relation to the site, product or source material as a whole. If you suspect any material to contain asbestos, then you must immediately stop the works and activities at the site or in respect of the materials and engage Tetra Tech Coffey Pty Ltd or another suitably trained asbestos hygienist to sample, assess or re-assess (as the case may be) the material suspected to contain asbestos.

Test Method: **Asbestos in Bulk Samples and Non-homogenous Material**
Tetra Tech Coffey Pty Ltd analyses bulk samples for asbestos using polarising light microscopy and dispersion staining techniques in accordance with Coffey SOP WILAB1, and Australian Standard (AS) 4964 – 2004, Method for the qualitative identification of asbestos in bulk samples (AS 4964). The detection limit for the test method as per AS 4964 is 0.1 g/kg. For non-homogenous samples a semi-quantitative aspect is adopted for the test method and is taken into account when reporting the results. As per Tetra Tech Coffey Pty Ltd's NATA approved SOP WILAB1 sample retention periods are set at 1 month for all samples from the date of analysis.

Analysed At: Tetra Tech Coffey Pty Ltd Laboratory, Level 20, Tower B, Citadel Towers 799 Pacific Highway Chatswood NSW 2067

Total Samples: 32

Approved Identifier
Panika Wongchanda & Matthew Tang

Approved Signatory
Matthew Tang

Sample No.	Location & Description	Sample Size (~)	Results
A25421	External, Paediatric Unit, Throughout, Cladding Around Windows and Awnings, Fibre Cement Sheet - Grey painted beige layered fibre cement sheet material	17 x 15 x 4 mm	No asbestos fibres detected Organic fibres detected
A25422	Internal, Paediatric Unit, Ceiling Space, Throughout, Dust - Brown non-homogeneous fibrous dust & debris	1.9 g	No asbestos detected above the reporting limit of 0.1 g/kg Organic fibres detected Synthetic mineral fibres detected No trace (respirable) asbestos detected as per AS 4964 2004
A25423	Internal, Paediatric Unit, Ceiling Space, Attached to Timber Beams Throughout, Insulation Board Debris - Red painted grey fibre cement sheet material	10 x 8 x 3 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25424	Internal, Paediatric Unit, Procedure Room 30073, Below Green Vinyl Sheet, Paper Backing - White paper backed green vinyl tile & amber adhesive with attached screed material	31 x 17 x 4 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25425	Internal, Paediatric Unit, Throughout, Below Green Vinyl Sheet, Screed - Amber adhesive with attached screed material & white paper backing material	25 x 20 x 2 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25426	Internal, Paediatric Unit, South Western Room 30094, Below Green Vinyl, Light Green Vinyl Sheet and Paper Backing - White paper backed green vinyl tile & amber adhesive with attached screed material	50 x 40 x 4 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25427	Internal, Paediatric Unit, Short Stay Room 30069, Floor, Paper Backing under Green Vinyl - Amber adhesive with attached screed material & white paper backing material	51 x 45 x 3 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25428	Internal, Paediatric Unit, Bathroom Adjacent Reception 30084, High Infill Panel Within Cupboard, Insulation Board - Beige layered fibre cement sheet material with attached soft mastic material	28 x 20 x 4 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25429	External, Paediatric Unit, Northern Side, Western, Mastic to Expansion Joint (lighter) - Brown rubbery mastic material	18 x 17 x 5 mm	No asbestos fibres detected

Sample No.	Location & Description	Sample Size (~)	Results
A25430	External, Paediatric Unit, Northern Side, Eastern (darker), Mastic to Expansion Joint to Wall - Brown rubbery mastic material	37 x 5 x 5 mm	No asbestos fibres detected
A25431	Internal, Paediatric Unit, Room Adjacent Exit 30079, Walls to Telecom Pit, Compressed Cement Sheet - Grey vitreous cement material	30 x 24 x 3 mm	No asbestos fibres detected Synthetic mineral fibres detected
A25432	Internal, Paediatric Unit, Room 8 30076, Below Green Vinyl, Paper Backing - Amber adhesive with attached screed material & white paper backing material	75 x 61 x 3 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25433	Internal, Paediatric Unit, Ceiling Space, Ductwork Throughout, Mastic - Grey soft mastic material	29 x 21 x 4 mm	No asbestos fibres detected
A25434	Internal, Paediatric Unit, Throughout, Floor Covering, Green Vinyl Sheet - Green vinyl tile & amber adhesive & attached screed material	72 x 23 x 3 mm	No asbestos fibres detected
A25435	Internal, Paediatric Unit, Central Corridor, Ceiling Space Above Plaster Ceiling, Below Compressed Flooring, Insulation Board - Grey loose fibrous sheet material	21 x 15 x 2 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25436	Internal, Paediatric Unit, Adjacent NUM Room 30083, Ceiling Space, Dust - Brown non-homogeneous fibrous dust & debris Matted fibre bundles containing **Chrysotile (white asbestos)** found within the sample raw weight: ~ 0.0010 g	1.4 g	**Chrysotile (white asbestos) detected** Organic fibres detected Synthetic mineral fibres detected No trace (respirable) asbestos detected as per AS 4964 2004
A25437	External, Geriatric Unit, Rooftop Plant Room, Mastic to Walls, Mastic - Beige rubbery mastic material	12 x 10 x 4 mm	No asbestos fibres detected
A25438	External, Paediatric Unit, South Side, Ramp, Expansion Joint - Black fibrous bituminous material	42 x 30 x 4 mm	No asbestos fibres detected Organic fibres detected
A25439	Internal, Paediatric Unit, Southern Room 30089, Floor Covering, Light Green Vinyl Sheet and Paper Backing - White paper backed green vinyl tile & amber adhesive with attached screed material	35 x 30 x 4 mm	**Chrysotile (white asbestos) detected** **Organic fibres detected**
A25440	External, Paediatric Unit, South Side, Infill Panel Above Window, Fibre Cement Sheet - Grey painted beige layered fibre cement sheet material	15 x 13 x 4 mm	No asbestos fibres detected Organic fibres detected
A25441	External, Throughout Block C, Awnings, Fibre Cement Sheet - White painted beige layered fibre cement sheet material	19 x 18 x 2 mm	No asbestos fibres detected Organic fibres detected
A25442	Internal, Geriatric Unit Ground Level, Throughout, Floor Coverings, White Vinyl Sheet - White vinyl tile & amber adhesive	70 x 41 x 4 mm	No asbestos fibres detected
A25443	Internal, Geriatric Unit Ground Level, Meeting Room, To Beams, Vermiculite - Beige powdery mica vermiculite material	73 x 51 x 2 mm	No asbestos fibres detected Organic fibres detected
A25444	Internal, Geriatric Unit Ground Level, Ceiling Space Above Doors to Cancer Unit, To Structural Beams, Vermiculite - Beige powdery mica vermiculite material	85 x 71 x 3 mm	No asbestos fibres detected Organic fibres detected
A25445	Internal, Geriatric Unit Ground Level, Throughout, Floor Covering Throughout Rooms, Blue Vinyl Sheet - Blue vinyl sheet & amber adhesive	64 x 32 x 4 mm	No asbestos fibres detected
A25446	Internal, Geriatric Unit Ground Level, Throughout, Below Light Blue Vinyl Sheet, Screed - Amber adhesive with attached screed material	28 x 22 x 2 mm	No asbestos fibres detected Organic fibres detected
A25447	External, Geriatric Unit Ground Level, South Western Side, Floor, Fibre Cement Sheet Debris - Beige layered fibre cement sheet material	51 x 43 x 4 mm	No asbestos fibres detected Organic fibres detected
A25448	External, Geriatric Unit Ground Level, South Eastern Side, On Floor, Adjacent Stairs to Roof, Fibre Cement Sheet Debris - Beige layered fibre cement sheet material	41 x 31 x 4 mm	No asbestos fibres detected Organic fibres detected
A25451	Internal, Geriatric Unit, Rooftop Plant Rooms, Central Plant Areas on Southern Side, Compressed Cement Sheet - Beige layered fibre cement sheet material	29 x 19 x 4 mm	No asbestos fibres detected Organic fibres detected
A25453	External, Geriatric Unit Roof, Rooftop Plantroom, Ductwork Throughout, Mastic Sealant - Grey painted cream rubbery mastic material	19 x 15 x 5 mm	No asbestos fibres detected
A12291	External, Paediatric Unit, East Side, Window Mastic - Grey hardened mastic material	12 x 10 x 2 mm	**Chrysotile (white asbestos) detected**
A12292	Internal, Geriatric Unit, Western Side, Window Mastic to Window Frames - Black sticky mastic material	11 x 3 x 2 mm	No asbestos fibres detected

