

Hazardous Building Materials Assessment Elkington Park Caretakers Cottage Fitzroy Avenue, Balmain NSW 2041

Inner West Council

April 2018

Client No.: S0149

Client: Inner West Council

Job No.: 57722-156

Count ID: CID: 134



Executive Summary

Introduction

Prensa Pty Ltd (Prensa) was engaged by Inner West Council (IWC) to conduct a Hazardous Building Materials Assessment (Assessment) of Elkington Park Caretakers Cottage located at Fitzroy Avenue, Balmain NSW 2041 (the site). Mackenzie Morrison, Patricy Cortes and Jessica Wood of Prensa conducted the Assessment on 23rd February 2018 at the request of Rick Jarvis of IWC.

The objective of this Assessment was to identify and assess the health risk posed by hazardous building materials which are considered accessible during normal occupation of the building.

Scope of Works

The scope of the Assessment included the interior and exterior of Elkington Park Caretakers Cottage located at Fitzroy Avenue, Balmain NSW 2041.

Specifically, Prensa included the following hazardous building materials in the scope of this Assessment:

- Asbestos-containing materials (ACM); and

Other Hazardous Materials (OHMs) inclusive of:

- Synthetic mineral fibre (SMF) materials;
- Polychlorinated biphenyls (PCB) containing capacitors in electrical fittings;
- Lead-containing paint (LCP); and
- Ozone depleting substances (ODS).

Methodology

The Assessment comprised a review of available information, interviews with available site personnel and a visual inspection of reasonably accessible areas. The Assessment was conducted in accordance with the current NSW Work Health and Safety Act 2011 and Regulation 2017.

Site Description

The site consists of a single building. Details of the building contained within this site are provided in **Table 1** below.

Table 1: Site Information			
Site:	CID: 134 – Elkington Park Caretakers Cottage, Fitzroy Avenue, Balmain NSW 2041		
Age (Circa):	1960's	External walls:	Brick and timber
Approximate area:	200 m ²	Internal walls:	Fibre cement sheeting and concrete
Levels:	1	Ceiling:	Fibre cement sheeting and plasterboard
Roof type:	Corrugated metal	Floor and coverings:	Timber, vinyl and ceramic tiles

Asbestos Risk Profile

The following table gives a summary of the Hazardous Building Materials identified or suspected during the Assessment:

Site Name	Number of items			OHM Requires Remediation
	ACM			
	High	Medium	Low	
Elkington Park Caretakers Cottage	0	0	9	1

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1. Hazardous Building Materials Register

Key to hazardous building materials priority risk rating:	
ACM Priority 1 (P1):	High Priority – Requiring immediate action
ACM Priority 2 (P2):	Medium Priority – May require action in the short term (12 months)
ACM Priority 3 (P3):	Low Priority – May require action in the medium term (3 years)
ACM Priority 4 (P4):	Very Low Priority – Requires ongoing management or longer term remedial action (5 years)
OHM Action Required	All Other Hazardous Materials that require remediation in the short term.

Important Note:

Priority Ratings listed above are only applicable to hazardous materials that require remediation. Where there is no remediation necessary, hazardous materials should be re-inspected in accordance with the dates listed in the register (typically 5 yearly for ACM in good condition).

