

**Mirvac**

**Asbestos and Hazardous Materials  
Re-Inspection**

410 Ann Street, Brisbane City QLD 4000

10 December 2019



When you  
think with a  
global mind  
problems  
get smaller

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# Asbestos and Hazardous Materials Re-Inspection

Prepared for  
Mirvac

Prepared by  
Coffey Services Australia Pty Ltd  
Level 19, Tower B, 799 Pacific Highway  
Chatswood NSW 2067 Australia  
t: +61 2 9406 1000 f: +61 2 9406 1002  
ABN: 55 139 460 521

## 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 Asbestos Containing Material (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 any 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.

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# Executive Summary

Coffey Services Australia Pty Ltd (Coffey) was commissioned by was commissioned by Mirvac Property Group to conduct an Asbestos and Hazardous Materials Re-Inspection of 410 Ann Street, Brisbane City QLD 4000 on the 17<sup>th</sup> October 2019. The survey was undertaken to facilitate the inspection of asbestos and other hazardous materials (HazMat) in accordance with the requirements of the QLD Code of Practice *How to Manage and Control Asbestos in the Workplace (2011)*, and relevant asbestos legislation.

State Legislation and guidance requires that the registers be used by and made available to property owners, employers, workers, persons intending business at the premises and Health and Safety Representatives, as part of overall hazardous materials management designed to control the risks of exposure to Hazardous Materials.

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.

From the site survey results, a register of asbestos has been produced, in accordance with the requirements of the relevant Regulations, Codes of Practice and Guidance Notes. In addition, the following report was used as a reference for the investigation: *ENAUBRIS09682AA, Hazardous Materials Management Survey, 410 Ann Street, Brisbane (issue date 15.11.2016)*.

During the audit conducted by Coffey, the following hazardous materials were noted:

## **Asbestos Containing Materials (ACM)**

### **East Tower:**

- Exterior: level 13, plant room, external walls – suspected asbestos containing fibre cement sheet;
- Exterior: level 13, plant room, soffit – suspected asbestos containing fibre cement sheet;
- Interior: level 13, lift motor room, lift motor – asbestos containing friction material;
- Interior: level 13, lift motor room, fire door - single (unlabelled) – suspected asbestos containing internal insulation material;
- Interior: level 13, diesel motor room, fire door - single (unlabelled) – suspected asbestos containing internal insulation material;
- Interior: level 13, plant room, pipe work – asbestos containing gasket material;
- Interior: level 13, plant room, Emergency Transfer Pump Shut Off – suspected asbestos containing internal insulation material;
- Interior: level 13, plant room, switchboard – suspected asbestos containing arc shields; and
- Interior: ground level to level 12, electrical server room, switchboard – suspected asbestos containing arc shields.

### **West Tower:**

- Exterior: level 7, plant room, external walls – suspected asbestos containing fibre cement sheet;

- Interior: level 7, lift motor room, lift motor – suspected asbestos containing friction material;
- Interior: level 7, lift motor room, switchboard – suspected asbestos containing arc shields;
- Interior: level 7, plant room, internal walls – suspected asbestos containing fibre cement sheet;
- Interior: level 7, plant room, pipe work – asbestos containing gasket material;
- Interior: level 7, plant room, Emergency Transfer Pump Shut Off – suspected asbestos containing internal insulation material;
- Interior: level 7, plant room, switchboard – suspected asbestos containing arc shields;
- Interior: levels 1, 3, 5 and 6, plant room, pipe work – asbestos containing fire stop membrane;
- Interior: levels 1 to 6, electrical server room, switchboard – suspected asbestos containing arc shields; and
- Interior: levels 1 to 6, electrical server room, pipe work – asbestos containing fire stop membrane.

#### Carpark:

- Interior: B2, MDF and switch rooms throughout, switchboard – suspected asbestos containing arc shields.

### **Synthetic Mineral Fibres (SMF)**

#### East Tower:

- Interior: level 13, plant room, ceiling – suspected SMF sarking insulation;
- Interior: level 12, air handling room, 'Rheem' hot water heater – suspected SMF internal insulation material;
- Interior: ground level to level 12, male amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 12, female amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 12, kitchenette, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 12, corridors (common areas), ceiling – suspected SMF compressed ceiling tiles; and
- Interior: ground level to level 12, electrical server room, packer – suspected SMF pillow insulation.

#### West Tower:

- Interior: level 7, plant room, ceiling – suspected SMF sarking insulation;
- Interior: ground level to level 6, air handling rooms, 'Rheem' hot water heater – suspected SMF internal insulation material;
- Interior: ground level to level 6, male amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 6, female amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 6, kitchenette, ceiling – suspected SMF compressed ceiling tiles;



- Interior: ground level and levels 1, 2, 3 and 6, corridors (common areas), ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 6, electrical server room, packer – suspected SMF pillow insulation; and
- Interior: ground level, disabled amenities, ceiling – suspected SMF compressed ceiling tiles.

Carpark:

- Interior: B2, Pump and Sprinkler rooms, 'Rheem' hot water heater – suspected SMF internal insulation material; and
- Interior: B2, storerooms throughout, loose ceiling tiles – suspected SMF compressed ceiling tiles.

### **Lead-Based Paint (LBP)**

No LBP was identified or suspected to be present on site at the time of the survey.

### **Lead Containing Dust (LCD)**

No LCD was identified or suspected to be present on site at the time of the survey.

### **Ozone Depleting Substances (ODS)**

East Tower:

- Exterior: level 13, roof top adjacent to plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant;
- Exterior: level 13, roof top adjacent to plant room, 'Sundowner' and 'Carrier' air conditioning units – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant; and
- Interior: level 13, plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant.

West Tower:

- Interior: level 7, plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant.

### **Polychlorinated Biphenyls (PCB)**

East Tower:

- Interior: all levels, generator, plant and lift motor rooms, fluorescent light fittings – suspected PCB containing capacitors.

West Tower:

- Interior: all levels, generator, plant and lift motor rooms, fluorescent light fittings – suspected PCB containing capacitors.

# 1. Introduction

Coffey Services Australia Pty Ltd (Coffey) was engaged by was commissioned by Mirvac Property Group to conduct an Asbestos and Hazardous Materials Re-Inspection of the multi-storey office building located at 410 Ann Street, Brisbane City QLD 4000.

Jake Iskenderian of Coffey carried out the re-inspection on the 17<sup>th</sup> October 2019, with the site contact providing access and information regarding the site and its history.

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. In addition, the following report was used as a reference for the investigation: *ENAUBRIS09682AA, Hazardous Materials Management Survey, 410 Ann Street, Brisbane (issue date 15.11.2016)*.

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 Mirvac Property Group is requesting this inspection to maintain and update records for the site in accordance with *QLD Work Health and Safety Regulation 2011* and the *QLD Code of Practice How to Manage and Control Asbestos in the Workplace 2011*.

## 1.2. Site Description

The hazardous materials re-inspection consisted of a multi-storey office building located at 410 Ann Street, Brisbane City QLD 4000. The building was occupied at the time of the survey.

**Table 1: Site Information**

<b>Site:</b>	410 Ann Street, Brisbane City QLD 4000		
<b>Age (Circa):</b>	1988	<b>External walls:</b>	Concrete, steel and glass
<b>Approximate area:</b>	20,521 m <sup>2</sup>	<b>Internal walls:</b>	Concrete, plasterboard & ceramic tiles
<b>Levels:</b>	13 levels	<b>Ceiling:</b>	Concrete, plasterboard & compressed ceiling tiles
<b>Roof type:</b>	Concrete	<b>Floor and coverings:</b>	Concrete, ceramic tiles & carpet

## 1.3. Scope

The scope of work required Coffey to:

- Conduct a full Asbestos and Hazardous Materials (HazMat) re-inspection survey of all reasonably accessible areas within the site, to locate Asbestos Containing Materials (ACM), Synthetic Mineral Fibre (SMF), Lead Based Paint systems (LBP), Lead Containing Dust (LCD), Polychlorinated Biphenyls in light capacitors (PCB) and Ozone Depleting Substances (ODS) in accessible areas;
- Collect representative samples of any suspect ACM and/or lead paint materials (where accessible) previously overlooked or missed 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), Lead Containing Dust (LCD), 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 intrusive sampling techniques to be undertaken in all locations, and consequently the register may have limitations as a reference document for the purposes of renovation or demolition.

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

Samples collected are representative of the material sampled, individually identified, transported, analysed and reported in accordance with relevant Statutory Regulations, Codes of Practice and 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 Australia's assessment of risk and assignment of action ratings. Reference to photographs, where available, is made in the

register along with sample identification and analysis results, where applicable. Sample analysis results from previous assessments may be utilised and referenced in this register.

## 3. Assessment Findings

The findings of this assessment are presented in tabulated format in **Appendix B: Asbestos and Hazardous Materials Register** of this assessment report. Hazardous building materials that have been photographed are shown in **Appendix A: Photographs**.