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CERTIFICATE OF ANALYSIS 329894

Client Details

Client	Tetra Tech Coffey Pty Ltd
Attention	Phoebe Quessy
Address	Level 19, Tower B, Citadel Tower, 799 Pacific Hwy, Chatswood, NSW, 2067

Sample Details

Your Reference	**754-SYDEN329755**
Number of Samples	5 Dust, 5 Paint
Date samples received	07/08/2023
Date completed instructions received	07/08/2023

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	10/08/2023
Date of Issue	10/08/2023

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Hannah Nguyen, Metals Supervisor
Loren Bardwell, Development Chemist

Authorised By
Nancy Zhang, Laboratory Manager

Lead (dust)						
Our Reference		329894-1	329894-3	329894-4	329894-8	329894-9
Your Reference	UNITS	L16580	L15677	L16583	L16576	L16578
Date Sampled		03/08/2023	03/08/2023	03/08/2023	03/08/2023	03/08/2023
Type of sample		Dust	Dust	Dust	Dust	Dust
Date prepared	-	09/08/2023	09/08/2023	09/08/2023	09/08/2023	09/08/2023
Date analysed	-	09/08/2023	09/08/2023	09/08/2023	09/08/2023	09/08/2023
Lead	mg/kg	140	45	99	16	96

Lead in Paint						
Our Reference		329894-2	329894-5	329894-6	329894-7	329894-10
Your Reference	UNITS	L16575	L16582	L16579	L16581	L16984
Date Sampled		04/08/2023	03/08/2023	03/08/2023	03/08/2023	03/08/2023
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	09/08/2023	09/08/2023	09/08/2023	09/08/2023	09/08/2023
Date analysed	-	09/08/2023	09/08/2023	09/08/2023	09/08/2023	09/08/2023
Lead in paint	%w/w	0.04	0.01	0.081	<0.005	0.02

Method ID	Methodology Summary
Metals-020	Determination of various metals by ICP-AES.
Metals-020/021/022	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.

QUALITY CONTROL: Lead (dust)						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			09/08/2023	8	09/08/2023	09/08/2023		09/08/2023	[NT]
Date analysed	-			09/08/2023	8	09/08/2023	09/08/2023		09/08/2023	[NT]
Lead	mg/kg	1	Metals-020	<1	8	16	16	0	98	[NT]

QUALITY CONTROL: Lead in Paint						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			09/08/2023	10	09/08/2023	09/08/2023		09/08/2023	[NT]
Date analysed	-			09/08/2023	10	09/08/2023	09/08/2023		09/08/2023	[NT]
Lead in paint	%w/w	0.005	Metals-020/021/022	<0.005	10	0.02	0.02	0	109	[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.

GREENCAP | NAA

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Level 2 / 11 Khartoum Road
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Friday, 15/08/2014

Our ref: C107778:J127382-010-POD

Matthew Curnow
NSW Health Infrastructure
20 Chandos Street
ST LEONARDS NSW 2065

Dear Matthew,

Re: Asbestos Identification Analysis - Wyong Hospital, Podiatry, Paediatric, AMB Building, 010-POD, Pacific Highway, Wyong NSW 2259

This letter presents the results of asbestos fibre identification analysis performed on 2 samples collected by Simon Miralles of GreencapNAA on Wednesday 13th - Thursday 14th August 2014. The samples were collected from Wyong Hospital, Podiatry, Paediatric, AMB Building, 010-POD, Pacific Highway, Wyong NSW 2259.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory in accordance with GreencapNAA Test Method NALAB 302 Asbestos Identification Analysis and following the guidelines of Australian Standard AS4964-2004.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact Simon Miralles.