Client: Inner West Council

Site Name: CID: 134 - Elkington Park Caretakers Cottage

Site Address: Fitzroy Avenue, Balmain NSW 2041

Client No.: S0149

Job No.: 57722-156

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friability	Disturb. Potential	Condition	Risk Status	Approx. Quantity	Recommendations & Comments	Control Priority	Reinspect Date	Photo No.
Exterior	Throughout	Window frames	Window caulking	Asbestos	57722-156-003	Negative	-	-	-	-	-	-	-	-	1
Exterior	Rear extensions, throughout	Upper walls	Fibre cement sheeting	Asbestos	57722-156-004	Positive	Non-friable	Low	Fair	Medium	30 m ²	Encapsulate exposed sections, label as containing asbestos and maintain in a good 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.	P3	Mar-20	2
Exterior	Rear extensions, laundry, kitchen, bathroom, throughout	Eaves	Fibre cement sheeting	Asbestos	Not sampled: Height restriction	Suspected Positive	Non-friable	Low	Good	Low	16 m ²	Confirm status, label as containing asbestos 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.	P4	Mar-23	3
Interior	Shed/ rear toilet, throughout	Walls	Fibre cement sheeting	Asbestos	57722-156-001	Positive	Non-friable	Low	Good	Low	20 m ²	Label as containing asbestos 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.	P4	Mar-23	4
Interior	Laundry, throughout	Walls	Fibre cement sheeting	Asbestos	57722-156-002	Positive	Non-friable	Low	Good	Low	20 m ²	Label as containing asbestos 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.	P4	Mar-23	5
Interior	Kitchen, throughout	Walls	Fibre cement sheeting	Asbestos	Same as 57722-156-002	Assumed Positive	Non-friable	Low	Good	Low	40 m	Label as containing asbestos 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.	P4	Mar-23	6
Interior	Laundry, throughout	Ceiling	Fibre cement sheeting	Asbestos	Same as 57722-156-002	Positive	Non-friable	Low	Good	Low	6 m ²	Label as containing asbestos 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.	P4	Mar-23	5
Interior	Kitchen, throughout	Ceiling	Fibre cement sheeting	Asbestos	Same as 57722-156-002	Assumed Positive	Non-friable	Low	Good	Low	20 m ²	Label as containing asbestos 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.	P4	Mar-23	6
Interior	Bathroom, throughout	Walls	Fibre cement sheeting	Asbestos	Same as 57722-156-002	Assumed Positive	Non-friable	Low	Good	Low	20 m ²	Label as containing asbestos 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.	P4	Mar-23	7
Interior	Bathroom, throughout	Ceiling	Fibre cement sheeting	Asbestos	Same as 57722-156-002	Assumed Positive	Non-friable	Low	Good	Low	6 m ²	Label as containing asbestos 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.	P4	Mar-23	7
Interior	Shed/ eastern elevation, rear toilet	Cistern	Moulded fibre cement	Asbestos	-	Suspected Negative	-	-	-	-	-	Suspected negative due to appearance.	-	-	-
Interior	Laundry	Hot water heater	Insulation material - internal	SMF	-	Suspected Positive	Bonded	Low	Good	Low	1 unit	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)].	-	-	8
Throughout	-	-	-	PCBs	-	-	-	-	-	-	-	No suspect PCB-containing capacitors identified at the time of the assessment.	-	-	-

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friability	Disturb. Potential	Condition	Risk Status	Approx. Quantity	Recommendations & Comments	Control Priority	Reinspect Date	Photo No.
Exterior	Throughout	Walls and awning features	White - upper coloured paint system	Lead Paint - Swab	-	Suspected Positive	-	Low	Good	Low	500 m ²	Confirm status by quantitative test method, maintain in current condition, over paint with a lead-free paint as part of ongoing maintenance. Remove under controlled conditions in accordance with AS 4361.2:2017 Guide to hazardous paint management prior to renovation or demolition works.	-	-	9
Exterior	Throughout	Windows and door frames	Beige - upper coloured paint system	Lead Paint - Swab	-	Positive	-	Low	Poor	Medium	60 m	Remove flaking sections and over paint with a lead-free paint. Remove under controlled conditions in accordance with AS 4361.2:2017 Guide to hazardous paint management prior to renovation or demolition works.	-	-	10
Interior	Throughout	Walls and ceiling	White - upper coloured paint system	Lead Paint - Swab	-	Suspected Positive	-	Low	Good	Low	600 m ²	Confirm status by quantitative test method, maintain in current condition, over paint with a lead-free paint as part of ongoing maintenance. Remove under controlled conditions in accordance with AS 4361.2:2017 Guide to hazardous paint management prior to renovation or demolition works.	-	-	-
Interior	Throughout	Windows and door frames	Dark beige - upper coloured paint system	Lead Paint - Swab	-	Suspected Positive	-	Low	Good	Low	60 m	Confirm status by quantitative test method, maintain in current condition, over paint with a lead-free paint as part of ongoing maintenance. Remove under controlled conditions in accordance with AS 4361.2:2017 Guide to hazardous paint management prior to renovation or demolition works.	-	-	-
Throughout	-	-	-	Ozone Depleting Substances	-	-	-	-	-	-	-	No suspect ODS's identified at the time of the assessment.	-	-	-
Throughout, Roofspace	-	-	-	-	-	-	-	-	-	-	-	No access at the time of the assessment.	-	-	-

2. Photographs




KEY	
	Confirmed or suspected ACM
	Confirmed or suspected other hazardous material type (SMF, PCB, LCP or ODS)
	Confirmed or suspected non-ACM or other non-hazardous material



Photo 1. Exterior, throughout, window frames – non asbestos-containing window caulking.



Photo 2. Exterior, rear extensions, throughout, upper walls – asbestos-containing fibre cement sheeting.



Photo 3. Exterior, rear extensions, throughout, eaves – suspected asbestos-containing fibre cement sheeting.



Photo 4. Interior, shed/rear toilet, walls – asbestos-containing fibre cement sheeting.



Photo 5. Interior, laundry, walls and ceiling – asbestos-containing fibre cement sheeting.



Photo 6. Interior, kitchen, walls and ceiling – assumed asbestos-containing fibre cement sheeting.



Photo 7. Interior, bathroom, walls and ceiling – assumed asbestos-containing fibre cement sheeting.



Photo 8. Interior, laundry, hot water heater – suspected SMF internal insulation material.