The following significant key findings are noted:

### 3.1. Hazardous Building Materials

#### 3.1.1. Asbestos Containing Materials

East Tower:

- Exterior: level 13, plant room, external walls – suspected asbestos containing fibre cement sheet;
- Exterior: level 13, plant room, soffit – suspected asbestos containing fibre cement sheet;
- Interior: level 13, lift motor room, lift motor – asbestos containing friction material;
- Interior: level 13, lift motor room, fire door - single (unlabelled) – suspected asbestos containing internal insulation material;
- Interior: level 13, diesel motor room, fire door - single (unlabelled) – suspected asbestos containing internal insulation material;
- Interior: level 13, plant room, pipe work – asbestos containing gasket material;
- Interior: level 13, plant room, Emergency Transfer Pump Shut Off – suspected asbestos containing internal insulation material;
- Interior: level 13, plant room, switchboard – suspected asbestos containing arc shields; and
- Interior: ground level to level 12, electrical server room, switchboard – suspected asbestos containing arc shields.

West Tower:

- Exterior: level 7, plant room, external walls – suspected asbestos containing fibre cement sheet;
- Exterior: level 7, plant room, soffit – suspected asbestos containing fibre cement sheet;
- Interior: all levels, air handling rooms, pipe work –asbestos containing fire stop membrane;
- Interior: level 7, lift motor room, lift motor – suspected asbestos containing friction material;
- Interior: level 7, lift motor room, switchboard – suspected asbestos containing arc shields;
- Interior: level 7, plant room, internal walls – suspected asbestos containing fibre cement sheet;
- Interior: level 7, plant room, pipe work – asbestos containing gasket material;

- Interior: level 7, plant room, Emergency Transfer Pump Shut Off – suspected asbestos containing internal insulation material;
- Interior: level 7, plant room, switchboard – suspected asbestos containing arc shields;
- Interior: levels 1, 3, 5 and 6, plant room, pipe work – asbestos containing fire stop membrane;
- Interior: levels 1 to 6, electrical server room, switchboard – suspected asbestos containing arc shields; and
- Interior: levels 1 to 6, electrical server room, pipe work – asbestos containing fire stop membrane.

Carpark:

- Interior: B2, MDF and switch rooms throughout, switchboard – suspected asbestos containing arc shields.

### **3.1.2. Synthetic Mineral Fibres**

East Tower:

- Interior: level 13, plant room, ceiling – suspected SMF sarking insulation;
- Interior: level 12, air handling room, 'Rheem' hot water heater – suspected SMF internal insulation material;
- Interior: ground level to level 12, male amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 12, female amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 12, kitchenette, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 12, corridors (common areas), ceiling – suspected SMF compressed ceiling tiles; and
- Interior: ground level to level 12, electrical server room, packer – suspected SMF pillow insulation.

West Tower:

- Interior: level 7, plant room, ceiling – suspected SMF sarking insulation;
- Interior: ground level to level 6, air handling rooms, 'Rheem' hot water heater – suspected SMF internal insulation material;
- Interior: ground level to level 6, male amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 6, female amenities, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 6, kitchenette, ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level and levels 1, 2, 3 and 6, corridors (common areas), ceiling – suspected SMF compressed ceiling tiles;
- Interior: ground level to level 6, electrical server room, packer – suspected SMF pillow insulation; and

- Interior: ground level, disabled amenities, ceiling – suspected SMF compressed ceiling tiles.

Carpark:

- Interior: B2, Pump and Sprinkler rooms, 'Rheem' hot water heater – suspected SMF internal insulation material; and
- Interior: B2, storerooms throughout, loose ceiling tiles – suspected SMF compressed ceiling tiles.

### **3.1.3. Lead Based Paint**

No LBP was identified or suspected to be present on site at the time of the survey.

### **3.1.4. Lead Containing Dust**

No LCD was identified or suspected to be present on site at the time of the survey.

### **3.1.5. Ozone Depleting Substances**

East Tower:

- Exterior: level 13, roof top adjacent to plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant;
- Exterior: level 13, roof top adjacent to plant room, 'Sundowner' and 'Carrier' air conditioning units – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant; and
- Interior: level 13, plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant.

West Tower:

- Interior: level 7, plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant.

### **3.1.6. Polychlorinated Biphenyls**

East Tower:

- Interior: all levels, generator, plant and lift motor rooms, fluorescent light fittings – suspected PCB containing capacitors.

West Tower:

- Interior: all levels, generator, plant and lift motor rooms, fluorescent light fittings – suspected PCB containing capacitors.

## 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:

- Tenanted office spaces throughout;
- Within live electricals and machinery;
- Lift motors; and
- Confined space areas.

## 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 Containing Materials

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 QLD Work Health and Safety Regulation 2011.

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

- ACM that has been identified in this survey must be removed prior to the commencement of general demolition works.
- 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).

Please note the survey undertaken is not considered a pre-demolition survey; an intrusive pre-demolition survey must be undertaken prior to refurbishment or demolition. 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 Fibres

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

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. PCB – Containing Capacitors

Electrical fittings that contain or suspected to contain PCB oil-containing capacitors should be removed as hazardous/regulated waste under controlled working conditions prior to the demolition or



refurbishment works in accordance with the Polychlorinated Biphenyls Management Plan, Revised Edition April 2003.

## 4.5. 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:

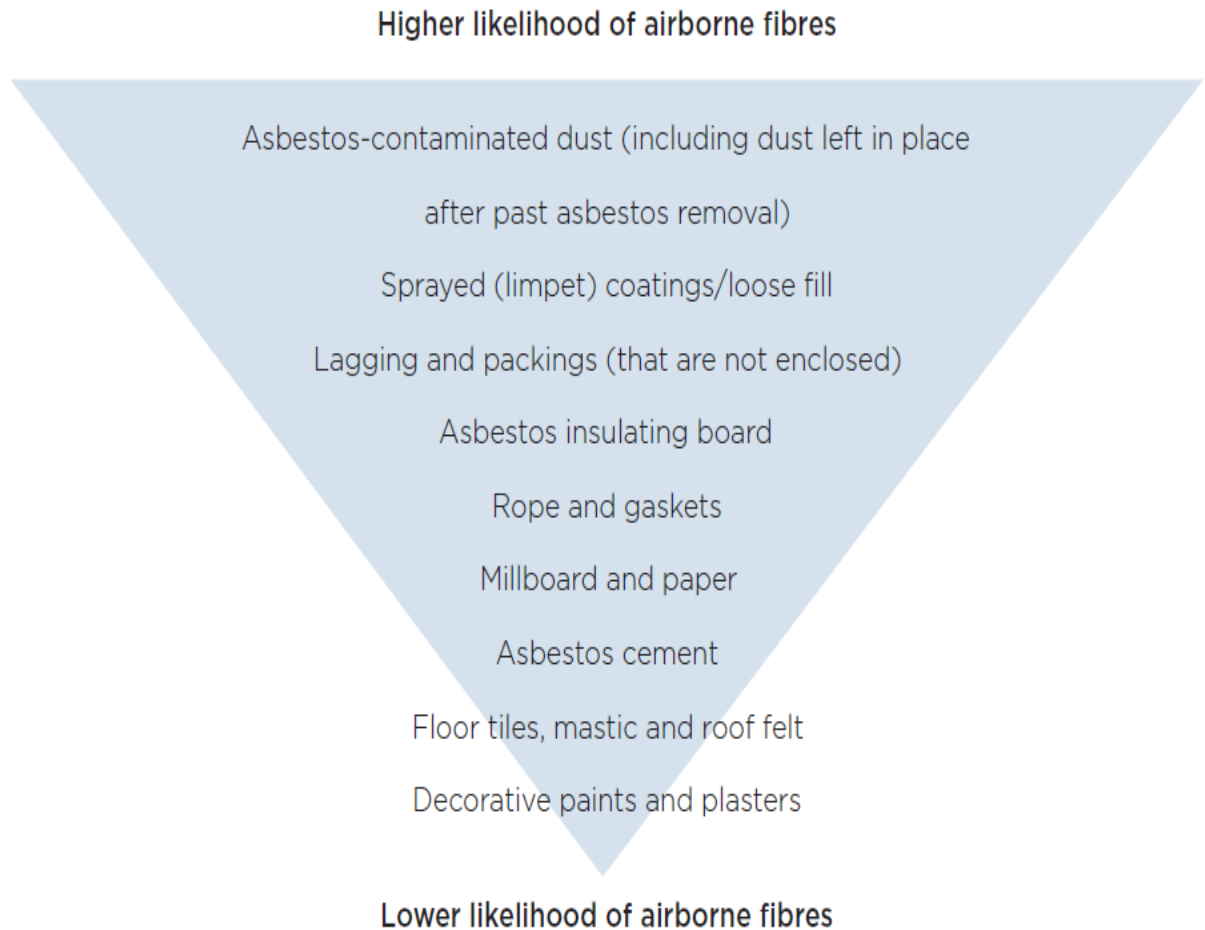
- The purpose of the training;
- The health risks of hazardous materials;
- The types, uses and likely occurrence of hazardous materials on site, in plant and/or equipment in the workplace;
- The trainees' roles and responsibilities under the workplace's hazardous materials management;
- Where the workplace's 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 QLD Code of Practice: *How to Manage and Control Asbestos in the Workplace* (2011)).