Yours sincerely
GreencapNAA

Simon Day : Approved Identifier

Simon Day : Approved Signatory

NATA
WORLD RECOGNISED ACCREDITATION

GREENCAP | NAA

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Monday, 18/08/2014

Our ref: C107778:J127382-011-GERI

Matthew Curnow
NSW Health Infrastructure
20 Chandos Street
ST LEONARDS NSW 2065

Dear Matthew,

Re: Asbestos Identification Analysis - Wyong Hospital, Geriatric Building 011-GERI, Pacific Highway, Wyong NSW 2259

This letter presents the results of asbestos fibre identification analysis performed on 5 samples collected by Ben McCann of GreencapNAA on Wednesday, 13 August 2014. The samples were collected from Wyong Hospital, Geriatric Building 011-GERI, Pacific Highway, Wyong NSW 2259.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory in accordance with GreencapNAA Test Method NALAB 302 Asbestos Identification Analysis and following the guidelines of Australian Standard AS4964-2004.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact Ben McCann.

Yours sincerely
GreencapNAA

Simon Day : Approved Identifier

Simon Day : Approved Signatory

NATA
WORLD RECOGNISED ACCREDITATION

GREENCAP NAA

Sydney Laboratory
Sample Analysis Results

Monday, 18/08/2014

Our ref: C107778:J127382-011-GERI

Site Location:		Wyong Hospital, Geriatric Building 011-GERI, Pacific Highway, Wyong NSW 2259	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J127382-011-GERI 01	Geriatric Rehab Unit - Level 1 - Exterior - Throughout - Awning - Fibre Cement Sheeting White-painted gold-grey fibre-cement sheet material ~ 20 x 7 x 2 mm	No Asbestos Detected Organic Fibres
2	J127382-011-GERI 02	Geriatric Rehab Unit - Roof - Exterior - Throughout - Infill Panels - Low Level - Fibre Cement Sheeting Unpainted gold-grey fibre-cement sheet material ~ 24 x 10 x 4 mm	No Asbestos Detected Organic Fibres
3	J127382-011-GERI 03	Geriatric Rehab Unit - Roof - Exterior - East & West - Gable Verge Lining - Fibre Cement Sheeting Dirty brown-npainted brown-grey fibre-cement sheet material ~ 22 x 12 x 2 mm	No Asbestos Detected Organic Fibres
4	J127382-011-GERI 04	Geriatric Rehab Unit - Roof - Exterior - Throughout - Waterproof Membrane - Bituminous Material Black-brown bituminous, organic fibrous sheet material ~ 27 x 17 x 5 mm	No Asbestos Detected Organic Fibres
5	J127382-011-GERI 05	Geriatric Rehab Unit - Level 1 - Ceiling Space - Various Throughout - Ceiling - Fibre Cement Sheeting Unpainted gold-grey fibre-cement sheet material ~ 16 x 12 x 5 mm	No Asbestos Detected Organic Fibres

ENVIROLAB SERVICES

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CERTIFICATE OF ANALYSIS 114796

Client:

Noel Arnold & Associates Pty Ltd
Level 2, 11 Khartoum Rd
North Ryde
NSW 2113

Attention: Ben McCann

Sample log in details:

Your Reference:	**C107778:J127382-011**
No. of samples:	1 Material
Date samples received / completed instructions received	19/08/14 / 19/08/14

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.
Please refer to the last page of this report for any comments relating to the results.

Report Details:

Date results requested by: / Issue Date:	26/08/14 / 25/08/14
Date of Preliminary Report:	Not Issued

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Results Approved By:

Jacinta Hurst
Laboratory Manager

Sample Analysis Results

Wyong Hospital - Geriatric Building 13-08-2014

Client Reference: **C107778:J127382-011**

Lead (dust)		
Our Reference:	UNITS	114796-1
Your Reference	----------	J127382-011 -LD-01
Type of sample	----------	Dust
Lead	mg/kg	14

Envirolab Reference: 114796
Revision No: R 00

Client Reference: **C107778:J127382-011**

Method ID	Methodology Summary
Metals-020 ICP-AES	Determination of various metals by ICP-AES.

Client Reference: C107778:J127382-011

QUALITY CONTROL Lead (dust)	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Lead	mg/kg	1	Metals-020 ICP-AES	<1	[NT]	[NT]	LCS-2	103%

Client Reference: **C107778:J127382-011**

Report Comments:

Asbestos ID was analysed by Approved Identifier:	Not applicable for this job
Asbestos ID was authorised by Approved Signatory:	Not applicable for this job

INS: Insufficient sample for this test	PQL: Practical Quantitation Limit	NT: Not tested
NA: Test not required	RPD: Relative Percent Difference	NA: Test not required
<: Less than	>: Greater than	LCS: Laboratory Control Sample

Appendix C: Photographs

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Line ID 1: External, Geriatric Unit Ground Level, South Eastern Side, on Floor, Adjacent Stairs to Roof, Fibre Cement Sheet Debris - No Asbestos Detected

Line ID 2: External, Geriatric Unit Ground Level, South Western Side, Floor, Fibre Cement Sheet Debris - No Asbestos Detected

Line ID 3: External, Geriatric Unit Ground Level, Throughout, Awning, Fibre Cement Sheet - No Asbestos Detected

Line ID 4: External, Geriatric Unit Roof, Rooftop Plantroom, Ductwork Throughout, Mastic Sealant - No Asbestos Detected

Line ID 5: External, Geriatric Unit Roof, Rooftop Plantroom, Floor, Bituminous Membrane - No Asbestos Detected

Line ID 6: External, Geriatric Unit Roof, Rooftop Plantroom, to Walls, Construction Joint Mastic - No Asbestos Detected

Line ID 7: External, Geriatric Unit Roof, Rooftop Plantroom, Within Eastern Ductwork, Millboard Insulation to Heating Coils - Suspected Asbestos

Line ID 7.1: External, Geriatric Unit Roof, Rooftop Plantroom, Within Eastern Ductwork, Millboard Insulation to Heating Coils - Suspected Asbestos

Line ID 8: External, Geriatric Unit Roof, Rooftop Plantroom, Within Western Ductwork, Millboard Insulation to Heating Coils - Suspected Asbestos

Line ID 9: External, Paediatric Unit, Throughout, Window Frames, Mastic Sealant - Chrysotile Asbestos Detected

Line ID 10: External, Paediatric Unit, Northern Side, Wall, Mastic to Expansion Joint (lighter) - No Asbestos Detected

Line ID 11: External, Paediatric Unit, Northern Side, Wall, Mastic to Expansion Joint (darker) - No Asbestos Detected

