TKD Architects

Asbestos and Hazardous Materials Survey

Alexandria Park Community School,
Alexandria NSW 2015

10 February 2017

When you think with a global mind problems get smaller

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Asbestos and Hazardous Materials Survey

Prepared for
TKD Architects

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Quality information

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Limitations

Coffey 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 Coffey. 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 Coffey 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 survey brief is to identify every reasonably accessible ACM. Reasonably accessible does not extend to searching for concealed ACM beneath concrete encased structural beams or beneath concrete floors, behind another ACM, 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 ACM was used in the construction of buildings, some may only be detected during the course of subsequent demolition.

Hazardous Materials surveys are restricted to areas that are reasonably accessible during the survey, with respect to the following:

- without contravention of relevant statutory requirements or codes of practice;
- without placing the surveyor at undue risk;
- without dismantlement or damage to installed fixtures and fittings, plant, electrical equipment, machinery; and
- without dismantlement, demolition or damage to finishes and structure.

Any areas within the remit of the survey but not described within the body of the report or in the Asbestos Material Assessments should be regarded by the client as un-surveyed, and 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.

Coffey 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 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 and lead-based paint, and any fluorescent lights inside the buildings should be assumed to contain PCB capacitors 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. Coffey will not update the report and has not taken into account events occurring after the time its assessment was conducted.

The following limitations and restrictions to specific materials, installations and locations are commonly found during surveys 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 survey.
- Lifts / Shafts – these will not be checked for safety reasons unless a lift engineer accompanies the surveyor.
- 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.
- Boilers - may contain asbestos internally, which is not visible or accessible until the unit is dismantled. Note: Where a bulk sample is obtained from a non-dismantled boiler it should not be regarded as definitive of all materials contained within the boiler's structure.
- 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
- Safes - the walls of some safes cannot be penetrated even where access arrangements have been made.

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.

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Appendices

Executive summary

Coffey Services Australia Pty Ltd (Coffey) conducted a hazardous materials investigation into the presence and likely risks of exposure to hazardous materials at Alexandria Park Community School located at Park Rd Alexandria, NSW 2015 (the site). The objectives of this assessment were to:

- Identify and assess the health risk posed by hazardous building materials which may be encountered during future demolition works.
- The hazardous materials survey involved the investigation and identification of Hazardous Materials inclusive of Asbestos-containing Materials (ACM). Other hazardous materials included Lead-Based Paint systems (LBP), Ozone Depleting Substances (ODS), Polychlorinated Biphenyls in light capacitors (PCB) and Synthetic Mineral Fibre (SMF) in accessible areas.

This was defined within the scope of works determined with the client prior to commencement of the survey.

From the site survey and laboratory analysis results (where applicable), a register of hazardous materials has been produced, in accordance with the requirements of the relevant Codes of Practice and Guidance Notes.

This contract was completed by Coffey on the basis of a defined program of work and terms and conditions agreed with the Client. We confirm that in preparing this report we have exercised all reasonable skill and care bearing in mind the project objectives, the agreed scope of works and prevailing site conditions. The client should be made aware of the limitations of a survey being conducted in a destructive manner and is referred to in the above limitations.

The asbestos information in this report is supplied on the understanding that the area surveyed is scheduled for major demolition works, and that identified Asbestos and other Hazardous Materials will be removed prior to, or as part of these works. Asbestos or other Hazardous Materials remaining in situ will need to be detailed in the site specific Hazardous Materials Register and Asbestos Management Plan as required by the Work Health and Safety Regulation, 2011.

Asbestos-Containing Materials (ACM)

The following Asbestos Containing Materials were identified or suspected to be present during the survey:

- Interior: Ground Floor; B00A – R0020 – Boys Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00A – R0027 – Main Switchboard Room – Suspected asbestos containing electrical backing board;
- Interior: Ground Floor; B00A – R0028 – Girls Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00B – R0021 – Laundry – Asbestos containing fibre cement sheeting to the packing below hot water heater;
- Interior: Ground Floor; B00B – R0030 – Staff Toilet - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00B – R0033 – Boys Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00B – R0034 – Girls Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Second Floor; B00B – R2001 – Movement – Asbestos containing fibre cement sheeting to the walls;

- Interior: Second Floor; B00B – R2001 – Movement – Asbestos containing fibre cement sheeting to the ceiling panels;
- Interior: Second Floor; B00B – R2002 – Plant – Asbestos containing cement sheet ceiling panels to west side;
- Interior: Second Floor; B00B – R2002 – Plant – Asbestos containing rope gasket to boiler;
- Interior: Ground Floor; B00C – R0029 - Girls Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00C – R0030 - Boys Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00C – R0059 – Plant – Asbestos containing fibre cement sheeting to the rear wall and associated debris; and
- Interior: Ground Floor; B00C – R0063 - Plant – Asbestos containing fibre cement sheeting to the packing below hot water heater.

Synthetic Mineral Fibres (SMF)

- Interior: Ground Floor; Block A - Throughout – Suspected SMF containing sarking to ceiling space;
- Interior: Ground Floor; B00A – R0057 - Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00A – R0062 - Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00A – R0066 - Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00A – R0070 - Plant – SMF containing wall insulation;
- Interior: First Floor; B00A – R1007 - Plant – Suspected SMF containing pipework insulation;
- Interior: First Floor; B00A – R1007 - Plant – Suspected SMF containing ducting insulation;
- Interior: First Floor; B00A – R1007 - Plant – Suspected SMF containing sarking insulation;
- Interior: First Floor; B00A – R1016 - Plant – Suspected SMF containing ducting insulation;
- Interior: First Floor; B00A – R1017 – General Learning Space – Suspected SMF containing insulation to Boiler;
- Interior: Ground Floor; Block B - Throughout – Suspected SMF containing sarking to ceiling space;
- Interior: Ground Floor; B00B – R0005 – Staff Room Annexe – Suspected SMF containing ducting insulation;
- Interior: Ground Floor; B00B – R0021 – Laundry – Suspected SMF containing insulation to hot water heater;
- Interior: Ground Floor; B00B – R0027 – Common Room – Suspected SMF containing insulation to hot water heater;
- Interior: Ground Floor; B00B – R0067 - Movement – Suspected SMF containing pipework insulation;
- Interior: Ground Floor; B00B – R0071 – Staff Kitchen – Suspected SMF containing pipework insulation;
- Interior: Ground Floor; B00B – R0072 – Sick Bay – Suspected SMF containing pipework insulation;
- Interior: Ground Floor; B00B – R0082 – Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00B – R0086 – Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00B – R0090 – Plant – SMF containing wall insulation;

- Interior: Second Floor; B00B – R2002 – Plant – Suspected SMF containing pipework insulation;
- Interior: Second Floor; B00B – R2002 – Plant – Suspected SMF containing duct insulation;
- Interior: Ground Floor; Block C - Throughout – Suspected SMF containing sarking to ceiling space;
- Interior: Ground Floor; B00C – R0060 – Plant – Suspected SMF containing insulation to hot water heater; and
- Interior: Ground Floor; B00C – R0063 – Plant – Suspected SMF containing insulation to hot water heater.

Lead-Based Dust (LBD)

No Lead Based Dust was identified or suspected to be present at the time of survey.

Lead-Based Paints (LPB)

No Lead Based Paint was identified or suspected to be present at the time of survey.

Polychlorinated Biphenyls (PCBs)

No Polychlorinated biphenyls were identified or suspected to be present at the time of survey.

Ozone Depleting Substances (ODS)

- Interior: Ground Floor; B00B – R0062 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0066 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0070 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0082 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0086 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0090 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00C – R0081 – Child Care Centre - Suspected ODS containing refrigerant to Air Conditioning Unit; and
- Interior: Ground Floor; B00C – R0083 – Child Care Centre - Suspected ODS containing refrigerant to Air Conditioning Unit.

1. Introduction

Coffey Corporate Services Pty Ltd (Coffey) was engaged by TKD Architects to conduct an Asbestos and Hazardous Materials survey of the Alexandria Park Community School located at Park Rd, Alexandria NSW 2015.

Sarah Cook, Bibiana Ortiz and Andres Ortega of Coffey carried out the survey between 25th and 27th January 2017. Other information was obtained from vendor manuals, standards, guidelines, regulations and other material available in the public domain.

The assessment was conducted on the basis of the condition of the materials at the time of inspection and the future anticipated activities at the site.