Photo 9. Exterior, throughout, walls and awnings – suspected lead-containing white upper paint systems.



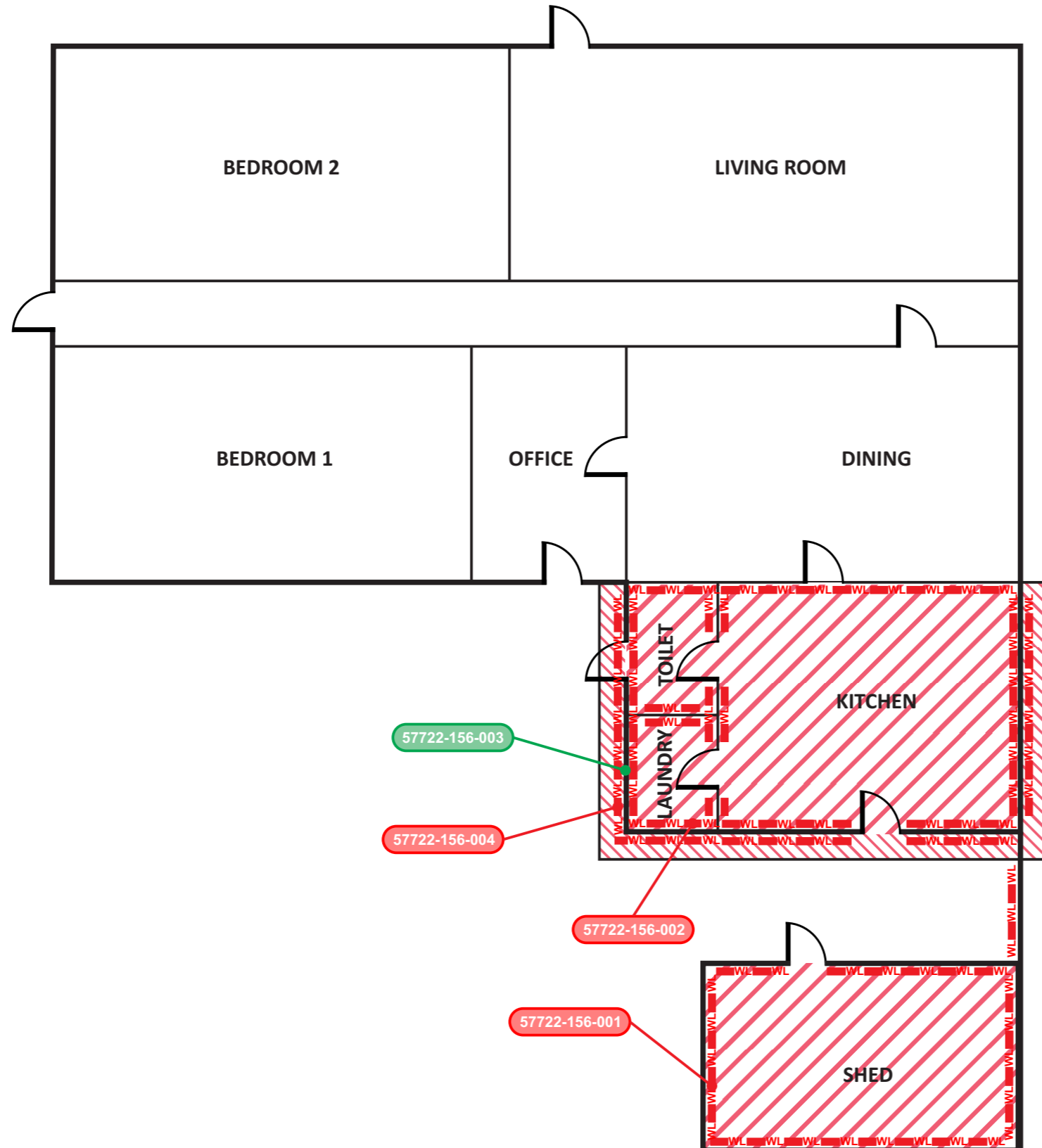
Photo 10. Exterior, windows and door frames – lead-containing beige upper paint systems.

3. Site Plan

Important Note:

*Only asbestos-containing materials (ACM) have been labelled on the attached site plan to prevent confusion and ensure that these materials are given priority for action. Therefore, other hazardous materials may be present within the building and the register attached in **Section 1** should be consulted prior to work commencing.*

Elkington Park Caretakers Cottage, Balmain - Ground Level



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Client: Inner West Council

Project: Hazardous Building
Materials Assessment

Address: Fitzroy Street,
Balmain NSW 2041

Drawing Title:
Elkington Park Caretakers Cottage

Job No.: 57722-156 | Client No.: S0149

IWC Code: CID 134

- Legend:**
- 57722-156-XXX Positive Asbestos Sample
 - 57722-156-XXX Negative Asbestos Sample
 - Eaves
 - Ceiling Lining
 - Wall Lining



Note:
All locations are approximate

Drawn by: SL	Date: 11/04/2018
Checked by: MM	Date: 11/04/2018
Figure number: 1	Revision: 2
File name: 57722- 157 - Rev 2	

4. Findings

Document Review and Interviews

As part of this Assessment, Prensa requested copies of previous documentation pertaining to hazardous building materials at the site.