Line ID 12: External, Paediatric Unit, South Side, Infill Panel Above Window, Fibre Cement Sheet - No Asbestos Detected

Line ID 13: External, Paediatric Unit, South Side, Ramp, Expansion Joint - No Asbestos Detected

Line ID 14: External, Paediatric Unit, Throughout, Cladding around Windows and Awnings, Fibre Cement Sheet - No Asbestos Detected

Line ID 15: External, Paediatric Unit, Throughout, Eaves, Fibre Cement Sheet - Chrysotile Asbestos Detected

Line ID 16: External, Paediatric Unit, Throughout, Old Ambulance Carport, Ceiling, Fibre Cement Sheet - Chrysotile Asbestos Detected

Line ID 19: Internal, Cancer Care Unit, Electrical Distribution Cupboard, Fire Doors, Fire Door Core - Suspected Asbestos

Line ID 20: Internal, Cancer Care Unit, Electrical Distribution Cupboard, Switchboard, HRC Fuses - Suspected Asbestos

Line ID 21: Internal, Cancer Care Unit, Western Corridor , Adjacent Electrical Distribution Cupboard, Doors, Fire Door Core - Suspected Asbestos

Line ID 22: Internal, Geriatric Unit, Rooftop Plant Rooms, Central Plant Areas on Southern Side, Compressed Cement Sheet - No Asbestos Detected

Line ID 23: Internal, Geriatric Unit, Rooftop Plant Rooms, Various Locations Throughout, Fibre Cement Sheet - No Asbestos Detected

Line ID 24: Internal, Geriatric Unit, Rooftop Plant Rooms, Within Ductwork Throughout, Millboard Insulation to Heating Coils - Suspected Asbestos

Line ID 25: Internal, Geriatric Unit Ground Level, Ceiling Space Above Doors to Cancer Unit, to Structural Beams, Vermiculite - No Asbestos Detected

Line ID 26: Internal, Geriatric Unit Ground Level, Meeting Room, to Beams, Vermiculite - No Asbestos Detected

Line ID 27: Internal, Geriatric Unit Ground Level, Throughout, Below Light Blue Vinyl Sheet, Screed - No Asbestos Detected

Line ID 28: Internal, Geriatric Unit Ground Level, Throughout, Floor Covering Throughout Rooms, Blue Vinyl Sheet - No Asbestos Detected

Line ID 29: Internal, Geriatric Unit Ground Level, Throughout, Floor Coverings, White Vinyl Sheet - No Asbestos Detected

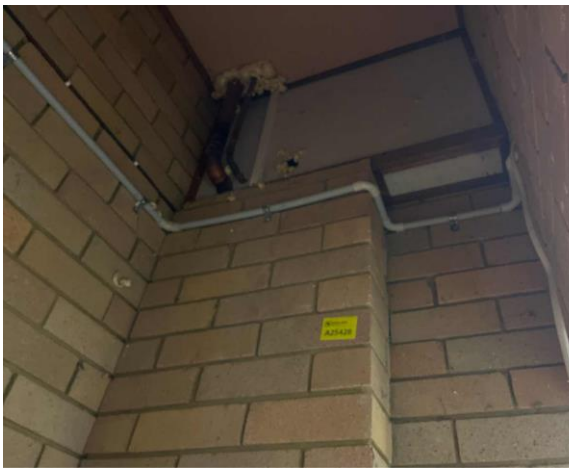
Line ID 30: Internal, Geriatric Unit Ground Level, Western Side, Window Frames, Mastic Sealant - No Asbestos Detected

Line ID 31: Internal, Paediatric Unit, Adjacent NUM Room 30083, Ceiling Space, Dust - Chrysotile Asbestos Detected

Line ID 32: Internal, Paediatric Unit, Adjacent NUM Room 30083, Ceiling Space, Fibre Cement Sheet Debris - Chrysotile Asbestos Detected

Line ID 33: Internal, Paediatric Unit, Adjacent NUM Room 30083, False Ceiling, Fibre Cement Sheet - Chrysotile Asbestos Detected

Line ID 33.1: Internal, Paediatric Unit, Adjacent NUM Room 30083, False Ceiling, Fibre Cement Sheet - Chrysotile Asbestos Detected



Line ID 34: Internal, Paediatric Unit, Bathroom Adjacent Reception 30084, High Infill Panel Within Cupboard, Fibre Cement Sheet - Chrysotile Asbestos Detected

Line ID 36: Internal, Paediatric Unit, Ceiling Space, Central Area, Floor, Compressed Cement Sheet - Chrysotile Asbestos Detected

Line ID 37: Internal, Paediatric Unit, Ceiling Space, Ductwork Throughout, Mastic - No Asbestos Detected

Line ID 38: Internal, Paediatric Unit, Ceiling Space, Switchboard, Bituminous Backing Board - Suspected Asbestos

Line ID 40: Internal, Paediatric Unit, Central Corridor, Ceiling Space Above Plaster Ceiling, Below Compressed Panels, Fibre Cement Sheet - Chrysotile Asbestos Detected

Line ID 41: Internal, Paediatric Unit, Procedure Room 30073, Below Green Vinyl Sheet, Paper Backing - Chrysotile Asbestos Detected

Line ID 42: Internal, Paediatric Unit, Room 8 30076, Below Green Vinyl, Paper Backing - Chrysotile Asbestos Detected

Line ID 43: Internal, Paediatric Unit, Room Adjacent Exit 30079, Walls to Telecom Pit, Compressed Cement Sheet - No Asbestos Detected

Line ID 44: Internal, Paediatric Unit, Short Stay Room 30069, Floor, Paper Backing under Green Vinyl - Chrysotile Asbestos Detected

Line ID 45: Internal, Paediatric Unit, South Western Room 30094, Below Green Vinyl, Light Green Vinyl Sheet and Paper Backing - Chrysotile Asbestos Detected

Line ID 46: Internal, Paediatric Unit, Southern Room 30089, Floor Covering, Light Green Vinyl Sheet and Paper Backing - Chrysotile Asbestos Detected

Line ID 47: Internal, Paediatric Unit, Throughout, Below Green Vinyl Sheet, Screed - Chrysotile Asbestos Detected

Line ID 48: Internal, Paediatric Unit, Throughout, Floor Covering, Green Vinyl Sheet - No Asbestos Detected