No inspection can be guaranteed to locate all asbestos and hazardous materials in a specific location and therefore this assessment cannot be regarded as absolute. Planned and future demolition to site structures may expose situations which were concealed or otherwise impractical to access during this assessment.

1.1. Background

Coffey understands that TKD Architects is requesting this survey to produce an asbestos and hazardous materials register for the site in accordance with NSW *Work Health and Safety Regulations,* 2011 and the NSW Code of Practice *How to Manage and Control Asbestos in the Workplace* (2016).

1.2. Site Description

The survey was conducted of the Community School Building located at Park Rd, Alexandria NSW 2015. The structure of the building is comprised of brick walls & concrete flooring.

Table 1: Site Information

Site:	Alexandria Park Community School, Park Rd, Alexandria NSW 2015		
Age (Circa):	Unknown	**External walls:**	Concrete and brick
Approximate area:	10, 000m^2	**Internal walls:**	Plasterboard, masonary, cement sheet and timber
Levels:	3 Floors	**Ceiling:**	Ceiling tiles, cement sheet and plaster
Roof type:	Metal	**Floor and coverings:**	Concrete, tiles, vinyl sheet and carpet

1.3. Scope

The scope of work required Coffey to:

- Mobilise an WHS consultant to and from the site;
- Conduct an area specific Asbestos and Hazardous Materials (HazMat) survey of all reasonably accessible areas within the site, to locate:
  - Asbestos-containing materials (ACM);
  - Synthetic mineral fibre (SMF) materials;
  - Lead-based paint systems (LBP);
  - Polychlorinated biphenyls (PCB) containing capacitors in electrical fittings; and
  - Ozone depleting substances (ODS).
- Collect representative samples of suspect ACM and/or lead paint material (where accessible) and submit samples for laboratory analysis. ODS, PCB and SMF were identified on a visual basis only;
- Document the details of materials identified including photographs of any samples taken;
- Record, collate and report the findings; and
- Deliver one electronic report to the client.

2. Methodology

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

The assessment involved the onsite investigation for the presence of Asbestos-containing Materials (ACM), synthetic mineral fibres (SMF), Lead based paint systems (LBP), Polychlorinated Biphenyls (PCB) and Ozone depleting substances (ODS – (CFC, HCFC, HFC). Information was collected from the site owners/occupiers/tenants 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 the Asbestos and Hazardous Materials Register (refer **Appendix B**).

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 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 Coffey Environments Work Instructions. Laboratories undertaking analysis are appropriately NATA certified for the analysis conducted.

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 **Section 5.1: Actions for Asbestos Materials.**

The register is made up of relevant information gathered on site plus Coffey's Environments' 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.

3. Assessment Findings

The findings of this assessment are presented in tabulated format in **Appendix B: Asbestos and Hazardous Building Materials Register** of this assessment report. Hazardous building materials that have been photographed are depicted in the rear of this assessment report.

The following significant key findings are noted:

3.1. Hazardous Building Materials

3.1.1. Asbestos-Containing Materials (ACM)

The following Asbestos Containing Materials were identified or suspected to be present during the survey:

- Interior: Ground Floor; B00A – R0020 – Boys Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00A – R0027 – Main Switchboard Room – Suspected asbestos containing electrical backing board;
- Interior: Ground Floor; B00A – R0028 – Girls Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00B – R0021 – Laundry – Asbestos containing fibre cement sheeting to the packing below hot water heater;
- Interior: Ground Floor; B00B – R0030 – Staff Toilet - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00B – R0033 – Boys Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00B – R0034 – Girls Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Second Floor; B00B – R2001 – Movement – Asbestos containing fibre cement sheeting to the walls;
- Interior: Second Floor; B00B – R2001 – Movement – Asbestos containing fibre cement sheeting to the ceiling panels;
- Interior: Second Floor; B00B – R2002 – Plant – Asbestos containing cement sheet ceiling panels to west side;
- Interior: Second Floor; B00B – R2002 – Plant – Asbestos containing rope gasket to boiler;
- Interior: Ground Floor; B00C – R0029 - Girls Toilets - Asbestos containing fibre cement sheeting to the partition walls;

- Interior: Ground Floor; B00C – R0030 - Boys Toilets - Asbestos containing fibre cement sheeting to the partition walls;
- Interior: Ground Floor; B00C – R0059 – Plant – Asbestos containing fibre cement sheeting to the rear wall and associated debris; and
- Interior: Ground Floor; B00C – R0063 - Plant – Asbestos containing fibre cement sheeting to the packing below hot water heater.

3.1.2. Synthetic Mineral Fibres (SMF)

- Interior: Ground Floor; Block A - Throughout – Suspected SMF containing sarking to ceiling space;
- Interior: Ground Floor; B00A – R0057 - Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00A – R0062 - Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00A – R0066 - Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00A – R0070 - Plant – SMF containing wall insulation;
- Interior: First Floor; B00A – R1007 - Plant – Suspected SMF containing pipework insulation;
- Interior: First Floor; B00A – R1007 - Plant – Suspected SMF containing ducting insulation;
- Interior: First Floor; B00A – R1007 - Plant – Suspected SMF containing sarking insulation;
- Interior: First Floor; B00A – R1016 - Plant – Suspected SMF containing ducting insulation;
- Interior: First Floor; B00A – R1017 – General Learning Space – Suspected SMF containing insulation to Boiler;
- Interior: Ground Floor; Block B - Throughout – Suspected SMF containing sarking to ceiling space;
- Interior: Ground Floor; B00B – R0005 – Staff Room Annexe – Suspected SMF containing ducting insulation;
- Interior: Ground Floor; B00B – R0021 – Laundry – Suspected SMF containing insulation to hot water heater;
- Interior: Ground Floor; B00B – R0027 – Common Room – Suspected SMF containing insulation to hot water heater;
- Interior: Ground Floor; B00B – R0067 - Movement – Suspected SMF containing pipework insulation;
- Interior: Ground Floor; B00B – R0071 – Staff Kitchen – Suspected SMF containing pipework insulation;
- Interior: Ground Floor; B00B – R0072 – Sick Bay – Suspected SMF containing pipework insulation;
- Interior: Ground Floor; B00B – R0082 – Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00B – R0086 – Plant – SMF containing wall insulation;
- Interior: Ground Floor; B00B – R0090 – Plant – SMF containing wall insulation;
- Interior: Second Floor; B00B – R2002 – Plant – Suspected SMF containing pipework insulation;
- Interior: Second Floor; B00B – R2002 – Plant – Suspected SMF containing duct insulation;
- Interior: Ground Floor; Block C - Throughout – Suspected SMF containing sarking to ceiling space;

- Interior: Ground Floor; B00C – R0060 – Plant – Suspected SMF containing insulation to hot water heater; and
- Interior: Ground Floor; B00C – R0063 – Plant – Suspected SMF containing insulation to hot water heater.

3.1.3. Lead-Based Dust (LBD)

No Lead Based Dust was identified or suspected to be present at the time of survey.

3.1.4. Lead-Based Paints (LPB)

No Lead Based Paint was identified or suspected to be present at the time of survey.

3.1.5. Polychlorinated Biphenyls (PCBs)

No Polychlorinated biphenyls were identified or suspected to be present at the time of survey.

3.1.6. Ozone Depleting Substances (ODS)

- Interior: Ground Floor; B00B – R0062 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0066 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0070 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0082 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0086 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00B – R0090 – Plant - Suspected ODS containing refrigerant to Chiller;
- Interior: Ground Floor; B00C – R0081 – Child Care Centre - Suspected ODS containing refrigerant to Air Conditioning Unit; and
- Interior: Ground Floor; B00C – R0083 – Child Care Centre - Suspected ODS containing refrigerant to Air Conditioning Unit.

3.2. Areas of No Access

Where Areas of No Access have been identified it should be presumed that hazardous materials are present in these areas until further investigation can confirm or refute the presence.

No inspection can be guaranteed to locate all asbestos and hazardous materials 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.

Building service and building core areas were accessible at the time of the survey, excluding the limited access areas listed below.

AREAS OF NO ACCESS

The following areas were not accessible or had limited access at the time of survey:

- Below concrete floors;
- Wall cavities.

4. Recommendations

The recommendations, conclusions or stability of hazardous materials contained in this report shall not abrogate a person of their responsibility to work in accordance with Statutory Requirements, Codes of Practice, Guidelines, Safety Data Sheets, Work Instructions or reasonable work practices.