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
<b>Occupant Activity</b>	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
<b>Likelihood of Disturbance</b>	0	Usually inaccessible or unlikely to be disturbed
	1	Minimal likelihood for disturbance
	2	Likely disturbance
	3	Frequent disturbance
<b>Human Exposure Potential</b>	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
<b>Maintenance Activity</b>	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
<b>Risk Score</b>	0 - 6	Very Low Risk - Action Score A4
	7 - 9	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

<b>A1</b>	<b>Action 1</b>	<b>Restrict access and remove</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>Friable or poorly bonded to substrate, located in accessible areas</li> <li>Severely water damaged, or unstable</li> <li>Further damage or deterioration likely</li> <li>Friable asbestos material located in air conditioning ducting</li> <li>Asbestos debris and stored asbestos in reasonably accessible areas</li> <li>Post removal of A1 item, update Asbestos Materials Register and Asbestos Management Plan</li> </ul>
<b>A2</b>	<b>Action 2</b>	<b>Enclose, encapsulate or seal and Label – Re-inspect according to Asbestos Management Plan</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>Damaged material</li> <li>In reasonably accessible area</li> <li>Friable material or poorly bonded to substrate, with bonding achievable</li> <li>Possibility of disturbance through contact</li> <li>Possibility of deterioration caused by weathering</li> <li>Post encapsulation of A2 item, update Asbestos Materials Register and Asbestos Management Plan</li> </ul>
<b>A3</b>	<b>Action 3</b>	<b>Remove during refurbishment or maintenance and Label – Re-inspect according to Asbestos Management Plan</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>Asbestos debris or stored material in rarely accessed areas</li> <li>Further disturbance or damage unlikely other than during maintenance or service</li> <li>Readily visible for further assessment</li> <li>Asbestos CAF Gaskets</li> <li>Asbestos friction materials and brake linings</li> </ul>
<b>A4</b>	<b>Action 4</b>	<b>No remedial action, Label – Re-inspect according to Asbestos Management Plan</b>
		<p>As a guide, the material conforms to one, or more, of the following:</p> <ul style="list-style-type: none"> <li>Firmly bonded to substrate and readily visible for inspection</li> <li>Inaccessible and fully contained</li> <li>Stable and damage unlikely</li> </ul>

## Acronyms

<b>ACM</b>	Asbestos-containing material
<b>NOHSC</b>	National Occupational Health and Safety Commission
<b>AMP</b>	Asbestos Management Plan
<b>V.O.</b>	Visual Observation
<b>NATA</b>	National Association of Testing Authorities, Australia
<b>PLM</b>	Polarised Light Microscopy
<b>SEM</b>	Scanning Electron Microscopy
<b>EDAX</b>	Energy Dispersive X-ray Analysis
<b>CH</b>	Chrysotile Asbestos
<b>CR</b>	Crocidolite Asbestos
<b>AM</b>	Amosite Asbestos
<b>NAD</b>	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 2019).

**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.

**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 the 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.

## 6. Bibliography

Association of Fluorocarbon Consumers and Manufacturers, the Australian Refrigeration and Air Conditioning Code of Good Practice - 1992

Australia and New Zealand Environment and Conservation Council (ANZECC), Polychlorinated Biphenyls Management Plan - 1999

Australia and New Zealand Environment and Conservation Council (ANZECC), Identification of PCB – Containing Capacitors - 1997

Australian Commonwealth Government Ozone Protection Act - 1989

Australian Standard (AS4361.2), Guide to Hazardous Paint Management - 2017

Department of Occupational Health, Safety and Welfare, Safe Handling of PCB in Fluorescent Light Capacitors - 1993

Department of Industrial Resources (DoIR) Guidance for Upstream Petroleum on the National Ban on Asbestos of 31 December 2003.

National Occupational Health and Safety Commission (NOHSC), Approved Criteria for Classifying Hazardous Substances, 1008 - 2002

National Occupational Health and Safety Commission Code of Practice for the Management and Control of Asbestos in the Workplace; [NOHSC: 2018 (2005)].

National Occupational Health and Safety Commission (NOHSC), Control of Inorganic Lead at Work: National Standard, 109 - 1994

National Occupational Health and Safety Commission (NOHSC), List of Designated Hazardous Substances, 10005 - 1999

National Institute for Occupational Safety and Health [NIOSH (U.S.A.)], Manual of Analytical Methods, Elements by ICP, Method 7300, 4th Edition, Issue 2 - 1994

National Occupational Health and Safety Commission (NOHSC), National Code of Practice for the Control and Safe Use of Inorganic Lead at Work, 2015 - 1994

National Occupational Health and Safety Commission (NOHSC), National Standard and National Code of Practice for Synthetic Mineral Fibre - May 1990

The National Model regulations for the Control of Workplace Hazardous Substances; [NOHSC: 1005 (1994)]

Department of Industrial Resources (DoIR) Guidance for Upstream Petroleum on the National Ban on Asbestos of 31 December 2003.

National Occupational Health and Safety Commission (NOHSC), Approved Criteria for Classifying Hazardous Substances, 1008 - 2002

QLD Code of Practice: *How to Manage and Control Asbestos in the Workplace*, (2011)

QLD Code of Practice: *How to Safely Remove Asbestos*, (2011)

Work Health and Safety Act and Regulations 2011 (QLD)

Occupational Health and Safety Act 2004 and Regulations 2017 (VIC),

Workplace Health and Safety Act 2012 and Regulations 2012 (TAS)

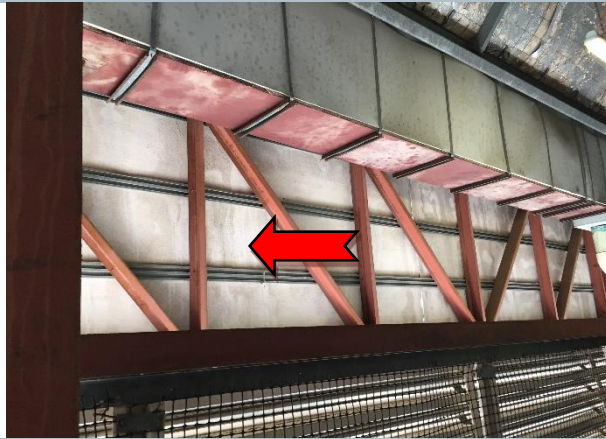
Amendment to the Customs (Prohibited Imports) Regulations 1956 - Regulation 4C – Importation of Asbestos – Australian Customs Notice No. 2009/30. – August 2009.

AS 1319-1994 Safety signs for the occupational environment.

Code of Practice: *Demolition Work* 2016.

## **Appendix A – Photographs**

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**Photo 1** Exterior: level 13, plant room, external walls – suspected asbestos containing fibre cement sheet.



**Photo 2** Exterior: level 13, plant room, soffit – suspected asbestos containing fibre cement sheet.



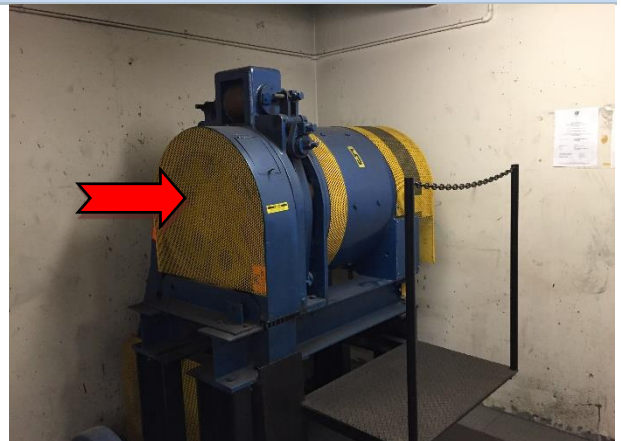
**Photo 3** Exterior: level 3, air conditioning unit enclosure, external walls – non-asbestos containing fibre cement sheet.



**Photo 4** Interior: all levels, south eastern fire stairwell, fire doors (1987) – non-asbestos containing internal insulation material.



**Photo 5** Interior: all levels, north western fire stairwell, fire doors (1987) – non-asbestos containing internal insulation material.



**Photo 6** Interior: level 13, lift motor room, lift motor – asbestos containing friction material.





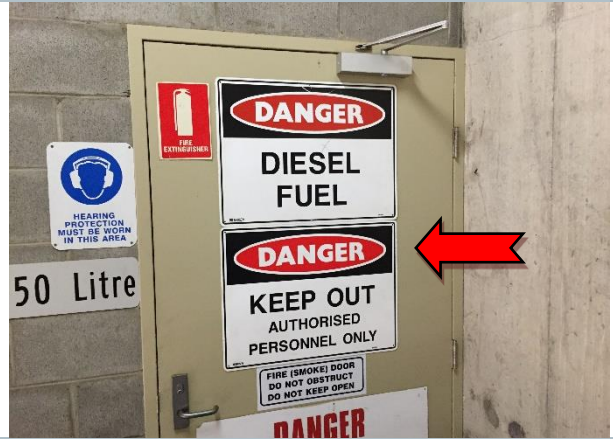
**Photo 7** Interior: level 13, lift motor room, switchboard – non-asbestos containing arc shields.