IWC made available to Prensa a previous survey report that had been carried out by EBG Environmental Geoscience, dated January 2011. The survey report (*Hazardous Materials Audit – Elkington Park Caretakers Cottage, HMA-02072.rpt*) is understood to be the most recent survey report for this site. The EBG report does not include a NATA accredited bulk sample analysis report and fails to state if ACMs mentioned have been confirmed by analysis or are suspected to be positive based on age and appearance. As these key data points are not included, this information may be deemed unreliable and based on the Prensa consultants on site Assessment may not be included in Prensa’s report unless specified otherwise.

Asbestos Bulk Sample Analysis

A total of four (4) samples suspected to contain asbestos were collected and submitted to Prensa’s NATA accredited laboratory for analysis. The asbestos bulk sample analysis report is provided in **Appendix C: NATA Endorsed Laboratory Sample Analysis Report** of this Assessment report. In summary, three (3) sample were reported to contain asbestos.

Assessment Findings

The findings of this Assessment are presented in tabulated format in **Section 1. Hazardous Building Materials Register** of this Assessment report. Hazardous building materials that have been photographed are depicted in **Sections 2. Photographs** of this Assessment report.

The following hazardous building materials were identified or suspected during the Assessment:

Property	Asbestos-containing Materials		Synthetic Mineral Fibre	Poly-chlorinated Biphenyls	Lead-containing Paint	Ozone Depleting Substances
	Non-friable	Friable				
Elkington Park – Caretakers Cottage	✓	-	✓	-	✓	-

The following significant key findings are noted:

Asbestos-containing Materials

- Non-friable asbestos was suspected in the form of fibre cement sheeting to the eaves.
- Non-friable asbestos was identified and assumed in the form of fibre cement sheeting located throughout the walls and ceiling in the shed, bathroom, kitchen and laundry.
- Non-friable asbestos was identified in the form of fibre cement sheet to the exterior upper walls around the rear extension of the building at the time of the Assessment.

Synthetic Mineral Fibre Materials

- SMF internal insulation material was suspected within the hot water heater located in the laundry.

Polychlorinated Biphenyls

- No PCBs were identified or suspected during the Assessment.

Lead-containing Paint

- LCP was identified in the form of beige upper paint systems to the windows and door frames of.
- LCP was suspected in the form of white and dark beige upper coloured paint systems throughout.

Ozone depleting substances

- No ODS-containing air conditioning units were identified or suspected during the Assessment.

Areas Not Accessed

Areas that are generally not accessed as part of Prensa's Assessments are listed in **Appendix B: Areas Not Accessed**. Site-specific areas that were inaccessible during Prensa's Assessments and were deemed likely to contain asbestos are also listed in **Appendix B: Areas Not Accessed** and **Sections 1. Hazardous Building Materials Register**.

5. Methodology

The Assessment comprised a review of relevant site information made available to Prensa, interviews with available site personnel and a visual inspection of accessible areas and destructive sampling techniques where necessary.

The methodology for assessing the hazardous building materials at the site is presented in the following sections.

Asbestos-containing Materials - This component of the Assessment was carried out in accordance with the guidelines documented in the relevant Codes of Practice. When safe to do so, building materials that were suspected of containing asbestos were sampled at the discretion of the Prensa consultant. Samples of suspected ACMs were analysed in Prensa's laboratory, which is NATA accredited to conduct asbestos bulk sample analysis. The analysis was conducted using polarised light microscopy including dispersion staining techniques.

Synthetic Mineral Fibres - This component of the Assessment was carried out in accordance with the guidelines documented in the *Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC: 2006 (1990)]. This report broadly identifies SMF materials found or suspected of being present during the Assessment and is based on a visual Assessment.

Polychlorinated Biphenyls - Where safely accessible, specifications of capacitors incorporated in light fittings and ceiling fans were recorded and cross-referenced with the Australian and New Zealand Environment Conservation Council (ANZECC) *Identification of PCB-containing Capacitors information booklet* – 1997. Due to the danger of accessing electrical components, or for other reasons, such as height restrictions, some electrical fittings may not have been accessed. In these instances, comment is provided in the Assessment report on the likelihood of PCB-containing materials being present. This determination is based upon the age and appearance of the electrical fittings.