4.1. Asbestos Materials Identified

Asbestos containing materials (ACM) are referred to as either friable or bonded.

Friable asbestos is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friable asbestos includes materials such as sprayed and thermal insulation, pipe lagging and millboard, and can release fibres with only minimal disturbance. Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance.

Bonded asbestos products are ones in which the asbestos fibres are bound within the matrix of the material. Bonded asbestos is difficult to damage or cause the release of fibres by hand and includes materials such as asbestos cement sheeting (fibre cement or fibro), vinyl floor tiles and zelemite electrical switchboards. However, bonded Asbestos-containing materials that have been subjected to weathering, physical damage, water damage, fire or other conditions may contain exposed fibres which could be released upon disturbance.

The asbestos information contained within this report is insufficient to meet the requirement for risk assessment for a management plan. Any Asbestos or other Hazardous Materials remaining in situ at the conclusion of the project will need to be detailed in the site specific Hazardous Materials Register and Asbestos Management Plan as required by the NSW Work Health and Safety Regulation 2011.

Based on the findings of this hazardous materials survey, the recommendations regarding ACM are:

- Access to the rear wall of the B00C - R0059 plant room needs to be restricted until the fibre cement debris identified at the base of the wall is removed under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor;
- The asbestos rope gasket to the boiler in the plant room (B00B – R2002) requires to be encapsulated, labelled as containing asbestos and maintained in its current condition if to remain in-situ. Eventual removal of this materials must be undertaken buy a Class A (friable) asbestos removal contractor;
- The exposed sections of the identified asbestos packers to the hot water heaters in rooms B00B – R2021 and B00C – R0063 need to be encapsulated, labelled as containing asbestos and maintained in a good condition if to remain in-situ;
- All asbestos fibre cement within the building which were identified requiring encapsulation of exposed edges should be done by a Class B (non-friable) licensed asbestos removal contractor;
- All identified asbestos-containing materials under risk A3 and A4 (refer to the register) are required to be maintained in their current condition if to remain in-situ;

- When asbestos removal works are to be undertaken, 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, Coffey 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.
- If friable asbestos is identified during future works and is to be removed, a licensed asbestos assessor who is independent of the asbestos contractor must be engaged to:
    - Inspect the asbestos removal work area prior to commencement of the works;
    - Undertake asbestos fibre air monitoring before and during friable removal works in the surrounding areas and clearance asbestos fibre air monitoring at the conclusion of the asbestos removal work; and
    - Complete a visual inspection of the asbestos removal area and the area immediately surrounding it and ensure these are free from visible asbestos contamination.
- The 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).
- 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.

4.2. Synthetic Mineral Fibre Materials

Un-bonded or bonded SMF that has severely deteriorated has the potential of becoming airborne. Health effects that may occur with exposure to certain SMF materials include; irritation of the skin, eyes and upper respiratory tract. As such removal and replacement would be the preferred option if such materials were found in accessible areas or air conditioning systems.

The selection of the most appropriate control measure should be determined from risk assessments and detailed knowledge of the workplace and activities. The following general principles may be applied:

- If the SMF is un-bonded or deteriorated, 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;
- If the SMF is un-bonded or deteriorated, in a poor/unstable condition but in inaccessible areas (i.e. Ceiling space), removal is preferred. However, if removal is not immediately practicable, short-term control measures (i.e. restrict access, or provide personal protective equipment to personnel required to access the area etc.) may be employed until removal can be facilitated;
- If the SMF is bonded and in a poor/unstable condition; minimising disturbance and removal or encapsulation may be appropriate controls; and
- Prior to any demolition, partial demolition, renovation or refurbishment, synthetic mineral fibre materials likely to be disturbed by those works should be removed in accordance with the NOHSC Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006 (1990)].

Further assessment of risk through airborne fibre monitoring can assist with decisions on the most appropriate, and urgency of, control measures.

4.3. Ozone Depleting Substances (Refrigerants)

CFCs and HCFCs -Air-conditioning systems may contain refrigerants.

Removal should be undertaken prior to any demolition. A licensed contractor who will recycle and reuse the refrigerant should decommission the 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.

4.4. Training

N.B. 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:

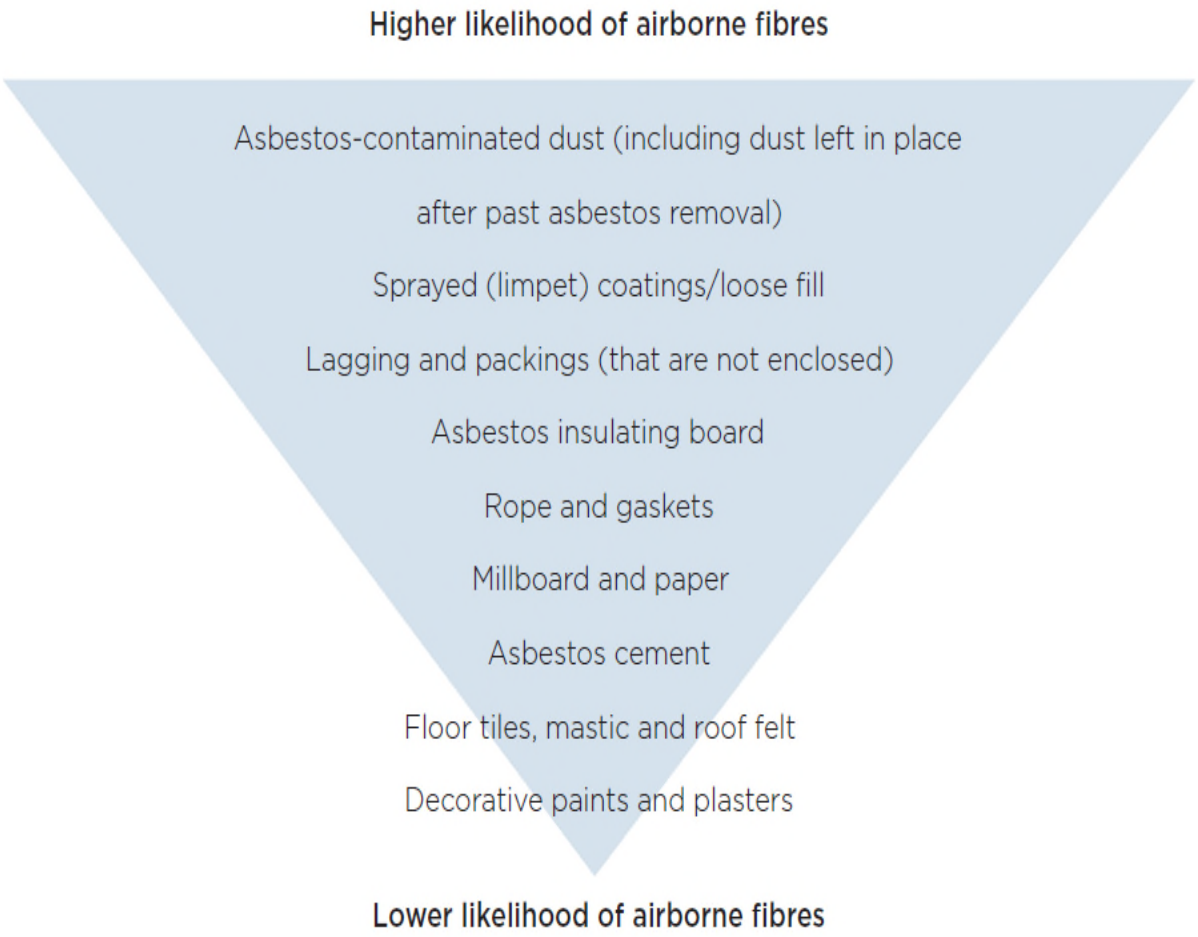
- The purpose of the training;
- The health risks of hazardous materials;
- The types, uses and likely occurrence of hazardous materials on site, in plant and/or equipment in the workplace;
- The trainees' roles and responsibilities under the workplace's hazardous materials management;
- Where the workplace's register of hazardous materials is located and how it can be accessed;
- The timetable for removal of hazardous materials from the workplace;
- The processes and procedures to be followed to prevent exposure, including exposure from any accidental release of hazardous materials into the workplace;
- Where applicable, the correct use of maintenance and control measures, protective equipment and work methods to minimise the risks from hazardous materials, limit the exposure of workers and limit the spread of hazardous materials outside any work area;
- The National Exposure Standard (NES) and control levels for hazardous materials; and
- The purpose of any air monitoring or health surveillance that may occur.