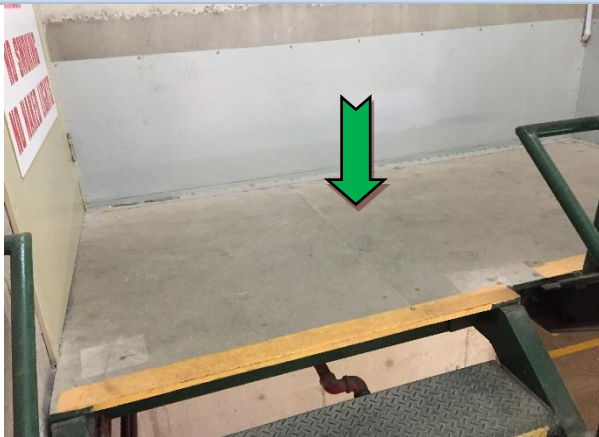
**Photo 8** Interior: level 13, lift motor room, fire door - single (unlabelled) – suspected asbestos containing internal insulation material.



**Photo 9** Interior: level 13, landing adjacent lift motor room, floor – non-asbestos containing compressed cement sheeting.



**Photo 10** Interior: level 13, diesel motor room, fire door - single (unlabelled) – suspected asbestos containing internal insulation material.



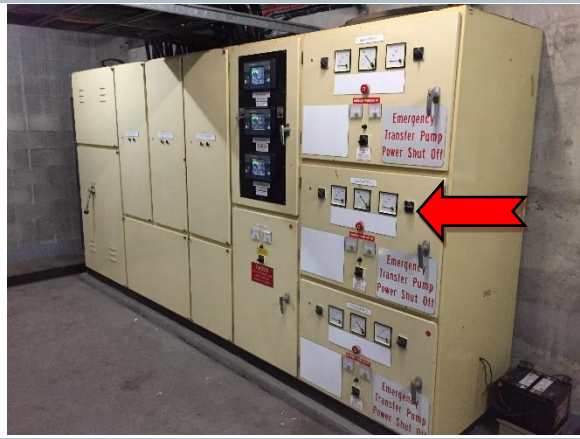
**Photo 11** Interior: level 13, landing adjacent diesel motor room, floor – non-asbestos containing compressed cement sheeting.



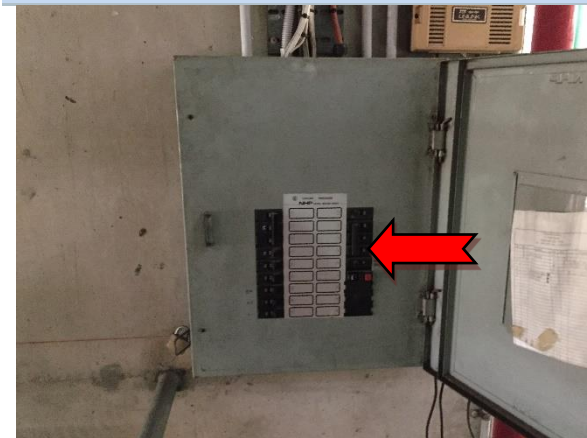
**Photo 12** Interior: level 13, plant room, partition wall – non-asbestos containing fibre cement sheet.



**Photo 13** Interior: level 13, plant room, pipe work – asbestos containing gasket material.



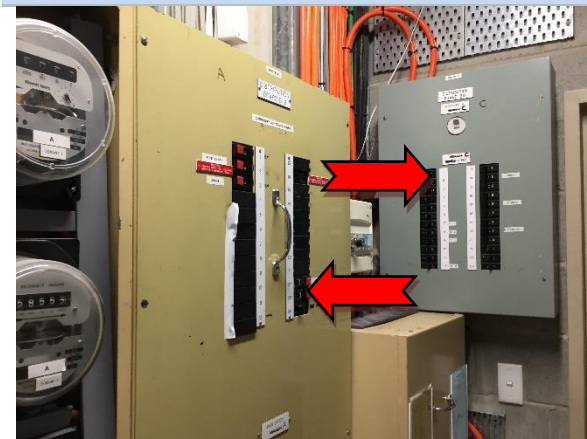
**Photo 14** Interior: level 13, plant room, Emergency Transfer Pump – suspected asbestos containing internal insulation material.



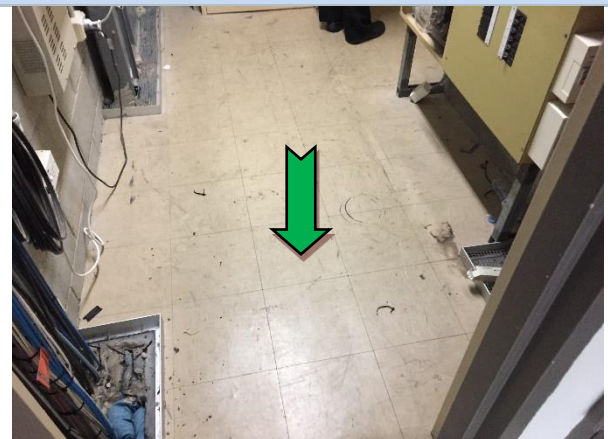
**Photo 15** Interior: level 13, plant room, switchboard – suspected asbestos containing arc shields.



**Photo 16** Interior: level 13, plant room, fire doors (1987) – non-asbestos containing internal insulation material.

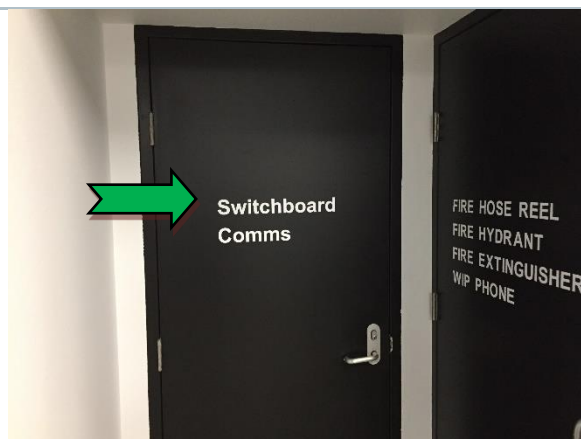


**Photo 17** Interior: ground level to level 12, electrical server room, switchboard – suspected asbestos containing arc shields.



**Photo 18** Interior: ground level to level 12, electrical server rooms, floor coverings (beige) – non-asbestos containing vinyl floor tiles.





**Photo 19** Interior: ground level to level 12, electrical server rooms, fire doors – non-asbestos containing internal insulation material.



**Photo 20** Interior: level 13, plant room, ceiling – suspected SMF sarking insulation.



**Photo 21** Interior: level 12, air handling room, 'Rheem' hot water heater – suspected SMF internal insulation material.



**Photo 22** Interior: ground level to level 12, male amenities, ceiling – suspected SMF compressed ceiling tiles.



**Photo 23** Interior: ground level to level 12, kitchenette, ceiling – suspected SMF compressed ceiling tiles.



**Photo 24** Interior: ground level to level 12, electrical server room, packer – suspected SMF pillow insulation.





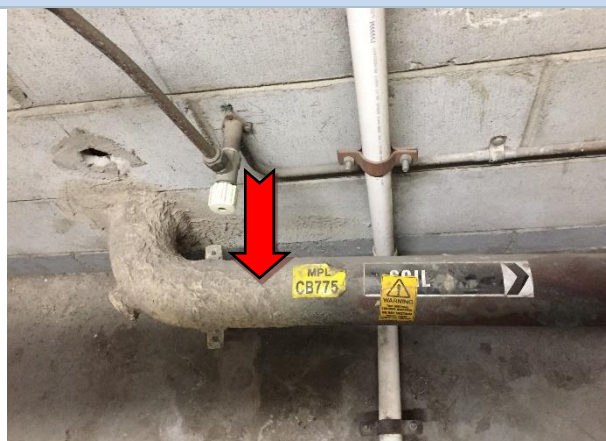
**Photo 25** Exterior: level 7, roof top adjacent to plant room, waterproof membrane – non-asbestos containing bituminous membrane.