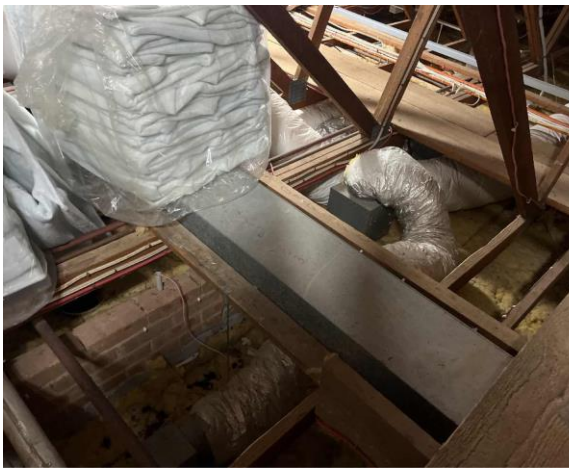
Line ID 51: External, Geriatric Unit Roof, Rooftop Plantroom, Air Conditioning Ductwork Throughout, Grey (Light) Paint - Lead Detected (0.02% w/w)

Line ID 52: External, Paediatric Unit, Eastern Side, to Timber, Yellow Paint - Lead Detected (1.8% w/w)

Line ID 53: Internal, Paediatric Unit, Throughout, Doors and Frames, Aqua Paint - Lead Detected (<0.005% w/w)

Line ID 54: Internal, Paediatric Unit, Throughout, Doors and Frames, White Paint - Lead Detected (0.005% w/w)

Line ID 55: Internal, Paediatric Unit, Throughout, Doors and Frames, Blue (Dark) Paint - Lead Detected (0.04% w/w)



Line ID 56: Internal, Geriatric Unit, Rooftop Plant Rooms, Northern Side Throughout, Dust - Lead Detected (420 mg/kg)

Line ID 57: Internal, Geriatric Unit, Rooftop Plant Rooms, South Side Throughout, Dust - Lead Detected (160 mg/kg)

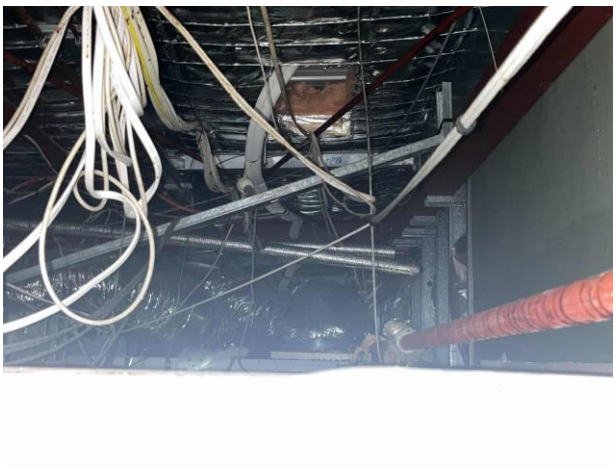
Line ID 60: External, Geriatric Unit Roof, Rooftop Plantroom, Ductwork Throughout, Internal Insulation - Suspected SMF

Line ID 61: External, Geriatric Unit Roof, Rooftop Plantroom, Pipework Throughout, Internal Insulation - Suspected SMF

Line ID 62: Internal, Cancer Care Unit, Cleaners Room, Hot Water Heater, Internal Insulation - Suspected SMF

Line ID 63: Internal, Cancer Care Unit, East and West Sides, Ceiling, Compressed Ceiling Tiles - Suspected SMF

Line ID 65: Internal, Cancer Care Unit, East and West Sides, Flexible Ductwork, Internal Insulation - Suspected SMF

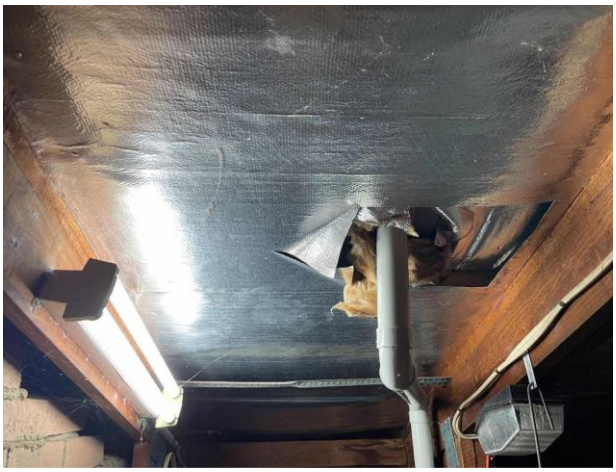


Line ID 66: Internal, Cancer Care Unit, East and West Sides, Pipework Throughout Ceiling Space, External Insulation - Suspected SMF

Line ID 67: Internal, Cancer Care Unit, East and West Sides, Throughout Ceiling Space, Sarking Insulation - Suspected SMF

Line ID 68: Internal, Cancer Care Unit, East and West Sides, Throughout Ceiling Space, Insulation Batts - Suspected SMF

Line ID 69: Internal, Cancer Care Unit, Kitchen, Boiler Below Sink, Internal Insulation - Suspected SMF



Line ID 70: Internal, Geriatric Unit, Rooftop Plant Rooms, Ceiling Throughout, Sarking Insulation - Suspected SMF

Line ID 71: Internal, Geriatric Unit, Rooftop Plant Rooms, Flexible Ductwork Throughout, Internal Insulation - Suspected SMF

Line ID 72: Internal, Geriatric Unit, Rooftop Plant Rooms, Pipework Throughout, External Insulation - Suspected SMF

Line ID 73: Internal, Geriatric Unit, Rooftop Plant Rooms, Rigid Ductwork Throughout, External Insulation - Suspected SMF

Line ID 74: Internal, Geriatric Unit, Rooftop Plant Rooms, Throughout Floor, Insulation Batts - Suspected SMF

Line ID 75: Internal, Geriatric Unit, Rooftop Plant Rooms, Walls Throughout, Sarking Insulation - Suspected SMF