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

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

5. Risk Assessment

From the findings of the hazardous materials survey, an individual risk assessment is conducted on each ACM. The following figure outlines the general likelihood of fibre release potential (Source: the NSW Code of Practice: *How to Manage and Control Asbestos in the Workplace (2016).*



Coffey adopts the following risk assessment algorithm in order to assess the risks associated with individual asbestos-containing materials identified.

ASBESTOS REGISTER SECTION

Friable

Variable	Score	Description
Friability	Y	Asbestos cement debris, or material which when dry may become crumbled, pulverised or reduced to powder by hand pressure.
	N	Bonded i.e. non-friable material

Materials Assessment

Variables	Scores	Examples of Score Descriptions
Asbestos Type	0	No asbestos
	1	Chrysotile only
	2	Amphibole asbestos (excluding crocidolite)
	3	Crocidolite
Product Type	0	No asbestos detected
	1	Bonded asbestos in good condition
	2	Friable asbestos in good condition or cement in poor condition
	3	Friable asbestos in poor condition
Extent of Damage	0	No visible damage
	1	Minor scratches or mark, broken edges
	2	Significant breakage, many small areas of damage to friable material
	3	High damage, visible debris
Surface Treatment	0	Bonded Asbestos including encapsulated asbestos cement
	1	Enclosed laggings, sprays and boards or bare cement
	2	Bare board or encapsulated lagging/spray or cement debris
	3	Unsealed lagging/spray

Location Assessment

Variables	Scores	Examples of Score Descriptions
Occupant Activity	0	Rare disturbance, e.g. little used store room
	1	Low disturbance, e.g. Office type activity
	2	Periodic disturbance, e.g. industrial or vehicular activity which may contact ACMs
	3	High levels of disturbance e.g. fire door with AIB sheet in constant use
Likelihood of Disturbance	0	Usually inaccessible or unlikely to be disturbed
	1	Minimal likelihood for disturbance
	2	Likely disturbance
	3	Frequent disturbance
Human Exposure Potential	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
Maintenance Activity	0	Minor disturbance (e.g. possibility of contact when gaining access)
	1	Low Disturbance (e.g. changing light bulbs in AIB ceiling).
	2	Medium disturbance (e.g. lifting one or two ceiling tiles to access a valve)
	3	High level of disturbance (e.g. moving a number of AIB ceiling tiles to replace a valve or for re-cabling)

Risk Score

The asbestos-containing material risk score is a quantitative assessment determined by the sum of the scores based on the Materials and Location Assessments; i.e. Risk score = Material Score + Location Score (out of as possible 24).

Should no asbestos be detected then the register will indicate a risk score of 0.

Variable	Scores	Examples of Score Descriptions
Risk Score	0 - 6	Very Low Risk - Action Score A4
	7 - 12	Low Risk – Action Score A3
	13 - 18	Medium Risk – Action Score A2
	19 - 24	High Risk – Action Score A1

OTHER HAZARDOUS MATERIALS REGISTER SECTION

Coffey adopt the following material and location assessment algorithms in order to assess the risks associated with individual **hazardous materials other than asbestos** located;

Friable

Variable	Score	Description
Friable	Y	Unsealed SMF
	N	Sealed SMF
	NA	Applicable to ODS, PCB, Lead in paint

Material Assessment

Variable	Score	Examples of Score Descriptions
Extent of Damage	G	Good condition
	Av	Average condition
	P	Poor condition
Surface Treatment	Y	Sealed
	P	Part sealed
	N	Not sealed

Location Assessment

Variable	Score	Examples of Score Descriptions
Occupant Activity	H	High traffic area
	M	Medium traffic area
	L	Low traffic area

Risk Score

The hazardous materials other than asbestos risk score is a qualitative assessment determined by the combination of Material and Location Assessments. Depending on the material one or all of these criteria may be used in assessing the recommended Action.

Variable	Score	Examples of Score Descriptions
Risk Score	L	Low exposure risk
	M	Medium exposure risk
	H	High exposure risk

5.1. Actions For Asbestos Materials

Following the assessment for asbestos-containing materials an action score is assigned. For asbestos-containing materials this will be assigned according to the risk score associated with the material.

Action Ratings

A1	**Action 1**	**Restrict access and remove**
		As a guide, the material conforms to one, or more, of the following: Friable or poorly bonded to substrate, located in accessible areas Severely water damaged, or unstable Further damage or deterioration likely Friable asbestos material located in air conditioning ducting Asbestos debris and stored asbestos in reasonably accessible areas Post removal of A1 item, update Asbestos Materials Register and Asbestos Management Plan
A2	**Action 2**	**Enclose, encapsulate or seal and Label – Re-inspect according to Asbestos Management Plan**
		As a guide, the material conforms to one, or more, of the following: Damaged material In reasonably accessible area Friable material or poorly bonded to substrate, with bonding achievable Possibility of disturbance through contact Possibility of deterioration caused by weathering Post encapsulation of A2 item, update Asbestos Materials Register and Asbestos Management Plan
A3	**Action 3**	**Remove during refurbishment or maintenance and Label – Re-inspect according to Asbestos Management Plan**
		As a guide, the material conforms to one, or more, of the following: Asbestos debris or stored material in rarely accessed areas Further disturbance or damage unlikely other than during maintenance or service Readily visible for further assessment Asbestos CAF Gaskets Asbestos friction materials and brake linings
A4	**Action 4**	**No remedial action, Label – Re-inspect according to Asbestos Management Plan**
		As a guide, the material conforms to one, or more, of the following: Firmly bonded to substrate and readily visible for inspection Inaccessible and fully contained Stable and damage unlikely

Acronyms

ACM	Asbestos-containing material
NOHSC	National Occupational Health and Safety Commission
AMP	Asbestos Management Plan
V.O.	Visual Observation
NATA	National Association of Testing Authorities, Australia
PLM	Polarised Light Microscopy
SEM	Scanning Electron Microscopy
EDAX	Energy Dispersive X-ray Analysis
CH	Chrysotile Asbestos
CR	Crocidolite Asbestos
AM	Amosite Asbestos
NAD	No Asbestos Detected

Definitions

Accredited Laboratory – means a testing laboratory accredited by NATA (National Association of Testing Authorities, Australia).

Air Monitoring – means atmospheric sampling for airborne contaminants including asbestos and SMF fibres or lead dust to assist in assessing human exposure and the effectiveness of control measures. This includes exposure monitoring, clearance monitoring (asbestos) and control monitoring.

Appropriately Qualified Person – means the person possesses the qualifications and experience necessary to find hazardous materials in a building.

Approved Respirator - A respirator which complies with AS/NZS 1716 - Respiratory Protective Devices.

Approved Cleaner - Vacuum cleaning equipment that passes all extracted air through a High Efficiency Particulates Air (HEPA) filter before the air is discharged into the atmosphere and conforms to the relevant requirements of the AS 3544 - Industrial Vacuum Cleaners for Particulates.

Asbestos – fibrous form of those mineral silicates that belong to the serpentine or amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos) and tremolite.

Asbestos-containing Material (ACM) – means any material, object, product or debris containing asbestos.

Asbestos Removalist – means a person whose business or undertaking includes asbestos removal work or a self-employed person whose work includes asbestos removal work.

Asbestos Removal Control Plan – A site specific document to be prepared by the removal contractor based on the information in the National Code of Practice How to Safely Remove Asbestos (Safe Work Australia 2016).

Asbestos Work - means work undertaken in connection with a construction work process in which exposure to asbestos may occur and includes any work process involving the use, application, removal, mixing or other handling of asbestos or asbestos-containing material.

Vacuum

Asbestos Removal Work – means work undertaken to remove friable or bonded asbestos-containing material.

Asbestos Work Area – means the immediate area in which work on ACM is taking place. The boundaries off the work area must be determined by a risk assessment.

Bonded asbestos material - means any material (other than friable asbestos material) that contains asbestos.

Bonded asbestos removal work - means work in which bonded asbestos material is removed, repaired or disturbed.