**Photo 26** Exterior: level 7, plant room, external walls – suspected asbestos containing fibre cement sheet.



**Photo 27** Exterior: level 7, plant room, soffit – suspected asbestos containing fibre cement sheet.



**Photo 28** Interior: all levels, air handling rooms, pipe work – asbestos containing fire stop membrane.

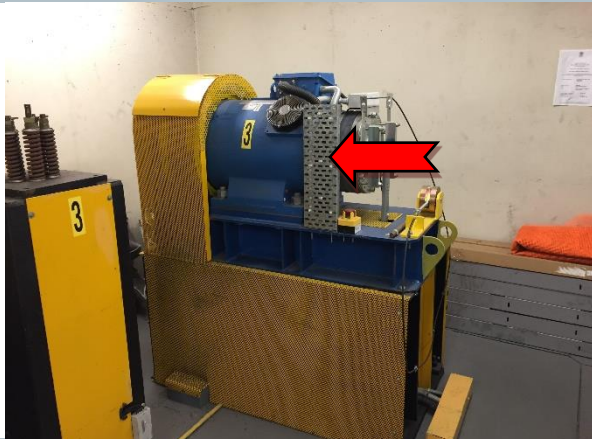


**Photo 29** Interior: all levels, eastern fire stairwell, fire doors (1987) – non-asbestos containing internal insulation material.



**Photo 30** Interior: all levels, western fire stairwell, fire doors (1987) – non-asbestos containing internal insulation material.





**Photo 31** Interior: level 7, lift motor room, lift motor – suspected asbestos containing friction material.



**Photo 32** Interior: level 7, lift motor room, switchboard – suspected asbestos containing arc shields.



**Photo 33** Interior: level 7, lift motor room, fire doors (1987) – non-asbestos containing internal insulation material.



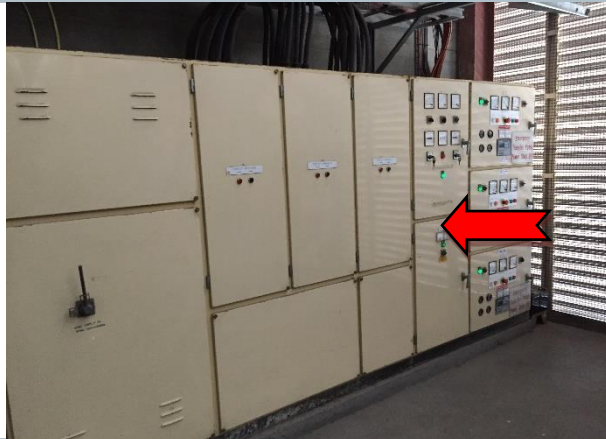
**Photo 34** Interior: level 7, landing adjacent lift motor room, floor – non-asbestos containing compressed cement sheeting.



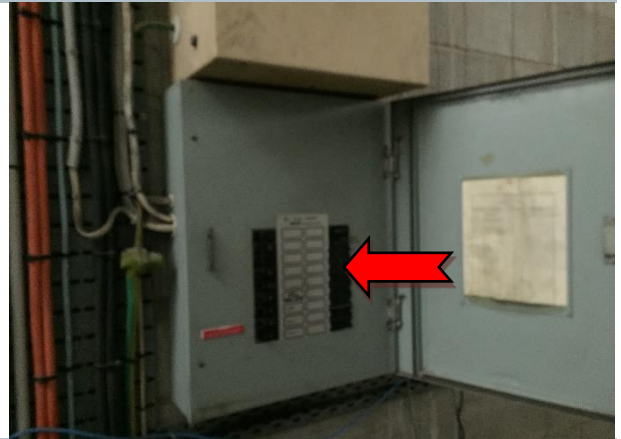
**Photo 35** Interior: level 7, plant room, internal walls – suspected asbestos containing fibre cement sheet.



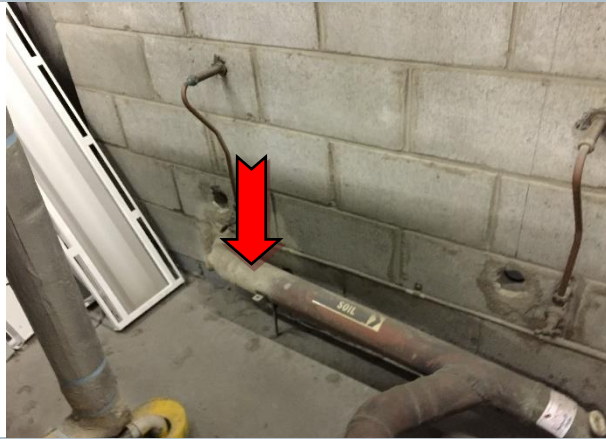
**Photo 36** Interior: level 7, plant room, pipe work – asbestos containing gasket material.



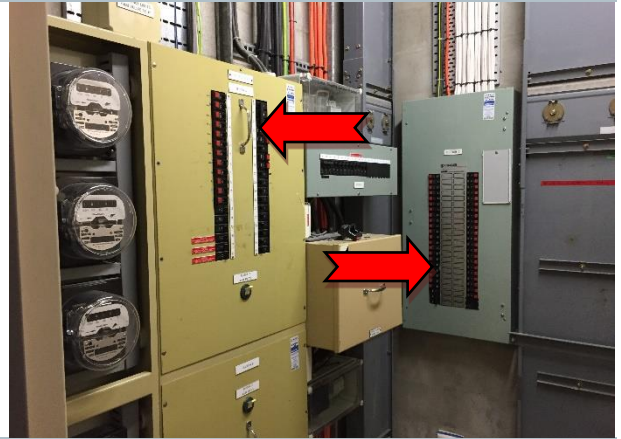
**Photo 37** Interior: level 7, plant room, Emergency Transfer Pump Shut Off – suspected asbestos containing internal insulation material.



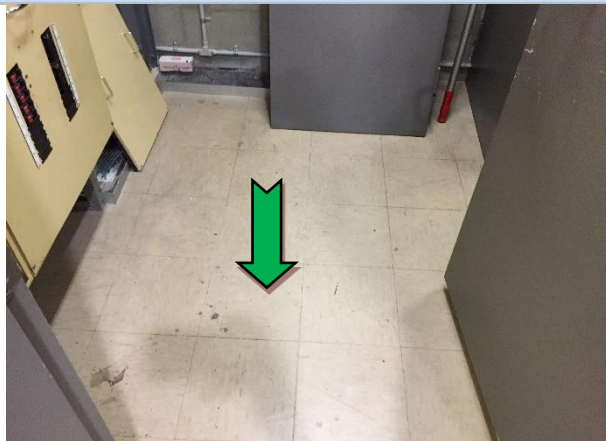
**Photo 38** Interior: level 7, plant room, switchboard – suspected asbestos containing arc shields.



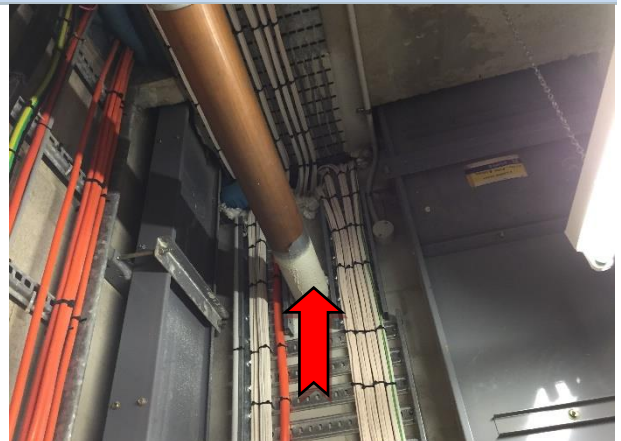
**Photo 39** Interior: levels 1, 3, 5 and 6, plant room, pipe work – asbestos containing fire stop membrane.



**Photo 40** Interior: levels 1 to 6, electrical server room, switchboard – suspected asbestos containing arc shields.



**Photo 41** Interior: levels 1 to 6, electrical server rooms, floor coverings (beige) – non-asbestos containing vinyl floor tiles.



**Photo 42** Interior: levels 1 to 6, electrical server room, pipe work – asbestos containing fire stop membrane.

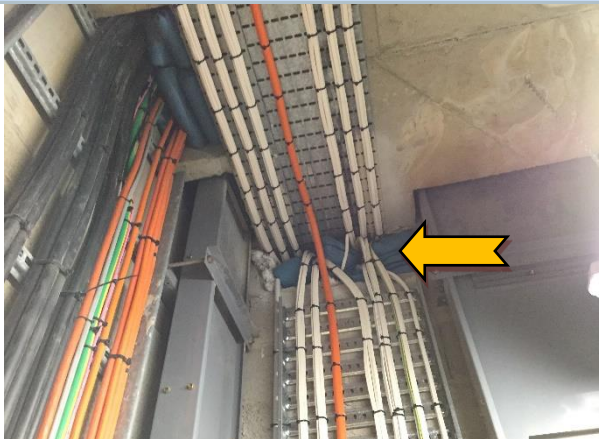




**Photo 43** Interior: level 7, plant room, ceiling – suspected SMF sarking insulation.



**Photo 44** Interior: ground level to level 6, air handling rooms, 'Rheem' hot water heater – suspected SMF internal insulation material.