Lead-containing Paint - Representative painted surfaces were tested in locations for the presence of lead using the qualitative *LeadCheck* paint swab method. This method can detect lead in paint at concentrations of 0.5% and above, and may indicate lead in some paint films as low as 0.2%. It is noted that the former Australian Standard (AS) 4361.2 – 1998 *Guide to lead paint management – Part 2: Residential and commercial buildings* defined lead paint as paint with a lead content greater than 1% by dry weight. This standard was updated in December 2017 (AS4361.2-2017 *Guide to Hazardous Paint Management – Part 2 – Lead Paint in Residential, Public and Commercial Buildings*) and now defines lead paint as paint with a lead content greater than 0.1% by dry weight (i.e. 90% reduction in content from 1998 standard). It should be noted that paint manufactured since 1997 contains <0.1% lead by weight (i.e. considered non lead based paint).

In circumstances where a “positive” (lead present) test result is obtained from the *LeadCheck* swab, these paint situations have been recorded in the register as LCP. For surface coatings installed prior to 1997, where “negative” test results are obtained from the *LeadCheck* swab, these situations have been recorded as “suspected positive” for lead content in the hazardous materials register. Prensa recommend that quantitative testing is conducted prior to disturbance of these situations using a NATA accredited laboratory.

The sampling program attempts to be representative of the various types of paints found at the Site. However, particular attention is paid to areas where LCPs were more likely to have been used (e.g. exterior gloss paints, window and door architraves and skirting boards). The objective of LCP identification in this Assessment is to highlight the presence of LCP within the site building(s), not to specifically identify every location of LCP.

Ozone Depleting Substances – This component of the Assessment comprised a visual inspection of air conditioning units and any chillers (if applicable) at the site and included a review of the air conditioners’ refrigerant types.

6. Management Options

As per NSW legislation, all materials suspected of containing asbestos must be identified and recorded in a register. Furthermore, a risk Assessment must be conducted of each hazardous building material and appropriate control measures implemented. The control measures have been determined based on reducing the risk of exposure, so far as is reasonably practicable. The control measures, which were determined by a competent person and/or hygienist, need to reflect the hierarchy of control outlined in specific state legislation and is as follows:

1. **Elimination**/removal (most preferred);
2. **Substitution**;
3. **Isolation**, such as erection of permanent enclosures encasing the material;
4. **Engineering** controls, such as negative air pressure enclosures for removal works, HEPA filtration systems;
5. **Administrative** controls – including the incorporation of registers and management plans, the use of signage, personnel training, safe work procedures, regular re-inspections and registers; and
6. The use of **Personal Protective Equipment (PPE)** (least preferred).

To manage the hazardous building materials, a combination of the above techniques may be required.

7. Accidental Disturbance of Known or Suspected Hazardous Building Materials

In the unlikely event that there is an accidental disturbance of known or suspected hazardous building materials the following procedures should be implemented:

1. Cease work immediately during maintenance or refurbishment works.
2. Isolate and evacuate the affected area.
3. Close and lock doors to affected area and post signs “No Entry”.
4. Notify the Inner West Council immediately at maintain@innerwest.nsw.gov.au or via phone on (02) 9392 5389.

8. Site Specific Recommendations

Based on the findings of this Assessment, it is recommended that the following control measures be adopted as part of the management of the hazardous building materials at the Site. Recommendations for specific items of hazardous building materials are also presented in **Section 1. Hazardous Building Materials Register** of this Assessment report.

Asbestos-containing Materials (ACM)

- When asbestos removal works are required, the person that commissions the works must ensure that this is undertaken by an appropriately licensed asbestos contractor. The asbestos removal works must be conducted under controlled asbestos removal working conditions.
- When non-friable asbestos removal works are to be conducted within or adjacent to a highly sensitive area or public location, Prensa recommends that a hygienist who is independent of the asbestos contractor should be engaged to undertake airborne asbestos fibre monitoring along the boundary of the works and within the work area on completion of the works.
- A competent person or a licensed asbestos assessor must provide a Clearance Certificate that documents the visual clearance inspection and the satisfactory completion of the asbestos removal works. The Clearance Certificate should state that all visible asbestos dust and debris resulting from the asbestos removal process has been removed from the removal area(s) and from areas adjacent to the removal work area(s).
- Most ACM were found not to be appropriately labelled. ACM on-site should be labelled in accordance with the relevant state / territory Legislation and AS 1319-1994 *Safety signs for the occupational environment* to warn of the dangers of disturbing these materials.
- Schedule periodic reassessment of ACM remaining on-site to monitor their aging/deterioration so that the site controller can be alerted if any ACM require encapsulation or removal – in accordance with the relevant state / territory Legislation and Codes of Practice.
- A destructive hazardous building material survey should be carried out prior to any demolition or refurbishment works. Any hazardous building materials identified within this survey should be removed prior to the commencement of any works that may cause disturbance.
- During demolition/refurbishment 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.