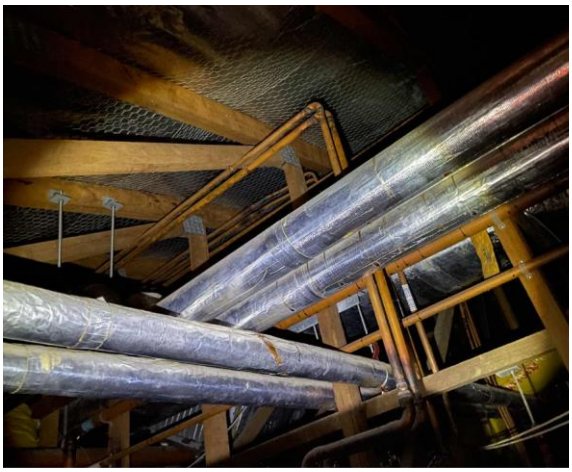
Line ID 76: Internal, Geriatric Unit Ground Level, Ceiling Space, Flexible Ductwork Throughout, Insulation Material - Suspected SMF

Line ID 77: Internal, Geriatric Unit Ground Level, Ceiling Space, Pipework Throughout, Insulation Material - Suspected SMF

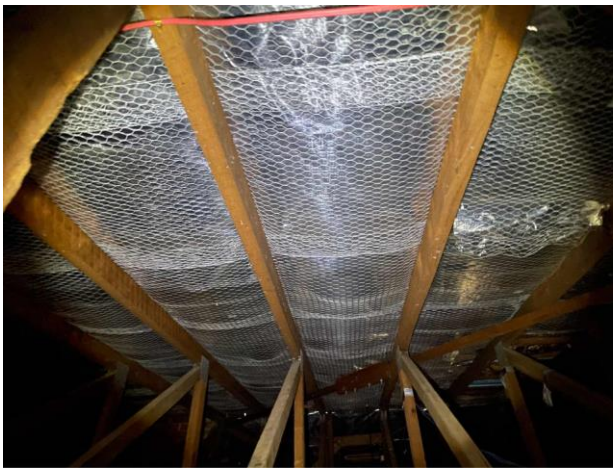
Line ID 78: Internal, Geriatric Unit Ground Level, Ceiling Space, Throughout, Sarking Insulation - Suspected SMF

Line ID 79: Internal, Geriatric Unit Ground Level, Throughout, Hallways and Rooms, Compressed Ceiling Tiles - Suspected SMF

Line ID 80: Internal, Paediatric Unit, Ceiling Space, Flexible Ductwork Throughout, Insulation Material - Suspected SMF



Line ID 81: Internal, Paediatric Unit, Ceiling Space, Pipework Throughout, External Insulation - Suspected SMF



Line ID 82: Internal, Paediatric Unit, Ceiling Space, Throughout, Sarking Insulation - Suspected SMF

Line ID 83: Internal, Paediatric Unit, Ceiling Space, Throughout, Insulation Batts - Suspected SMF

Line ID 84: Internal, Paediatric Unit, Central Corridor, Hot Water Heater, Above Sink, Internal Insulation - Suspected SMF

Line ID 85: Internal, Paediatric Unit, Kitchen 30074, Hot Water Heater, Above Sink, Internal Insulation - Suspected SMF

Line ID 86: External, Paediatric Unit, Throughout, Light Fittings, Ballast(s) and Capacitor(s) - Suspected PCB

Line ID 87: External, Cancer Care Unit Ground Level, East Side, Mitsubishi AC Unit, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 87.1: External, Cancer Care Unit Ground Level, East Side, Mitsubishi AC Unit, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 88: External, Cancer Care Unit Ground Level, South Side, Mitsubishi AC Unit, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 89: External, Geriatric Unit Roof, Rooftop Plantroom, Mitsubishi AC units, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 89.1: External, Geriatric Unit Roof, Rooftop Plantroom, Mitsubishi AC units, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 89.2: External, Geriatric Unit Roof, Rooftop Plantroom, Mitsubishi AC units, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 90: External, Geriatric Unit Roof, Rooftop Plantroom, Temperzone AC Units, R410A Hydrofluorocarbon (HFC) - Non ODS Refrigerant

Line ID 91: External, Paediatric Unit, Northern Side, Mitsubishi AC Unit, Unknown Refrigerant - Non ODS Refrigerant

Line ID 92: External, Paediatric Unit, South Side, Daikin AC unit, Unknown Refrigerant - Suspected ODS

Line ID 93: Internal, Paediatric Unit, Electrical Cupboard, - No Access

Appendix D: Risk Assessment

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Risk Assessment

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

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

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

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

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

Table 2 - Risk Scores

Overall Risk Assessment Score	Overall Risk Rating
0 – 4	Very Low
5 – 8	Low
9 – 13	Moderate
14 – 18	High

Table 3 – Product Type (or debris)

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

Table 4 – Extent of Damage or Deterioration

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

Table 5 – Surface type and treatment

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

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

Appendix E: Legislative Requirements

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Legislative Requirements

The assessment, and preparation of this report have been undertaken in accordance with the requirements of State/Territories legislation and standards outlined below.

State/Territories Relevant Legislation

States & Territories	Acts	Legislation
Australian Capital Territory (ACT)	ACT Work Health & Safety Act 2011	ACT Work Health & Safety Regulation 2011
New South Wales (NSW)	NSW Work Health & Safety Act 2011	NSW Work Health & Safety Regulation 2017
Northern Territory (NT)	NT Work Health & Safety Act 2011	NT Work Health & Safety Regulation 2017
Queensland (QLD)	QLD Work Health & Safety Act 2011	QLD Work Health & Safety Regulation 2011
South Australia (SA)	SA Work Health & Safety Act 2012	SA Work Health & Safety Regulation 2012
Tasmania (TAS)	Tasmanian Work Health & Safety Act 2012	Tasmanian Work Health & Safety Regulation 2012
Victoria (VIC)	Victorian Occupational Health and Safety Act 2004	Victorian Occupational Health and Safety Regulation 2017
Western Australia (WA)	Occupational Safety and Health Act 1984	Occupational Safety and Health Regulation 1996

States/Territories Code of Practices & Compliance Codes

States & Territories	Codes of Practices & Compliance Codes	
Australian Capital Territory (ACT)	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.
New South Wales (NSW)	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.
Northern Territory (NT)	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.
Queensland (QLD)	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.
South Australia (SA)	Code of Practice: How to manage and Control asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.
Tasmania (TAS)	Code of Practice: How to Manage and Control Asbestos in the Workplace.	Code of Practice: How to Safely Remove Asbestos.
Victoria (VIC)	Compliance Code: Managing Asbestos in Workplaces.	Compliance Code: Removing Asbestos in Workplaces.