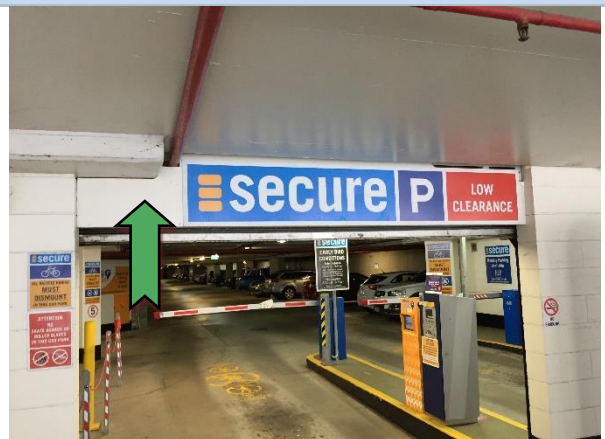
**Photo 45** Interior: ground level to level 6, electrical server room, packer – suspected SMF pillow insulation.



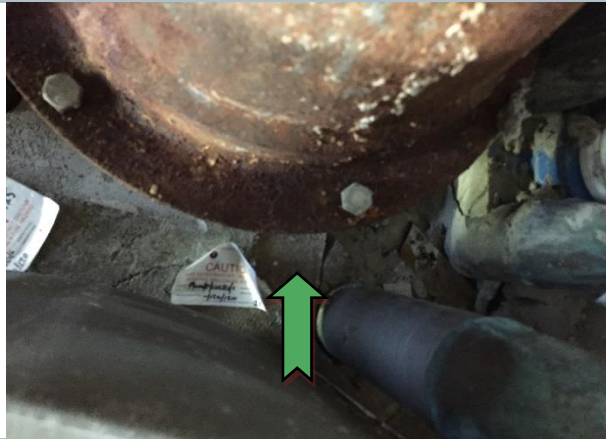
**Photo 46** Interior: ground level, disabled amenities, ceiling – suspected SMF compressed ceiling tiles.



**Photo 47** Interior: level 13, plant room, 'York' air conditioning unit – ozone depleting R22 Hydrochlorofluorocarbon (HCFC) refrigerant.



**Photo 48** Exterior: B2, Raff Street entrance, above roller door, cladding – non-asbestos containing fibre cement sheet.



**Photo 49** Interior: B1, West Tower lift foyer, near fire stairs 1, packer to pipework in ceiling – non-asbestos containing fibre cement sheet.



**Photo 50** Interior: B1, West Tower lift foyer, near fire stairs 1, debris – non-asbestos containing fibre cement sheet.



**Photo 51** Interior: B1, West Tower storeroom adjacent switchroom, floor coverings (beige) – non-asbestos containing vinyl floor tiles.



**Photo 52** Interior: B1, West Tower carpark, above roller door, fascia – non-asbestos containing fibre cement sheet.



**Photo 53** Interior: B2, MDF room, floor coverings (beige) – non-asbestos containing vinyl floor tiles.

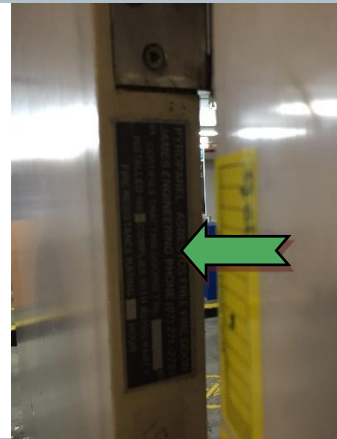


**Photo 54** Interior: B2, MDF and switch rooms throughout, switchboard – suspected asbestos containing arc shields.





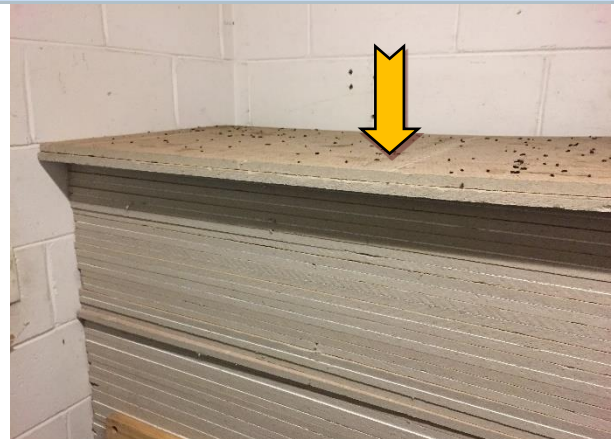
**Photo 55** Interior: B1 and B2 East Tower  
and West Tower lift foyer Infill  
panels Fibre cement sheet



**Photo 56** Interior: B1 and B2 Switch  
rooms throughout Fire door -  
single (1987) Insulation material -  
internal



**Photo 57** Interior: B2, Pump and Sprinkler  
rooms, 'Rheem' hot water heater –  
suspected SMF internal insulation  
material.



**Photo 58** Interior: B2, storerooms throughout,  
loose ceiling tiles – suspected SMF  
compressed ceiling tiles.

## **Appendix B – Asbestos and Hazardous Materials Register**

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Client: Mirvac				Site Name: 410 Ann Street				Site Address: 410 Ann Street, Brisbane City QLD 4000										Job No: 754-SYDEN228628			
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	Reinspect Date	Photo No.
East Tower																					
Exterior: level 13	Roof top adjacent to plant room	Waterproof membrane	Bituminous membrane	Asbestos	Refer to CB-765	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior: level 13	Roof top adjacent to plant room	Waterproof membrane	Mastic sealant	Asbestos	CB-769	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior: level 13	Plant room	Walls - external	Fibre cement sheet	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~500m <sup>2</sup>	Oct-24	1
Exterior: level 13	Plant room	Soffit	Fibre cement sheet	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~10m <sup>2</sup>	Oct-24	2
Exterior: level 3	Air conditioning unit enclosure	Walls - external	Fibre cement sheet	Asbestos	69110	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Interior: all levels	Air handling rooms	Pipe work	Fire stop membrane	Asbestos	CB-773	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interior: all levels	South eastern fire stairwell	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Interior: all levels	North western fire stairwell	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Interior: level 13	Lift motor room	Lift motor	Friction material	Asbestos	CB-763	Chrysotile Asbestos Detected	N	1	1	0	0	0	0	0	0	2	A4	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	5 units	Oct-24	6
Interior: level 13	Lift motor room	Switchboard	Arc shields	Asbestos	CB-762	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Interior: level 13	Lift motor room	Fire door - single (unlabelled)	Insulation material - internal	Asbestos	Visual Observation	Suspected Asbestos	Y	3	2	0	0	0	0	0	0	5	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.	1 unit	Oct-24	8
Interior: level 13	Landing adjacent lift motor room	Floor	Compressed cement sheeting	Asbestos	CB-764	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9

Interior: level 13	Diesel motor room	Fire door - single (unlabelled)	Insulation material - internal	Asbestos	Visual Observation	Suspected Asbestos	Y	3	2	0	0	0	0	0	0	5	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.	1 unit	Oct-24	10
Interior: level 13	Landing adjacent diesel motor room	Floor	Compressed cement sheeting	Asbestos	Refer to CB-764	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11
Interior: level 13	Plant room	Roof support	Fire stop membrane	Asbestos	CB-768	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interior: level 13	Plant room	Partition wall	Fibre cement sheet	Asbestos	CB-766	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Interior: level 13	Plant room	Pipe work	Gasket material	Asbestos	69111	Chrysotile Asbestos Detected	N	1	1	0	0	0	0	0	0	2	A4	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m²	Oct-24	13
Interior: level 13	Plant room	Emergency Transfer Pump Shut Off	Insulation material - internal	Asbestos	Visual Observation	Suspected Asbestos	N	1	1	0	0	0	0	0	0	2	A4	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m²	Oct-24	14
Interior: level 13	Plant room	Switchboard	Arc shields	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m²	Oct-24	15
Interior: level 13	Plant room	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16
Interior: ground level to level 12	Electrical server room	Switchboard	Arc shields	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m²	Oct-24	17
Interior: ground level to level 12	Electrical server room	Floor coverings - beige	Vinyl floor tiles	Asbestos	S6784	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
Interior: ground level to level 12	Electrical server room	Fire door - single	Insulation material - internal	Asbestos	S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
Interior: level 13	Plant room	Ceiling	Sarking insulation	SMF	Visual Observation	Suspected SMF	NA	NA	NA	Average	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)].	~1000m²	-	20
Interior: level 12	Air handling room	'Rheem' Hot water heater	Insulation material - internal	SMF	Visual Observation	Suspected SMF	NA	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
Interior: ground level to level 12	Male amenities	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m²	-	22