Clearance Inspection – means a mandatory visual inspection carried out by a competent person to verify that an asbestos work area has been rendered free of visible asbestos contamination and is safe to be returned to normal use after work involving the disturbance of ACM has taken place. A clearance inspection must include a visual inspection, and may also include clearance air monitoring and/or settled dust sampling.

Clearance Monitoring – means air monitoring using static or positional samples to measure the level of airborne asbestos fibres in an area following work on ACM. An area is cleared when the level of airborne asbestos fibres is measured as being below eth clearance standard of 0.01 fibres/ml.

Construction Work - include all work performed in or in connection with the installation, erection, repair, cleaning, painting, renewal, renovation, dismantling, maintenance, ornamentation or demolition of buildings, ships, structures, pipes, plant, machinery, parts, artefacts, appliances, or tools or parts thereof.

Control Actions - In the process of implementing hazardous building materials management, it is fundamental that any identified situations have control actions determined to prevent personnel from being placed at risk.

Control Monitoring – means air monitoring using static or positional to measure the level of airborne asbestos fibres in an area during work on ACM or airborne lead dust in an area of lead paint removal. Control monitoring is designed to assist in assessing the effectiveness of control measures. Its results are not representative of actual occupational exposures and should not be used for that purpose.

Exposure Standard (TWA) - represent the National Occupational Health and Safety Commission (NOHSC) maximum exposure level by inhalation of airborne concentration of atmospheric lead over an eight-hour day, for a five-day working week, over an entire working life and expressed as 8-hour TWA (Time weighed average). The TWA do not represent 'no-effect' levels which guarantee protection to every worker.

Friable Asbestos-containing Material – means asbestos-containing material that, when dry, is or may become crumbled, pulverised or reduced to powder by hand pressure.

Hazard – means any matter, thing, process, or practice that may cause death, injury, illness or disease.

HEPA - High Efficiency Particulate Air. A filtering system capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micron in diameter or larger.

Membrane Filter Method - is the technique outlined in the NOHSC Guidance Note on the Membrane Filter Method for Estimating Method Airborne Asbestos Fibres 2nd Edition [NOHSC:3003 (2005)].

National Association of Testing Authorities, Australia (NATA) – the organisation that approves the method of sampling for airborne asbestos fibres, bulk sample analysis of asbestos-containing materials and hazardous materials inspections.

NOHSC - National Occupational Health and Safety Commission.

PPE/RPE - Personal / Respiratory Protective Equipment.

PM – Project Manager of the asbestos removal job. If a Principal Contractor has been appointed the Project Manager of the Principal Contractor, if no PM appointed then the owner is the Project Manager.

Person in charge of area - The person in charge of the building or area affected by the asbestos removal.

Restricted Area - A location requiring an Access/Work Permit because unprotected activity to undertake the intended purpose may expose a person to hazardous respirable (airborne) asbestos fibre. For example: Drilling a switch board containing asbestos; entry to a ceiling space containing asbestos or lead dust; entry to a riser shaft containing asbestos; access onto a fragile asbestos cement roof; a cupboard containing asbestos pipe lagging.

Risk – means the likelihood of a hazard causing harm to a person.

Safe Work Australia - An independent statutory agency responsible to improve occupational health and safety and workers' compensation arrangements across Australia.

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Occupational Health and Safety Act 2004 and Regulations 2003, 2007 (VIC),

Occupational Health and Safety and Welfare Act 1986 and Regulations 2010 (SA)

Workplace Health and Safety Act 1995 and Regulations 1998 (TAS)

Occupational Health and Safety Act 1984 and Regulations 1996 (WA)

The National Occupational Health & Safety Commission -NOHSC 1003-2005: Australian Exposure Standards for Atmospheric Contaminants in the Workplace.

Amendment to the Customs (Prohibited Imports) Regulations 1956 - Regulation 4C – Importation of Asbestos – Australian Customs Notice No. 2009/30. – August 2009.

AS 1319-1994 Safety signs for the occupational environment.

Code of Practice: Demolition Work 2014.

Appendix A - Photographs

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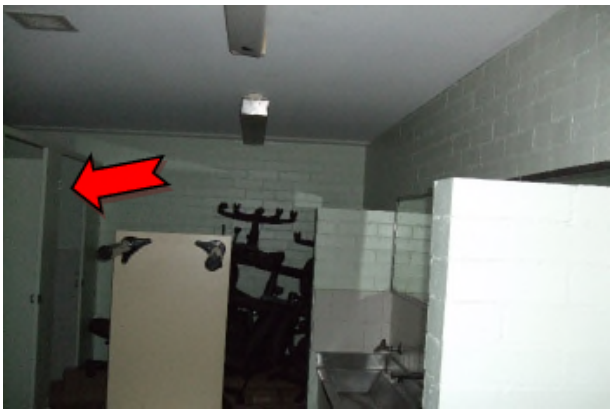
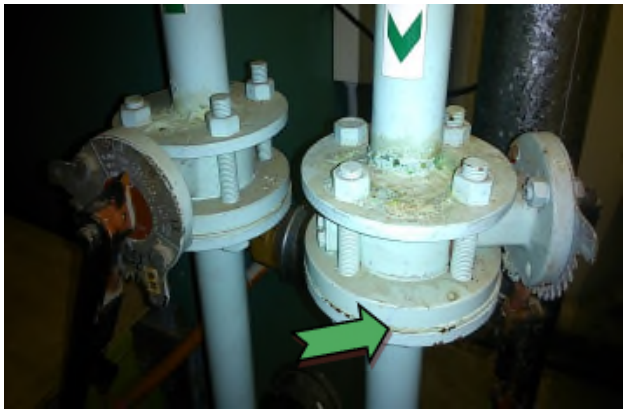
Photograph 1: Interior: Ground Floor; B00A R0027 – Main Switch Board – Suspected asbestos containing electrical backing board.

Photograph 2: Interior: Ground Floor; B00A R0028 – Girls Toilets – Asbestos containing fibre cement sheeting to the partition walls.



Photograph 3: Interior: First Floor; B00A R1007 – Plant – Non-asbestos containing gaskets to pipework.



Photograph 4. Interior: Ground Floor; B00B R0021 – Laundry – Asbestos containing fibre cement to the packing below hot water heater.

Photograph 5: Interior: Ground Floor; B00B R0034 – Girls Toilets – Asbestos containing fibre cement sheeting to the partition walls.

Photograph 6: Interior: Second Floor; B00B R2001 – Movement – Asbestos containing fibre cement sheeting to the compressed cement sheet ceiling panels.

Photograph 7: Interior: Second Floor; B00B - R2002 – Plant – Asbestos containing rope gasket to boiler.

Photograph 8: Interior: Second Floor; B00B - R2002 – Plant – Non-asbestos containing bituminous collars to condenser water pipes.

Photograph 9: Interior: Ground Floor; B00C – R0029 – Girls Toilets – Asbestos containing fibre cement sheeting to the partition walls.

Photograph 10. Interior: Ground Floor; B00C – R0030 – Boys Toilets – Asbestos containing fibre cement sheeting to the partition walls.

Photograph 11: Interior: Ground Floor; B00C – R0022 – Change – Asbestos containing fibre cement sheeting to the partition walls.

Photograph 12: Interior: Ground Floor; B00C – R0059 – Plant – Asbestos containing fibre cement sheeting to the rear wall.

Photograph 13: Interior: Ground Floor; B00C – R0059 – Plant – Asbestos containing fibre cement debris associated with damaged rear wall.

Photograph 14: Interior: Ground Floor; B00C – R0063 – Plant – Asbestos containing fibre cement to the packing beneath hot water heater.

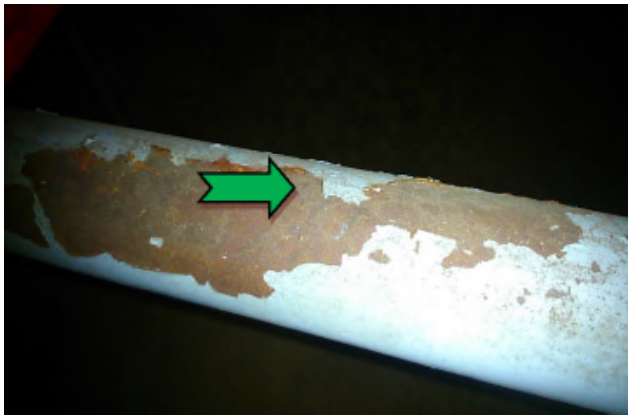
Photograph 15: Interior: Ground Floor; B00A R0057 – Plant – Suspected SMF containing wall insulation and ODS containing refrigerant to Chiller.