Synthetic Mineral Fibre (SMF) Materials

- SMF materials that are likely to be disturbed during any proposed demolition/refurbishment works should be handled in accordance with the *Code of Practice for the Safe Use of Synthetic Mineral Fibres* [NOHSC:2006(1990)]. If these materials are impacted upon by accident or by pre-planned works, the Inner West Council must be informed via the contact detailed within Section 7: *Accidental Disturbance of Known or Suspected Hazardous Building Materials*. Following disturbance, inspection by a competent person should be undertaken.

Polychlorinated Biphenyls (PCB)

- No recommendations.

Lead-containing Paint (LCP)

- The *LeadCheck* paint swab method can detect lead in paint at concentrations of 0.5% and above, and may indicate lead in some paint films as low as 0.2%. As paint with a lead content greater than 0.1% by dry weight is now considered to be lead-containing, Prensa recommends confirming status of suspected LCP identified during the Assessment by quantitative test method.
- Remove flaking lead containing paint to window surrounds throughout the property in accordance with AS4361.2-2017 Guide to Hazardous Paint Management and relevant legislation.
- The safest method of dealing with LCP is to replace or remove the items in their entirety that have LCP on them and replace them with new items that do not contain lead. This allows the items to be disposed of as regular building or demolition unsegregated waste in accordance with the NSW Environment Protection Authority (EPA) *Waste Classification Guidelines 2014 Part 1 – Classifying Waste*. The advantage of this method is the reduction in labour requirements to remove the lead paint and also this reduces the risk to workers from exposure to lead dust or fumes. If the removal of the LCP or coatings is the preferred or required option this may generate significant amounts of potential hazardous waste. This waste must be removed, collected and disposed of by an appropriately licensed contractor under controlled conditions that minimises the release to air, water and soil. Disposal of lead waste must be disposed of as hazardous waste at an approved waste facility.
- Advise all relevant site personnel and site contractors of the results of the LCP and the safe work procedures required and/or work practices to be avoided in the areas of confirmed LCP.
- 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).

Ozone Depleting Substances

- No recommendations.

Appendix A: Risk Assessment Factors and Priority Ratings

Risk Assessment Factors

To assess the health risk posed by the presence of hazardous building materials, all relevant factors must be considered. These factors include:

- Product type;
- Condition;
- Disturbance potential;
- Friability of the material;
- Proximity to direct air stream; and
- Surface treatment (if any).

The purpose of the material risk assessment is to establish the relative risk posed by specific hazardous building materials identified in this Assessment. The following risk factors are defined to assist in determining the relative health risk posed by each item.

Condition

The condition of the hazardous building materials identified during the Assessment is reported as being **good**, **fair** or **poor**.

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

Friability

The friability of a material describes the ease by which the material can be crumbled, which in turn, can increase the release of fibres into the air. Therefore, friability is only applicable to asbestos and SMF.

- **Friable asbestos** can be crumbled, pulverised, or reduced to powder by hand pressure, which makes it more dangerous than non-friable asbestos.
- **Non-friable asbestos**, more commonly known as bonded asbestos, is typically comprised of asbestos fibres tightly bound in a non-asbestos matrix. If accidentally damaged or broken these ACMs may release fibres initially but will not continue to do so.
- **Bonded SMF** describes a synthetic fibrous material which has a specific designed shape and exists within a stable manufactured product.
- **Un-bonded SMF** is a loosely packed synthetic fibrous material which has no adhesive or cementitious binding properties.

Disturbance Potential

Hazardous building materials can be classified as having low, medium or high disturbance potential.

- **Low disturbance potential** describes materials that have very little or no activity in the immediate area with the potential to disturb the material. Low accessibility is considered as monthly occupancy or less, or inaccessible due to its height or its enclosure.
- **Medium disturbance potential** describes materials that have moderate activity in the immediate area with the potential to disturb the material. Medium accessibility is considered weekly access or occupancy.
- **High disturbance potential** describes materials that have regular activity in the immediate area with the potential to disturb the material.

Health Risk Status

The risk factors described above are used to grade the potential health risk ranking posed by the presence of the materials. These risk rankings are described below:

- A **low health risk** describes a material that poses a negligible or low health risk to occupants of the area due to the materials not readily releasing fibres (or other toxic/hazardous constituents) unless seriously disturbed.
- A **medium health risk** describes a material that pose a moderate health risk due to the material status and activity in the area.
- A **high health risk** describes a material that pose a high health risk to personnel or the public in the area of the material.

ACM Priority Rating System for Control Recommendations

While an assessment of health risk has been made, our recommendations have been prioritised based on the practicability of a required remedial action. In determining a suitable priority ranking, consideration has been given to the following:

- Level of health risk posed by the hazardous building material;
- Potential commercial implications of the finding; and
- Ease of remediation.

As a guide the recommendation priorities have been given a timeframe as follows:

Priority 1 (P1):	Asbestos Containing Material with High Risk Potential – Requiring immediate action
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Status: ACM that are either damaged or are being exposed to continual disturbance. Due to these conditions there is an increased potential for exposure and/or transfer of the material to other parts of the property if unrestricted use of the area containing the material is allowed.