Appendix B: Asbestos and Hazardous Materials Register

Interior: ground level to level 12	Female amenities	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	-
Interior: ground level to level 12	Kitchenette	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	23
Interior: ground level to level 12	Corridors (common areas)	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	-
Interior: ground level to level 12	Electrical server room	Packer	Pillow insulation	SMF	Visual Observation	Suspected SMF	NA	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)].	~1m <sup>2</sup>	-	24
Exterior: level 13	Roof top adjacent to plant room	'York' Air conditioning unit	R22 Hydrochlorofluorocarbon (HCFC)	Ozone Depleting Substances	Visual Observation	ODS Refrigerant	NA	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	hydrochlorofluorocarbon (HCFC); ozone depleting substances identified in the assessment that require removal during refurbishment or demolition works should be appropriately decanted and disposed of by a licensed contractor in accordance with the Ozone Protection and Synthetic Greenhouse Gas	1 unit	-	-
Exterior: level 13	Roof top adjacent to plant room	'Sundowner' and 'Carrier' Air conditioning units	R22 Hydrochlorofluorocarbon (HCFC)	Ozone Depleting Substances	Visual Observation	ODS Refrigerant	NA	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	hydrochlorofluorocarbon (HCFC); ozone depleting substances identified in the assessment that require removal during refurbishment or demolition works should be appropriately decanted and disposed of by a licensed contractor in accordance with the Ozone Protection and Synthetic Greenhouse Gas	2 units	-	-
Interior: level 13	Plant room	'York' Air conditioning unit	R22 Hydrochlorofluorocarbon (HCFC)	Ozone Depleting Substances	Visual Observation	ODS Refrigerant	NA	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	hydrochlorofluorocarbon (HCFC); ozone depleting substances identified in the assessment that require removal during refurbishment or demolition works should be appropriately decanted and disposed of by a licensed contractor in accordance with the Ozone Protection and Synthetic Greenhouse Gas	1 unit	-	-
Interior: all levels	Generator, Plant and Lift motor rooms	Fluorescent light fittings	Capacitor	PCBs	Visual Observation	PCB Capacitor	NA	NA	NA	Good	Not Sealed	Low	0	0	0	Low	-	PCB-containing capacitors are suspected due to age & appearance of electrical fittings. Remove and dispose of in accordance with the Polychlorinated Biphenyls Management Plan, Revised Edition April 2003.	>20 units	-	-
West Tower																					
Exterior: level 7	Roof top adjacent to plant room	Waterproof membrane	Bituminous membrane	Asbestos	CB-765	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Exterior: level 7	Plant room	Walls - external	Fibre cement sheet	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~500m <sup>2</sup>	Oct-24	26
Exterior: level 7	Plant room	Soffit	Fibre cement sheet	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~10m <sup>2</sup>	Oct-24	27
Interior: all levels	Air handling rooms	Pipe work	Fire stop membrane	Asbestos	CB-775	Chrysotile Asbestos Detected	N	1	1	0	3	0	0	0	0	5	A4	Maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.	~40m <sup>2</sup>	Oct-24	28
Interior: all levels	Eastern fire stairwell	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29
Interior: all levels	Western fire stairwell	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30

Appendix B: Asbestos and Hazardous Materials Register

Interior: level 7	Lift motor room	Lift motor	Friction material	Asbestos	Visual Observation	Suspected Asbestos	N	1	1	0	0	0	0	0	0	2	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	3 units	Oct-24	31
Interior: level 7	Lift motor room	Switchboard	Arc shields	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~1m <sup>2</sup>	Oct-24	32
Interior: level 7	Lift motor room	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33
Interior: level 7	Landing adjacent lift motor room	Floor	Compressed cement sheeting	Asbestos	28086	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34
Interior: level 7	Plant room	Walls - internal	Fibre cement sheet	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~20m <sup>2</sup>	Oct-24	35
Interior: level 7	Plant room	Pipe work	Gasket material	Asbestos	69108	Chrysotile Asbestos Detected	N	1	1	0	0	0	0	0	0	2	A4	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m <sup>2</sup>	Oct-24	36
Interior: level 7	Plant room	Emergency Transfer Pump Shut Off	Insulation material - internal	Asbestos	Visual Observation	Suspected Asbestos	N	1	1	0	0	0	0	0	0	2	A4	Label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m <sup>2</sup>	Oct-24	37
Interior: level 7	Plant room	Switchboard	Arc shields	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m <sup>2</sup>	Oct-24	38
Interior: level 7	Plant room	Fire door - single	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interior: levels 1, 3, 5 and 6	Plant room	Pipe work	Fire stop membrane	Asbestos	CB-767	Chrysotile Asbestos Detected	N	1	1	0	3	0	0	0	0	5	A4	Maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.	~40m <sup>2</sup>	Oct-24	39
Interior: levels 1 to 6	Electrical server room	Switchboard	Arc shields	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	<1m <sup>2</sup>	Oct-24	40

Interior: levels 1 to 6	Electrical server room	Floor coverings - beige	Vinyl floor tiles	Asbestos	Refer to S6784	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41
Interior: levels 1 to 6	Electrical server room	Pipe work	Fire stop membrane	Asbestos	Refer to CB-767	Chrysotile Asbestos Detected	N	1	1	0	3	0	0	0	0	5	A4	Maintain in current condition if to remain in-situ. Remove under controlled friable asbestos removal conditions prior to refurbishment or demolition works by a Class A (friable) licensed asbestos removal contractor.	~40m <sup>2</sup>	Oct-24	42
Interior: level 7	Plant room	Ceiling	Sarking insulation	SMF	Visual Observation	Suspected SMF	NA	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)].	~1000m <sup>2</sup>	-	43
Interior: levels 1 to 6	Air handling rooms	'Rheem' and 'Thermann' Hot water heaters	Insulation material - internal	SMF	Visual Observation	Suspected SMF	NA	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	-	44
Interior: ground level to level 6	Male amenities	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	-
Interior: ground level to level 6	Female amenities	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	-
Interior: ground level to level 6	Kitchenette	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	-
Interior: ground level and levels 1, 2, 3 and 6	Corridors (common areas)	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~30m <sup>2</sup>	-	-
Interior: levels 1 to 6	Electrical server room	Packer	Pillow insulation	SMF	Visual Observation	Suspected SMF	NA	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)].	~1m <sup>2</sup>	-	45
Interior: ground level	Disabled amenities	Ceiling	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~12m <sup>2</sup>	-	46
Interior: level 7	Plant room	'York' Air conditioning unit	R22 Hydrochlorofluorocarbon (HCFC)	Ozone Depleting Substances	Visual Observation	ODS Refrigerant	NA	NA	NA	Good	Sealed	Low	NA	NA	NA	Low	-	Hydrochlorofluorocarbon (HCFC), Ozone depleting substances identified in the assessment that require removal during refurbishment or demolition works should be appropriately decanted and disposed of by a licensed contractor in accordance with the Ozone Protection and Synthetic Greenhouse Gas Management Amendment Regulation 2012.	1 unit	-	47
Interior: all levels	Generator, Plant and Lift motor rooms	Fluorescent light fittings	Capacitor	PCBs	Visual Observation	PCB Capacitor	NA	NA	NA	Good	Not Sealed	Low	0	0	0	Low	-	PCB-containing capacitors are suspected due to age & appearance of electrical fittings. Remove and dispose of in accordance with the Polychlorinated Biphenyls Management Plan, Revised Edition April 2003.	>20 units	-	-
Carpark																					
Exterior: B2	Raff Street entrance, above roller door	Cladding	Fibre cement sheet	Asbestos	Refer to S6787	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	48
Interior: B1	West Tower lift foyer, near fire stairs 1	Packer to pipework in ceiling	Fibre cement sheet	Asbestos	Refer to S6786	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49

Interior: B1	West Tower lift foyer, near tenanted storeroom	Packer to pipework in ceiling	Fibre cement sheet	Asbestos	Refer to S6786	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Interior: B1	West Tower lift foyer, near fire stairs 1	Debris	Fibre cement sheet	Asbestos	S6786	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	50	
Interior: B1	West Tower storeroom adjacent switchroom	Floor coverings - beige	Vinyl floor tiles	Asbestos	Refer to S6784	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	51	
Interior: B1	West Tower carpark, above roller door	Fascia	Fibre cement sheet	Asbestos	S6787	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	52	
Interior: B2	MDF room	Floor coverings - beige	Vinyl floor tiles	Asbestos	Refer to S6784	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	53	
Interior: B2	MDF and Switch rooms throughout	Switchboard	Arc shields	Asbestos	Visual Observation	Suspected Asbestos	N	3	1	0	0	0	0	0	0	4	A4	Confirm status, label as containing asbestos and maintain in current condition if to remain in-situ. Remove under controlled non-friable asbestos removal conditions prior to refurbishment or demolition works by a Class B (non-friable) licensed asbestos removal contractor.	~1m <sup>2</sup>	Oct-24	54
Interior: B1 and B2	East Tower and West Tower lift foyer	Infill panels	Fibre cement sheet	Asbestos	69109	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	55	
Interior: B1 and B2	Switch rooms throughout	Fire door - single (1987)	Insulation material - internal	Asbestos	Refer to S6785	No Asbestos Detected	-	-	-	-	-	-	-	-	-	-	-	-	-	56	