Photograph 16. Interior: Ground Floor; B00B R0021 – Laundry – Suspected SMF containing insulation to hot water heater.

Photograph 17: Interior: Ground Floor; B00B – Suspected SMF containing sarking throughout ceiling space.

Photograph 18: Interior: Second Floor; B00B R2002 – Plant – Suspected SMF containing insulation to pipework.

Photograph 19: Interior: Second Floor; B00B – R2002 – Plant – Non-lead containing paint to condenser water pipes.



Photograph 20: Interior: Second Floor; B00B – R2002 – Plant – SMF containing loose pipe insulation.

Photograph 21: Interior: Ground Floor; B00C R0060 – Plant – Suspected SMF containing insulation to hot water heater.

Photograph 22. Interior: Ground Floor; B00C R0063 – Plant – Suspected SMF containing insulation to hot water heater.

Photograph 23: Interior: Ground Floor; B00C – R0081 – Childcare Centre - Suspected ODS containing refrigerant to Mitsubishi AC Unit.

Appendix B - Asbestos and Hazardous Materials Register

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Coffey Environments Pty Ltd.
Level 19, Tower B, Citadel Towers
799 Pacific Highway, Chatswood NSW 2067

Client: TKD Architects **Site Name:** Alexandria Park Community School **Site Address:** Park Rd, Alexandria NSW 2015 **Job No:** 754-SYDEN201044

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Ground Floor - Internal	B00A - R0020 - Boys Toilets	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	$4m^2$	-
Ground Floor - Internal	B00A - R0027 - Main Switch Board	Electrical backing board	Resinous Board	Asbestos	Visual observation	Suspected Asbestos	N	1	1	0	1	0	0	0	1	4	A4	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.	1 unit	1
Ground Floor - Internal	B00A - R0028 - Girls Toilets	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	$9m^2$	2
Ground Floor - Internal	B00A - R0035 - Home Base Store	Floor	Vinyl floor tiles - blue	Asbestos	Refer A2596	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00A - R0050 - Disabled Toilet	Wall near door	Compressed cement sheeting	Asbestos	A2589	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00A - R0055 - Home Base	Floor	Vinyl floor tiles - cream	Asbestos	A2588	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00A - R0068 - Home Base	Floor	Vinyl floor tiles - blue	Asbestos	Refer A2597	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - External	B00A - R0076 - External Movement	Ceiling	Compressed cement sheet	Asbestos	Refer A2593	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
First Floor - Internal	B00A - R1007 - Plant	Pipework throughout	Gaskets	Asbestos	A2587	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	3
Ground Floor - Internal	B00B - R0021 - Laundry	Hot water heater packing	Fibre Cement Sheet	Asbestos	A2595	Chrysotile Asbestos Detected	N	1	1	1	1	1	1	1	0	7	A3	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.	$2m^2$	4

Coffey Environments Pty Ltd.
Level 19, Tower B, Citadel Towers
799 Pacific Highway, Chatswood NSW 2067

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Ground Floor - Internal	B00B - R0030 - Staff Toilet	Partition walls	Compressed cement sheet	Asbestos	A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	$4m^2$	-
Ground Floor - Internal	B00B - R0033 - Boys Toilets	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	$4m^2$	-
Ground Floor - Internal	B00B - R0034 - Girls Toilets	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	$9m^2$	5
Ground Floor - External	B00B - R0060 - External Movement	Ceiling and eaves	Compressed cement sheet	Asbestos	A2593	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00B - R0071 - Staff Kitchen	Under sink	Sink pad	Asbestos	A2592	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - External	B00B - R0075 - External Movement	Ceiling	Compressed cement sheet	Asbestos	Refer A2593	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00B - R0077 - General Learning Space	Floor	Vinyl floor tiles - blue	Asbestos	A2597	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00B - R0082 - Plant	Floor	Vinyl floor tiles - blue	Asbestos	A2596	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00B - R0097 - Boys Toilet	Wall - western wall behind urinal	Fibre Cement Sheet	Asbestos	A2590	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Second Floor - Internal	B00B - R2001 - Movement	Walls	Compressed Cement Sheet	Asbestos	A2586	Chrysotile Asbestos Detected	N	1	1	1	1	1	1	1	0	7	A3	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.	$20m^2$	-

Coffey Environments Pty Ltd.
Level 19, Tower B, Citadel Towers
799 Pacific Highway, Chatswood NSW 2067

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Second Floor - Internal	B00B - R2001 - Movement	Ceiling	Compressed Cement Sheet Panels	Asbestos	A2585	Chrysotile Asbestos Detected	N	1	1	1	1	1	0	1	0	6	A4	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.	4m^2	6
Second Floor - Internal	B00B - R2002 - Plant	Ceiling along west wall	Compressed Cement Sheet Panels	Asbestos	Refer A2585	Chrysotile Asbestos Detected	N	1	1	1	1	1	0	1	0	6	A4	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.	4m^2	-
Second Floor - Internal	B00B - R2002 - Plant	Boiler	Rope Gasket	Asbestos	Refer J125177-8556-S8	Chrysotile Asbestos Detected	Y	1	2	1	3	1	0	1	1	10	A3	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.	1 unit	7
Second Floor - Internal	B00B - R2002 - Plant	Condenser water pipes	Gaskets	Asbestos	A2579	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Second Floor - Internal	B00B - R2002 - Plant	Condenser water pipes	Bituminous collars	Asbestos	A2580	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	8
Ground Floor - Internal	B00C - R0022 - Change	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	25m^2	11
Ground Floor - Internal	B00C - R0029 - Girls Toilets	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	9m^2	9
Ground Floor - Internal	B00C - R0030 - Boys Toilets	Partition walls	Compressed cement sheet	Asbestos	Refer A2594	Chrysotile Asbestos Detected	N	1	1	0	1	1	1	1	0	6	A4	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.	3m^2	10
Ground Floor - Internal	B00C - R0059 - Plant	Rear Wall	Compressed cement sheet	Asbestos	A2578	Chrysotile Asbestos Detected	N	1	1	1	1	1	1	1	0	7	A3	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.	3m^2	12
Ground Floor - Internal	B00C - R0059 - Plant	Rear wall debris	Compressed cement sheet	Asbestos	A2578	Chrysotile Asbestos Detected	N	1	1	3	1	1	1	1	0	9	A3	Restrict access and isolate area. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	0.5m^2	13

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Ground Floor - Internal	B00C - R0063 - Plant	Hot water heater packing	Fibre Cement Sheet	Asbestos	Refer A2595	Chrysotile Asbestos Detected	N	1	1	1	1	1	1	1	0	7	A3	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.	$2m^2$	14
Ground Floor - Internal	B00C - R0065 - Child Care Centre	West wall	Fibre Cement Sheet	Asbestos	Refer A2583	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00C - R0073 - Child Care Centre	Walls and ceilings	Fibre Cement Sheet	Asbestos	Refer A2583 and 84	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00C - R0074 - Child Care Centre	East wall	Fibre Cement Sheet	Asbestos	A2581	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00C - R0075 - Child Care Centre	Walls	Fibre Cement Sheet	Asbestos	A2583	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00C - R0075 - Child Care Centre	Ceiling	Fibre Cement Sheet	Asbestos	A2584	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00C - R0079 - Laundry	Ceiling and bulkhead	Fibre Cement Sheet	Asbestos	A2582	No Asbestos Detected	-	0	0	0	0	0	0	0	0	0	-	-	-	-
Ground Floor - Internal	B00A - R0057 - Plant	Walls	Insulation material	SMF	Visual observation	SMF Detected	-	NA	NA	Good	Part Sealed	Low	NA	NA	NA	Medium	-	Encapsulate exposed sections under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	-	-
Ground Floor - Internal	B00A - R0059 - Darkroom Space	Ceiling	Cream - Top coat	Lead Paint - Chip	L1010	Lead Not Detected <0.05 %w/w	-	0	0	0	0	0	0	0	0	0	-	RESULT <1.0% lead content, not lead-containing paint as described in AS 4361.2:1998 Guide to lead paint management.	-	-
Ground Floor - Internal	B00A - R0062 - Plant	Wall space	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$5m^2$	15