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

Priority 2 (P2):	Asbestos Containing Material with Medium Risk Potential – May require action in the short term
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Status: ACM with a potential for disturbance due to the following conditions:

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

Recommendation: If the ACM is easily 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 as soon as is practical (3-6 months). Negligible health risk if material remains undisturbed under the control of a management plan.

Priority 3 (P3):	Asbestos Containing Material with Low Risk Potential – May require action
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Status: ACM with a low potential for disturbance due to the following conditions:

- The material is in good condition but the surface of the material has been disturbed slightly or has deteriorated as a result of minor environmental factors. This may include influences such as weathering or if the material has sustained minor cracks or broken due to minimal damage.
- The material appears to be in good condition, however further disturbance or damage may occur which would increase the likelihood of asbestos fibres or other hazardous materials being released if disturbed.

Recommendation: Minor health risks if the ACM is left undisturbed under the control of a management plan. Consider removal or encapsulation of the materials.

Priority 4 (P4):	Asbestos Containing Material with Negligible (very low) Risk Potential
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Status: The ACM is in a friable or non-friable form and in good condition. It is most unlikely that the material can be disturbed under normal circumstances. Even if it were subjected to minor disturbance the material poses a minor health risk.

Recommendation: These ACM's should be left in a good and stable condition, with ongoing maintenance and periodic inspection. It is advisable that any remaining identified building materials or presumptions should be appropriately labelled, where possible, and regularly inspected to ensure they are not deteriorating resulting in a potential risk to health.

OHM Action:	Other Hazardous Building Materials with a Requirement for Short Term Remediation
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Status: The hazardous material is damaged or in a degraded condition. The material may be disturbed under normal circumstances. If it were subjected to disturbance the material potentially poses a health risk to personnel.

Recommendation: The building material should be removed or remediated in the short-term to control potential occupant exposure. This should be undertaken in accordance with guidelines defined under **Section 8** of this report.

Appendix B: Areas Not Accessed

Given the constraints of practicable access encountered during this Assessment, the following areas were not inspected. Assessments are restricted to those areas that are reasonably accessible at the time of the Assessment with respect to the following:

- Without contravention of relevant statutory requirements or codes of practice.
- Without placing the Prensa consultant and/or others at undue risk.
- Without demolition or damage to finishes and structure.
- Excluding plant and equipment that was 'in service' and operational.

Documented below are the areas where the Prensa consultant encountered access restrictions during the Assessment:

Areas Not Accessed

Sampling was restricted due to the tenant's request at the time of the Assessment.

No access to the roof space at the time of the Assessment.

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

Exposed soils surrounding the building structures of the site.

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

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

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

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

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

Within those areas accessible only by dismantling equipment.

Within totally inaccessible areas such as voids and cavities present but intimately concealed within the building structure.

All areas outside the Scope of Work.

Note:

If proposed works entail possible disturbance of any suspect materials in the above locations, or any other location not mentioned in **Section 1. Hazardous Building Materials Register**, further investigation may be required prior to the commencement of such works.

The presence of residual asbestos insulation on steel members, concrete surfaces, pipe work, equipment and adjacent areas remaining from prior removal works cannot normally be determined without extensive removal and damage to existing insulation, fixtures and fittings at the Site. If, during any demolition/refurbishment works any materials that are not referenced in this report and are suspected of containing asbestos are encountered, works must cease and a hygienist should be notified to determine whether the material is hazardous.

Appendix C: NATA Endorsed Laboratory Sample Analysis Report

15 March 2018

Rick Jarvis
Inner West Council
7-15 Wetherill Street
Leichhardt NSW 2040

Dear Rick,

Asbestos Bulk Sample Analysis Report Elkington Park Caretakers Cottage

Please find attached the asbestos bulk sample analysis results of the 5 samples collected by Jessica Wood of Prensa Pty Ltd for Elkington Park Caretakers Cottage on 26 February 2018 and received at the Prensa Pty Ltd laboratory (Level 2, 15 Mayneview Street, Milton QLD 4064) on 8 March 2018. The samples were analysed on 14 March 2018 and the results are presented on the following page(s).

Prensa qualitatively analyses bulk samples for asbestos using polarising light microscopy and dispersion staining techniques in accordance with Prensa's National Association of Testing Authorities (NATA), Australia approved PRLAB2002 Asbestos Identification Test Method, and in accordance with Australian Standard (AS) 4964 – 2004, *Method for the qualitative identification of asbestos in bulk samples* and AS ISO/IEC 17025 – 2005, *General requirements for the competence of testing and calibration laboratories*.

If you require further information please contact the Prensa office on (07) 3291 9700.