Western Australia (WA)	Code of Practice for Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)].	Code of Practice for the Safe Removal of Asbestos [NOHSC:2002(2005)]

The Victorian Compliance Codes align with the intent of the SafeWork Australia Model Code of Practice

Hazardous Materials Standard & Guidance Notes

Hazardous Material	Guidance Notes
Lead Based Paint	AS/NZS *4361.2:2017* Guide to hazardous paint management – Part 2: Lead paint in residential, public and commercial buildings
Lead Containing Dust	National Environmental Protection Measure (NEPM) (NEPC,1999) as updated in 2013.
Synthetic Mineral Fibres	National Occupational Health and Safety Commission (1990) Synthetic Mineral Fibres; National Standard for Synthetic Mineral Fibres; and the National Code of Practice for the Safe Use of Synthetic Mineral Fibres
Polychlorinated Biphenyls	ANZECC (1997) Identification of PCB-containing Capacitors: An Information Booklet for Electricians and Electrical Contractors
Ozone Depleting Substances	UNEP (2001) Inventory of Trade Names of Chemical Products containing Ozone Depleting Substances and their Alternatives

Each section is to be read in conjunction with the whole of this report, including the appendices.

Appendix F: Methodology

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Methodology

Hazmat surveys are undertaken considering a risk management approach, in accordance with relevant statutory regulations and relevant Codes of Practice. A risk assessment was conducted based on a number of factors associated with hazmat identified during the survey and prioritised through Risk and Action Classifications.

The assessment involved the onsite investigation for the presence of ACM, SMF, LBP systems, LCD, PCB and ODS including chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs). Information was collected from the site owners/occupiers/tenants where available on relevant issues pertaining to the site. Based on the available data and the status at the time of inspection, where items were identified, visual and/or analytical characterisation (where required) was performed and reported in **Appendix A: Asbestos and Hazardous Materials Register**.

The assessment was conducted on the basis of the condition, type and location of the materials at the time of inspection. The scope of this investigation did not allow intrusive sampling techniques to be undertaken in all locations, and consequently the register may have limitations as a reference document for the purposes of renovation or demolition.

Only ‘typical’ suspected material occurrences are inspected and sampled. Sampling is undertaken on a representative basis, for example, the inspection of one fire door of the same type within the same area is undertaken (i.e. not every ‘matching’ fire door is examined), unless specifically instructed. Sample collection was performed in a non-destructive and non-invasive manner by competent persons. Presumptions, based on knowledge and experience, that inaccessible areas contain asbestos materials may also be made and stated within the register.

Samples collected are representative of the material sampled, individually identified, transported, analysed and reported in accordance with relevant Statutory Regulations, Codes of Practice and Tetra Tech’s Work Instructions. Laboratories undertaking analysis are appropriately NATA certified for the analysis conducted. LCD thresholds are adopted from lead in soil thresholds found in the National Environment Protection Assessment of Site Contamination (ASC) Measure (1999) as amended in 2013 (NEPM).

The presence of asbestos in bulk samples is determined by Polarised Light Microscopy (PLM) with dispersion staining techniques. Where asbestos was found to exist, a risk assessment was conducted on each item and a priority rating applied. This was conducted in accordance with the protocols described in **Appendix D: Risk Assessment**.

The asbestos and hazmat register is made up of relevant information gathered on site plus Tetra Tech’s assessment of risk and assignment of action ratings. Reference to photographs, where available, is made in the register along with sample identification and analysis results, where applicable. Sample analysis results from previous assessments may be utilised and referenced in this register.

Appendix G: Statement of Limitations

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Statement of Limitations

Tetra Tech has conducted work concerning the environmental status of the property which is the subject of this report and has prepared this report on the basis of that assessment.

The work was conducted, and the report has been prepared, in response to specific instructions from the client to whom this report is addressed, within the time and budgetary requirements of the client, and in reliance on certain data and information made available to Tetra Tech. The analyses, evaluations, opinions and conclusions presented in this report are based on those instructions, requirements, data or information, and they could change if such instructions etc. are in fact inaccurate or incomplete.

Investigations have been based on inspections conducted in accordance with relevant guidelines and standards, and normal industry practice, having regard to the client's instruction, and interpretations of conditions are based on the data from those inspections and, where relevant and conducted, testing. To the best of our knowledge, they represent a reasonable interpretation of the condition of the site as able to be inspected.

This report has been provided by Tetra Tech for the sole use of the client and only for the purpose for which it was prepared. Any representation contained in the report is made only for the client.

No inspection can be guaranteed to locate all asbestos in a specific location. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

The assessment brief is to identify every reasonably accessible hazmat. Reasonably accessible does not extend to searching for concealed hazmat beneath concrete encased structural beams or beneath concrete floors, behind another hazmat, or any other locations which, to access, would cause structural damage that could potentially destabilise the structure or the building. Given the way in which hazmat was used in the construction of buildings, some may only be detected during the course of subsequent demolition.

Any areas within the remit of the assessment but not described within the body of the report or in the hazmat register should be regarded by the client as un-assessed, and suspected as ACM potentially containing amphibole asbestos. A competent person should assess such areas before any work affecting them is carried out.

It must be assumed that materials visually assessed as presumed asbestos contain amphibole asbestos, unless sampled and analysed to prove otherwise. All areas where access was not possible must also be presumed to contain asbestos until proven otherwise.

Asbestos Containing Materials

Tetra Tech assessors take samples at any situations known, or suspected, to contain Asbestos. Where the analysis determines that No Asbestos is Detected (NAD) the samples are listed in the report to provide information for potential future assessments.

Representative sampling is defined as one like sample per consistent material type, situation or item. In these instances, only one test sample will be collected for analytical confirmation and the results expressed as consistent and typical of the building. It is advisable to presume that materials similar to those positively identified as asbestos also contain asbestos until proved otherwise. It should not be presumed that materials similar in appearance to those tested and found not to contain asbestos also do not contain asbestos.

Due to the very low concentration of asbestos fibres and the non-homogenous matrix of vinyl floor tiles, false negative results may be obtained. Therefore, the accuracy of all results cannot be guaranteed.

Notably, with some asbestos containing bulk material it can be very difficult, or impossible to detect the presence of asbestos using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the low grade or small length or diameter of asbestos fibres

present in the material, or attributed to the fact that, very fine fibres have been distributed individually throughout the materials.