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Ground Floor - Internal	B00B - R0062 - Plant	Chiller	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	15
Ground Floor - Internal	B00A - R0066 - Plant	Wall space	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$5m^2$	-
Ground Floor - Internal	B00B - R0066 - Plant	Chiller	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	-
Ground Floor - Internal	B00A - R0070 - Plant	Wall space	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$5m^2$	-
Ground Floor - Internal	B00B - R0070 - Plant	Chiller	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	-
First Floor - Internal	B00A - R1007 - Plant	Pipe work	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	-
First Floor - Internal	B00A - R1007 - Plant	Duct	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	-
First Floor - Internal	B00A - R1007 - Plant	Ceiling	Sarking insulation	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$20m^2$	-
First Floor - Internal	B00A - R1007 - Plant	Pipework to chiller	Green (light) - Undercoat	Lead Paint - Chip	L1011	Lead Not Detected 0.2% w/w	-	0	0	0	0	0	0	0	0	0	-	RESULT <1.0% lead content, not lead-containing paint as described in AS 4361.2:1998 Guide to lead paint management.	-	3
First Floor - Internal	B00A - R1007 - Plant	Chiller	R409 Refrigerant	Ozone Depleting Substances	Visual observation	Non ODS Refrigerant	-	0	0	0	0	0	0	0	0	0	-	Hydrofluoracarbon (HFC) non ozone depleting substances.	-	-

Coffey Environments Pty Ltd.
Level 19, Tower B, Citadel Towers
799 Pacific Highway, Chatswood NSW 2067

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
First Floor - Internal	B00A - R1016 - Plant	Duct	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	-
First Floor - Internal	B00A - R1017 - General Learning Space	Boiler	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	1 unit	-
Ground Floor - Internal	B00A - Throughout	Ceiling space	Sarking insulation	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	Throughout	-
Ground Floor - Internal	B00B - R0005- Staff Room Annexe	Duct	Insulation material - internal	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	6 m^2	-
Ground Floor - Internal	B00B - R0021 - Laundry	Hot water heater	Insulation material - internal	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	1 unit	16
Ground Floor - Internal	B00B - R0027 - Commonroom	Hot water heater	Insulation material - internal	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	1 unit	-
Ground Floor - Internal	B00B - Throughout	Ceiling space	Sarking insulation	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	Throughout	17
Ground Floor - Internal	B00B - R0067 - Movement	Pipe work	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	-
Ground Floor - Internal	B00B - R0068 - Administration	Air conditioner	R410A Hydrofluorocarbon (HFC)	Ozone Depleting Substances	Visual observation	Non ODS Refrigerant	-	0	0	0	0	0	0	0	0	-	-	Hydrofluoracarbon (HFC) non ozone depleting substances.	1 unit	-
Ground Floor - Internal	B00B - R0071 - Staff Kitchen	Pipe work	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	-

Coffey Environments Pty Ltd.
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Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Ground Floor - Internal	B00B - R0072 - Sick Bay	Pipe work	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	-
Ground Floor - External	B00B - R0075 - External Movement	Air conditioner	R410A Hydrofluorocarbon (HFC)	Ozone Depleting Substances	Visual observation	Non ODS Refrigerant	-	0	0	0	0	0	0	0	0	-	-	Hydrofluoracarbon (HFC) non ozone depleting substances.	1 unit	-
Ground Floor - Internal	B00B - R0082 - Plant	Wall space	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$5m^2$	-
Ground Floor - Internal	B00B - R0082 - Plant	Chiller	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	-
Ground Floor - Internal	B00B - R0086 - Plant	Wall space	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$5m^2$	-
Ground Floor - Internal	B00B - R0086 - Plant	Chiller	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	-
Ground Floor - Internal	B00B - R0090 - Plant	Wall space	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	$5m^2$	-
Ground Floor - Internal	B00B - R0090 - Plant	Chiller	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	-
First Floor - Internal	B00B - R1028 - External Movement	Air conditioner	R410A Hydrofluorocarbon (HFC)	Ozone Depleting Substances	Visual observation	Non ODS Refrigerant	-	0	0	0	0	0	0	0	0	-	-	Hydrofluoracarbon (HFC) non ozone depleting substances.	1 unit	-
Second Floor - Internal	B00B - R2001 - Movement	Metal structural beams	Green (light) - Undercoat	Lead Paint - Chip	L1012	Lead Not Detected <0.05% w/w	-	0	0	0	0	0	0	0	0	-	-	RESULT <1.0% lead content, not lead-containing paint as described in AS 4361.2:1998 Guide to lead paint management.	-	-

Area / Level	Room & Location	Feature	Item Description	Hazard Type	Sample No.	Sample Status	Friable	Asbestos Type	Product Type	Extent of Damage	Surface Treatment	Occupant Activity	Likelihood of Disturbance	Exposure Potential	Maintenance Activity	Risk Score	Action	Recommendations & Comments	Quantity	Photo No.
Second Floor - Internal	B00B - R2002 - Plant	Pipe work	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	-	18
Second Floor - Internal	B00B - R2002 - Plant	Duct	Insulation material - internal	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	6 m^2	-
Second Floor - Internal	B00B - R2002 - Plant	Condenser water pipes	Brown (light) - Undercoat	Lead Paint - Chip	L1013	Lead Not Detected <0.05% w/w	-	0	0	0	0	0	0	0	0	-	-	RESULT <1.0% lead content, not lead-containing paint as described in AS 4361.2:1998 Guide to lead paint management.	-	19
Second Floor - Internal	B00B - R2002 - Plant	Loose pipe insulation in south west corner	Insulation material	SMF	Visual observation	Suspected SMF	-	NA	NA	Average	Not Sealed	Low	NA	NA	NA	Medium	-	Remove under controlled SMF conditions as per the Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC: 2006 (1990)].	5 m^2	20
Ground Floor - Internal	B00C - Throughout	Ceiling space	Sarking insulation	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	Throughout	-
Ground Floor - Internal	B00C - R0060 - Plant	Hot water heater	Insulation material - internal	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	1 unit	21
Ground Floor - Internal	B00C - R0063 - Plant	Hot water heater	Insulation material - internal	SMF	Visual observation	Suspected SMF	-	NA	NA	Good	Sealed	Low	NA	NA	NA	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)].	1 unit	22
Ground Floor - Internal	B00C - R0070 - Child Care Centre	Air conditioner	R410A Hydrofluorocarbon (HFC)	Ozone Depleting Substances	Visual observation	Non ODS Refrigerant	-	0	0	0	0	0	0	0	0	-	-	Hydrofluoracarbon (HFC) non ozone depleting substances.	1 unit	-
Ground Floor - Internal	B00C - R0081 - Child Care Centre	Air conditioner	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	23
Ground Floor - Internal	B00C - R0083 - Child Care Centre	Air conditioner	Unknown refrigerant	Ozone Depleting Substances	Visual observation	Suspected ODS	-	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	No data was visible at the time of the assessment. Confirm status of suspected ozone depleting substances identified in the assessment.	1 unit	-

Appendix C - Certificates of Analysis

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CERTIFICATE OF ANALYSIS 160920

Client:

Coffey Environment
Level 19, Tower B, Citadel Tower
799 Pacific Hwy
Chatswood
NSW 2067

Attention: S Cook

Sample log in details:

Your Reference:	**201044**
No. of samples:	4 Paints, 20 Materials
Date samples received / completed instructions received	27/01/17 / 27/01/17

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:	1/02/17 / 1/02/17
Date of Preliminary Report:	Not Issued

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

Results Approved By:

David Springer
General Manager

Lead in Paint Our Reference: Your Reference	UNITS ---------- -	160920-21 L1010	160920-22 L1011	160920-23 L1012	160920-24 L1013
Date Sampled	----------	27/01/2017	27/01/2017	27/01/2017	27/01/2017
Type of sample		material	Paint	Paint	Paint
Date prepared	-	1/02/2017	1/02/2017	1/02/2017	1/02/2017
Date analysed	-	1/02/2017	1/02/2017	1/02/2017	1/02/2017
Lead in paint	%w/w	<0.05	0.2	<0.05	<0.05