Regards,



Susan Simmonds
Approved Asbestos Fibre Identifier and Signatory



Accredited for compliance with ISO/IEC 17025 - Testing. Corporate Site Number 21284. This document shall not be reproduced except in full. Sampling is not covered by the scope of the NATA accreditation.

Asbestos Bulk Sample Analysis Report Elkington Park Caretakers Cottage

Sample No	Sample Location / Description / Size	Result
57722 - 156 - 001	Interior, shed/rear toilet, wall - fibre cement sheeting	<i>Chrysotile (white asbestos) detected</i>
	Grey painted grey fibre cement material ~ 10 x 8 x 2 mm	<i>Amosite (brown asbestos) detected</i> <i>Crocidolite (blue asbestos) detected</i>
57722 - 156 - 002	Interior, laundry, wall - fibre cement sheeting	<i>Chrysotile (white asbestos) detected</i>
	White painted grey fibre cement material ~ 12 x 12 x 2 mm	Organic fibres detected
57722 - 156 - 003	Exterior, window - caulking	No asbestos fibres detected
	Cream coated beige brittle mastic material ~ 14 x 12 x 2 mm	
57722 - 156 - 004	Exterior, rear extension, upper level wall - fibre cement sheeting	<i>Chrysotile (white asbestos) detected</i>
	Grey and orange painted grey compressed fibre cement material ~ 18 x 4 x 1 mm	
57722 - 156 - 005	Interior, shed/rear toilet, cistern - moulded fibre cement	<i>Insufficient Sample for Analysis</i>
	Grey paint ~ 10 x 8 x 2 mm	

Only the samples submitted for analysis have been considered in presenting these results.

Appendix D: Statement of Limitations

Statement of Limitations

This document has been prepared in response to specific instructions from IWC to whom the report has been addressed. The work has been undertaken with the usual care and thoroughness of the consulting profession. The work is based on generally accepted standards and practices of the time the work was undertaken. No other warranty, expressed or implied, is made as to the professional advice included in this report.

The report has been prepared for the use by IWC and the use of this report by other parties may lead to misinterpretation of the issues contained in this report. To avoid misuse of this report, Prensa advises that the report should only be relied upon by IWC and those parties expressly referred to in the introduction of the report. The report should not be separated or reproduced in part and Prensa should be retained to assist other professionals who may be affected by the issues addressed in this report to ensure the report is not misused in any way.

Unless otherwise stated in this report, the scope is limited to fixed and installed materials and excludes buried waste materials, contaminated dusts and soils.

Unless expressly stated it is not intended that this report be used for the purposes of tendering works. Where this is the intention of IWC, this intention needs to be communicated with Prensa and included in the scope of the Proposal.

Prensa is not a professional quantity surveyor (QS) organisation. Any areas, volumes, tonnages or any other quantities noted in this report are indicative estimates only. The services of a professional QS organisation should be engaged if quantities are to be relied upon.

Sampling Risks

It is noted that while the Assessment has attempted to locate the asbestos-containing materials within the building(s), the investigation was limited to only a visual Assessment and limited sampling program and/or the review and analysis of previous reports made available. Prensa notes that sampling is representative only and that due to the lack of homogeneity of building materials it is possible that sampling has not detected all asbestos within the nominated locations.

Given that a representative sampling program has been adopted, not all materials suspected of containing asbestos at the time of the investigation were sampled and assessed. It is noted that some asbestos materials may have been assumed to contain asbestos based on their similar appearance to previously sampled materials.

Therefore, it is possible that asbestos materials, which may be concealed within inaccessible areas/voids, may not have been located during the investigation. Such areas include, but are not limited to:

- Materials concealed behind structural members and within inaccessible building voids;
- Areas inaccessible without the aid of scaffolding or lifting devices;
- Areas below ground;
- Inaccessible ceiling or wall cavities;
- Areas which require substantial demolition to access;
- Areas beneath floor covering where asbestos-containing materials were not expected to exist;
- Materials contained within plant and not accessible without dismantling the plant; and
- Areas where access is restricted due to locked doors, safety risks, or being occupied at the time of the investigation.

Reliance on Information Provided by Others

Prensa notes that where information has been provided by other parties in order for the works to be undertaken, Prensa cannot guarantee the accuracy or completeness of this information. IWC therefore waives any claim against the company and agrees to indemnify Prensa for any loss, claim or liability arising from inaccuracies or omissions in information provided to Prensa by third parties. No indications were found during our investigations that information contained in this report, as provided to Prensa, is false.

Future Works

During future works at the site, care should be taken when entering or working in any previously inaccessible areas or areas mentioned above and it is imperative that works cease immediately pending further investigation and sampling (if necessary) if any unknown materials are encountered. Therefore, during any refurbishment or demolition works, further investigation, sampling and/or Assessment may be required should any suspect or unknown material be observed in previously inaccessible areas or areas not fully inspected, i.e. carpeted floors.