The analysis of many asbestos products used as a component of insulation materials, may be compromised in instances where the material has been heat affected, as heat may alter the morphology of the fibrous material.

Internal building materials should be assumed to contain asbestos until otherwise assessed.

Subsurface drains and pipes may be constructed of asbestos cement, but this could not be assessed. Any subsurface pipes, particularly those constructed of fibre-cement or concrete, should be assumed to contain asbestos until otherwise assessed.

It is also noted that sub-surface conditions can change with time, and the report is based on data that was gathered at the time of the report. Tetra Tech will not update the report and has not taken into account events occurring after the time the assessment was conducted.

The following limitations and restrictions to specific materials, installations and locations are commonly found during assessments of this nature, even if safe access can be provided through consultation with the client this inspection and report may not include the following areas:

- **Risers / Ceiling, Floor or Wall Cavities, and Voids** - may be completely blocked or bricked in. Occasionally may only be detected if shown on building construction plans or during demolition
- **Columns / Structural Elements** - these will not be penetrated if doing so will damage the stability of the building
- **Roofs / External Areas** - these will not be checked if safe access cannot be achieved
- **Confined Spaces** - these will not be checked if safe access cannot be achieved
- **Restricted Access** - areas subject to restricted access will not be checked unless special arrangements have been made through the client within the remit of the assessment
- **Live Plant or Electrical Installations** - live electrical installations including fuse boxes, electrical control cabinets, distribution panels etc. are not routinely checked for safety reasons. Electrical equipment will only be examined if it is locked off and an isolation certificate has been issued. Under exceptional circumstances, when arranged by the client, examination of non-isolated equipment may take place under the supervision of an electrician
- **Live Refrigerators / Cold Rooms / Mechanical Equipment / Heater Units / Kilns** - may contain asbestos internally, which is not visible or accessible until the unit is isolated and dismantled

The Client must not rely on an inspection or report as indicating that a site or a building is “asbestos free”. All that the report can be relied upon to show is that no asbestos was found (or that only such asbestos was found as was reported to be found) in the course of the inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.

This report does not comment on, or present information regarding regulatory waste disposal practices and the associated waste disposal legislative requirements for hazardous materials. Prior to the disposal of any hazardous materials from site, clarification from the EPA should be sought by you, the client or the controller of the site (PCBU).

As part of the site inspection, materials may be suspected to be non-hazardous based on age and/or appearance. If any of these materials are damaged or likely to be disturbed, due to (but not limited to) maintenance activities or building inspections, a risk assessment and sampling of this material, with analytical confirmation should be undertaken in conjunction with the processes outlined in the Asbestos Management Plan (AMP) for the site.

Materials including (but not limited to) e.g. fire retardants, vermiculite, sprayed coatings and insulations cannot be feasibly sampled in their entirety due to the heterogeneous nature of such materials. Sample results provided are only representative of the material sampled, and in that particular sample location. If any such materials are damaged or likely to be disturbed, due to (but not limited to) maintenance activities or building inspections, a risk assessment and targeted area sampling, with analytical

confirmation should be undertake in conjunction with the processes outlined in the Asbestos Management Plan (AMP) for the site.

Should any other material suspected to contain asbestos or hazmat be found at the site, then works should cease and a suitably trained asbestos hygienist should be engaged to sample or assess the material.

Appendix H: Site Plan

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REFER TO B1211

PATHOLOGY (576.9m²)

MEDICAL STAFF WORKSPACES (MSW)(515.4m²)

REFER TO C1213

CARER SUPPORT UNIT (CSU) (176.3m²)

920W OPENING

REFER TO B1212

WYONG WOMEN'S CENTRE CLINIC (WWCC) (608.8m²)

SHARED AMENITIES (52.8m²)

SHARED SUPPORT (113.4m²)

NUNYARA ABORIGINAL HEALTH UNIT (NAHU) (370.5m²)

CANCER DAY UNIT (CDU) (1673.3m²)

REFER TO C1214

KEY PLAN

ROOM DEPARTMENT LEGEND

- Cancer Day Unit
- Cancer Day Unit Circulation
- Cancer Day Unit Existing
- Carer Support Unit
- Carer Support Unit Circulation
- EXISTING
- Medical Staff Workspace
- Medical Staff Workspace Circulation
- Nunyara Aboriginal Health Unit
- Nunyara Aboriginal Health Unit Circulation
- Pathology
- Pathology Circulation
- Shared Amenities
- Shared Amenities Circulation
- Shared Support
- Shared Support Circulation
- Travel & Engineering
- Wyong Women's Centre Clinic
- Wyong Women's Centre Clinic Circulation

Notes

Verify all dimensions and levels on site and report any discrepancies to dwp for direction prior to the commencement of work.

Drawings are to be read in conjunction with all other contract documents.

Use figured dimensions only. Do not scale from drawings. dwp cannot guarantee the accuracy of content and format for copies of drawings issued electronically. The completion of the Issue Details Checked and Authorised section isconfirmation of the status of the drawing. The drawing shall not be used forconstruction unless endorsed 'For Construction' and authorised for issue.

LEGEND:

= FIRE RATED ELEMENT

= SMOKE PROOF ELEMENT

*THIS COMPARTMENT PLAN IS FOR DIAGRAMMATIC PURPOSES ONLY. REFER TO OTHER DOCUMENTS FOR SPECIFIC DETAILS ON ELEMENTS.

1:200@ 5 10 m

DESIGN DEVELOPMENT

NOT TO BE USED DURING CONSTRUCTION

Issue	Description	Date	Chk	Auth
A	FOR INFORMATION	20.06.2023	DS	DC

Architect/ Designer
dwp
www.dwp.com

Client
HEALTH INFRASTRUCTURE

NSW GOVERNMENT Health Infrastructure

Location
WYONG PUBLIC HOSPITAL
Pacific Hwy, Hamlyn Terrace NSW 2259

Project
WYONG HOSPITAL STAGE 3 REDEVELOPMENT

Drawing
OVERALL PROPOSED NEW WORK

Scale (A1)
As indicated

Date Printed
22/06/2023 9:59:40 AM

Project Number
22-0064

Drawing Number
A0005

Issue
A

File Name: BIM 360://22-0064_Wyong Hospital Redevelopment - Stage 3/22-0064-AR-WHR3-R21.rvt