Asbestos ID - materials						
Our Reference:	UNITS	160920-1	160920-2	160920-3	160920-4	160920-5
Your Reference	---------- -	A2578	A2579	A2580	A2581	A2582
Date Sampled	----------	27/01/2017	27/01/2017	27/01/2017	27/01/2017	27/01/2017
Type of sample		material	material	material	material	material
Date analysed	-	31/01/2017	31/01/2017	31/01/2017	31/01/2017	31/01/2017
Mass / Dimension of Sample	-	69x44x6mm	12x10x5mm	16x11x4mm	35x10x4mm	20x13x4mm
Sample Description	-	Beige layered fibre cement material	Black bituminous material	Blue/white fibre cement material	Assorted organic fibrous material	Peach fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Organic fibres detected	No asbestos detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected

Asbestos ID - materials						
Our Reference:	UNITS	160920-6	160920-7	160920-8	160920-9	160920-10
Your Reference	---------- -	A2583	A2584	A2585	A2586	A2587
Date Sampled	----------	27/01/2017	27/01/2017	27/01/2017	27/01/2017	27/01/2017
Type of sample		material	material	material	material	material
Date analysed	-	31/01/2017	31/01/2017	31/01/2017	31/01/2017	31/01/2017
Mass / Dimension of Sample	-	8x5x3mm	10x9x3mm	24x10x5mm	23x20x5mm	11x5x5mm
Sample Description	-	Peach fibre cement material	Beige fibre cement material	Grey fibre cement material	Beige layered fibre cement material	Black bituminous material
Asbestos ID in materials	-	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	Chrysotile asbestos detected	Chrysotile asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected

Asbestos ID - materials						
Our Reference:	UNITS	160920-11	160920-12	160920-13	160920-14	160920-15
Your Reference	---------- -	A2588	A2589	A2590	A2591	A2592
Date Sampled	----------	27/01/2017	27/01/2017	27/01/2017	27/01/2017	27/01/2017
Type of sample		material	material	material	material	material
Date analysed	-	31/01/2017	31/01/2017	31/01/2017	31/01/2017	31/01/2017
Mass / Dimension of Sample	-	25x16x5mm	9x8x2mm	34x12x5mm	41x22x4mm	6x6x<1mm
Sample Description	-	Beige vinyl tile	Beige fibre cement material	Beige layered fibre cement material	White flexible vinyl tile	Black bituminous material
Asbestos ID in materials	-	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	No asbestos detected

Asbestos ID - materials						
Our Reference:	UNITS	160920-16	160920-17	160920-18	160920-19	160920-20
Your Reference	---------- -	A2593	A2594	A2595	A2596	A2597
Date Sampled	----------	27/01/2017	27/01/2017	27/01/2017	27/01/2017	27/01/2017
Type of sample		material	material	material	material	material
Date analysed	-	31/01/2017	31/01/2017	31/01/2017	31/01/2017	31/01/2017
Mass / Dimension of Sample	-	37x21x6mm	25x15x3mm	164x81x5mm	78x21x4mm	45x31x5mm
Sample Description	-	White plaster-like material	Grey fibre cement material	Grey layered fibre cement material	Blue flexible vinyl tile	Grey vinyl tile & organic backing
Asbestos ID in materials	-	No asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected Organic fibres detected	No asbestos detected	No asbestos detected Organic fibres detected

Method ID	Methodology Summary
Metals-004	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.

Client Reference: 201044

QUALITY CONTROL Lead in Paint	UNITS	PQL	METHOD	Blank	Duplicate Sm#	Duplicate results Base II Duplicate II %RPD	Spike Sm#	Spike % Recovery
Date prepared	-			1/02/2017	[NT]	[NT]	LCS-1	1/02/2017
Date analysed	-			1/02/2017	[NT]	[NT]	LCS-1	1/02/2017
Lead in paint	%w/w	0.05	Metals-004	<0.05	[NT]	[NT]	LCS-1	102%

Report Comments:

Asbestos ID was analysed by Approved Identifier: Matt Tang
Asbestos ID was authorised by Approved Signatory: Paul Ching

INS: Insufficient sample for this test
NR: Test not required
<: Less than

PQL: Practical Quantitation Limit
RPD: Relative Percent Difference
>: Greater than

NT: Not tested
NA: Test not required
LCS: Laboratory Control Sample

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.

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: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.
Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-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.

Measurement Uncertainty estimates are available for most tests upon request.

Appendix D - Asbestos Legislative Requirements

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LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc. to ensure they are familiar with the latest applicable state legislation and guidance.

Introduction:

New (Harmonised) work health and safety laws commenced in the Commonwealth, New South Wales, Queensland, the Australian Capital Territory and the Northern Territory on 1 January 2012 and in Tasmania and South Australia on 1 January 2013.

For links to these legislation and the most current information on the progress of legislative change for the other states, please access Safe Work Australia at:

http://www.safeworkaustralia.gov.au/Legislation/Pages/ModelWHSLegislation.aspx

Transitional Arrangements

Safe Work Australia has developed transitional principles that set out how arrangements under existing work health and safety legislation are intended to transition to the new harmonised system. There are transitional principles statements for both the WHS Act and Regulations. These are available from the Safe Work Australia site:

http://www.safeworkaustralia.gov.au/Legislation/transitional-arrangements/Pages/transitional-arrangements.aspx

Further, each state and territory work health and safety authority has also developed resources to assist their jurisdiction with the transition. If you have any questions regarding transitional arrangements in your jurisdiction please contact your regulator.

Further Useful Resources

Safe Work Australia publishes a range of guidance material to provide information on the model work health and safety laws and to assist compliance. This information can be accessed from:

http://www.safeworkaustralia.gov.au/Legislation/guidance-material/Pages/guidance-material.aspx

For More Information Contact:

Coffey Environments – Work Health and Safety Section:

Phone: 02 8083 1600 Email: WHS_Support@Coffey.com Web: www.coffey.com

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STATE **Primary Asbestos Legislation**	**Asbestos Survey Requirements**	**Asbestos Resurvey Requirements**	**Reporting Requirements**	**Management and Labelling/Signage Requirements**	**Other Requirements**
COMMONWEALTH ***NEW SOUTH WALES*** ***QUEENSLAND*** ***NORTHERN TERRITORY*** ***TASMANIA*** ***SOUTH AUSTRALIA*** *Work Health and Safety Act 2011 (Cth, NSW, QLD, TAS, SA)* *Work Health and Safety Regulations 2011 (Cth, NSW, QLD, TAS, SA)* *Work Health and Safety (National Uniform Legislation) Act and Regulations 2011 (NT)* *Supported by:* *Code of Practice - How to Manage and Control Asbestos in the Workplace (2016)* *Code of Practice - How to Safely Remove Asbestos (2016)*	A person conducting a business or undertaking (PCBU) must, for work place buildings/ structures that are constructed prior to December 31, 2003; • survey to identify and locate any Asbestos-containing Materials (ACM; and, • Compile and keep at the workplace a site specific Asbestos Register. If ACM is identified at the work place, an Asbestos Management Plan (AMP) is to be compiled for the management of the identified ACM. The Asbestos Register and the Asbestos Management Plan must be made available at the work place for workers, people intending to conduct business at the work place and to Health and Safety representatives.	Re-inspections of identified ACM are determined on a case-by-case basis depending on the risk situation and should be informed by and conducted in accordance with the site specific Asbestos Management Plan.	The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey. The Asbestos Register must be maintained and also updated if: • the AMP is under review, • further ACM is identified and/or, • ACM is removed, disturbed or encapsulated. The site specific AMP must include management actions and justifications, incident and emergency response plans and record details of works carried out that involves ACM at the work place. The AMP must be maintained and updated: • when the Asbestos Register is under review, • if asbestos is removed, disturbed or encapsulated, • if the AMP is no longer adequate for managing the ACM, • if a Health and Safety Officer requests a review and/or at least • Once every 5 years.	Generally, health monitoring is not required excepting for workers involved in asbestos removal works. Training is required for persons involved in asbestos removal work or carrying out asbestos related works. All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item. Before refurbishment or demolition: • ensure Asbestos Register is current • undertake necessary inspections A licenced asbestos removalist is required unless: • ACM < 10m2 and non-friable and then by a competent person	WHS Regulation 419 requires A person conducting a business or undertaking (PCBU) must not carry out, or direct or allow a worker to carry out, work involving asbestos; excepting as is applicable: • managing risk; • sampling, identification and analysis; • maintenance • removal/disposal • other exemptions per s.419 (3)