Appendix B: Asbestos and Hazardous Materials Register

Interior: B2	Pump and Sprinkler rooms	'Rheem' Hot water heater	Insulation material - internal	SMF	Visual Observation	Suspected SMF	NA	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	-	57
Interior: B2	Storerooms throughout	Loose ceiling tiles	Compressed ceiling tiles	SMF	Visual Observation	Suspected SMF	NA	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)].	~10m <sup>2</sup>	-	58
No LBP was identified or suspected to be present on site at the time of the survey																					
No LCD was identified or suspected to be present on site at the time of the survey																					

## **Appendix C – Laboratory Analysis Certificates**



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## Bulk Identification Report

**Job No:** 754-SYDEN228268 Mirvac National 410 Ann Street 30102019  
**Client:** Mirvac Real Estate  
**Client Address:** Level 28, 200 George Street,  
Sydney NSW, 2000  
**Contact:** Melanie Jones  
**E-mail:** [melanie.jones@mirvac.com](mailto:melanie.jones@mirvac.com)  
**Date Sampled:** 17/10/2019  
**Date Printed:** 30/10/2019  
**Sampled By:** Jake Iskenderian  
**Site:** 410 Ann Street



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

Please note: In accepting the results, you (the client) agree that Coffey Services Australia Pty Ltd does not accept any responsibility for the sample submitted in relation to its source and is not liable for any works undertaken at site based on the analytical data provided. Only the samples submitted for analysis have been considered in presenting these results. Should any other material suspected to contain asbestos be found at the site, then works should cease and a suitably trained asbestos hygienist should be engaged to sample or assess the material.

### Asbestos in Bulk Samples and Non-homogenous Material

**Test Method:** Coffey analyses bulk samples for asbestos using polarising light microscopy and dispersion staining techniques in accordance with Coffey SOP WILAB1, and Australian Standard (AS) 4964 – 2004, Method for the qualitative identification of asbestos in bulk samples (AS 4964). The detection limit for the test method as per AS 4964 is 0.1 g/kg. For non-homogenous samples a semi quantitative aspect is adopted for the test method and is taken into account when reporting the results. As per Coffey's NATA approved SOP WILAB1 sample retention periods are set at 1 month (no asbestos detected) and 3 months (asbestos detected).

**Total Samples:** 4

Matthew Tang  
Approved Identifier

Patricy Cortes  
Approved Identifier and Signatory

Sample No.	Location & Description	Sample Size	Results
69108	Interior, level 7, West Tower plant room, pipe work to cooling tower, gasket material - Beige fibrous gasket material with attached green paint	~ 10 x 9 x 3 mm	Chrysotile (white asbestos) detected Organic fibres detected
69109	Interior, B1, East Tower lift foyer, infill panel, fibre cement sheet - Beige layered fibre cement sheet material	~ 12 x 9 x 3 mm	No asbestos fibres detected Organic fibres detected
69110	Exterior, level 3, East Tower, air conditioning unit enclosure, wall lining, fibre cement sheet - Beige layered fibre cement sheet material	~ 15 x 12 x 3 mm	No asbestos fibres detected Organic fibres detected
69111	Interior, level 13, East Tower, plant room, pipe work to cooling tower, gasket material - Beige fibrous gasket material with attached green paint	~ 23 x 12 x 3 mm	Chrysotile (white asbestos) detected Organic fibres detected

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Report Reference: CUS014/00011651/ENAUBRIS09682AA 410 Ann Street Brisbane

Tuesday 18th October 2016

Marlise Norman  
Coffey Environments  
47 Doggett Street  
**NEWSTEAD QLD 4006**

Dear Marlise,

**RE: Test Report - Asbestos Fibre Identification Analysis  
ENAUBRIS09682AA 410 Ann Street Brisbane**

On Friday 14th October 2016, five (5) samples were received by Environmental & Laboratory Solutions (ELS) Pty Ltd from Marlise Norman of Coffey Environments. The samples were stated to be from ENAUBRIS09682AA 410 Ann Street Brisbane.

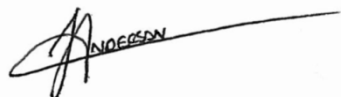
As requested, Asbestos Fibre Identification Analysis was performed on the samples submitted. The analysis was performed between the date of submission and the date the report was issued.

The attached Table One describes the sample description, sample dimensions and sample analysis result/s of the samples submitted.

If any further information is required, please do not hesitate to contact Environmental & Laboratory Solutions Pty Ltd on the number shown above.

Kind Regards

Environmental & Laboratory Solutions Pty Ltd



**Jesse Anderson**  
**Approved Signatory**



**Accreditation No. 18452**  
**Accredited for compliance**  
**with ISO/IEC 17025**  
**The results of the tests,**  
**calibrations and /or**  
**measurements included in this**  
**document are traceable to**  
**Australian/national standards**

**Table One: Asbestos Fibre Identification Analysis Result/s**

The samples were analysed in our NATA accredited laboratory (accreditation number: 18452) using Stereo Microscopy & Polarised Light Microscopy (PLM), including Dispersion Staining (DS) in accordance with ELS Test Method One, Asbestos in Bulk Materials, which is based on the guidelines of Australian Standard 4964-2004 Method for the qualitative identification of asbestos in bulk samples.

Sample ID	Sample Location / Sample Description / Sample Dimensions	Analysis Result	
		Type of Asbestos Present	Other Fibres (organic / SMF)
00011651-001	S6784 Level 11, electrical server room – beige vinyl tiles Beige brittle vinyl tile material ~27 x 25 x 5 mm	No Asbestos Detected	-
00011651-002	S67853 Level 5, electrical server room – fire door core Beige fibre insulation material ~17 x 12 x 2 mm	No Asbestos Detected	SMF
00011651-003	S6786 Basement B1, FCS packers around pipes Beige compressed fibre cement sheet material ~55 x 19 x 5 mm	No Asbestos Detected	Organic
00011651-004	S6787 Basement B1, FCS above roller door Beige fibre cement sheet material ~7 x 4 x 2 mm	No Asbestos Detected	Organic

Sample ID	Sample Location / Sample Description / Sample Dimensions	Analysis Result	
		Type of Asbestos Present	Other Fibres (organic / SMF)
00011651 -005	S6788 Basement B1, beige vinyl floor tiles Black flexible vinyl material ~12 x 7 x 4 mm	No Asbestos Detected	Organic

**Notes:**

- Non-Homogenous samples (including soil, dust, debris and tape samples) are not covered by the scope of this accreditation
- The results within this test report relate only to the sample(s) submitted for testing
- The sample(s) will be kept for three months, and then disposed of, unless otherwise directed
- Other fibres must be "part of" the material matrix
- Fibre treatment can affect optical properties and therefore, identification
- SMF: Synthetic Mineral Fibre      MFUT: Mineral Fibre of Unknown Type
- This document should not be reproduced except in full. Sampling is not covered by the scope of NATA accreditation



Jesse Anderson  
Approved Identifier

Report Reference: CUS014/00001414/ENAUBRIS08680DA Investa 410 Ann Street Brisbane

Monday 6th August 2012

Lee McAlister  
Coffey Environments  
Level 2, 12 Creek Street  
**BRISBANE QLD 4000**

Dear Lee,

**RE: Asbestos Fibre Identification Analysis**  
**ENAUBRIS08680DA Investa 410 Ann Street Brisbane**

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On Monday 6th August 2012, one (1) sample was received by Environmental & Laboratory Solutions (ELS) Pty Ltd from Lee McAlister of Coffey Environments. The sample was stated to be from ENAUBRIS08680DA Investa 410 Ann Street Brisbane.

As requested, Asbestos Fibre Identification Analysis was performed on the sample submitted.

The attached Table One provides the sample location, sample description, sample dimensions and sample analysis result of the sample submitted.

If any further information is required, please do not hesitate to contact Environmental & Laboratory Solutions Pty Ltd on the number shown above.

Kind Regards

Environmental & Laboratory Solutions Pty Ltd



**Sally Ann Snook**  
**Laboratory Manager**

**Table One: Asbestos Fibre Identification Analysis Result/s**

The sample was analysed in our NATA accredited laboratory (accreditation number: 18452) using Stereo Microscopy & Polarised Light Microscopy (PLM), including Dispersion Staining (DS) in accordance with ELS Test Method One, Asbestos in Bulk Materials, which is based on the guidelines of Australian Standard 4964-2004, Qualitative Identification of Asbestos.

Sample ID	Sample Location / Sample Description / Sample Dimensions	Analysis Result	
		Type of Asbestos Present	Other Fibres (organic / mmmf)
00001414-001	28086 West Tower - Lift Room Entry - Cement Floor Sheet Yellow Painted Beige Fibre Cement Sheet Material 20 x 7 x 2 mm	No Asbestos Detected	Organic

**Notes:**

- Non-Homogenous samples (including dust, debris and tape samples) are not covered by the scope of this accreditation
- The results within this test report relate only to the sample(s) submitted for testing
- The sample(s) will be kept for six months, and then disposed of, unless otherwise directed
- Other fibres must be "part of" the material matrix
- All fibre treatment can/may affect optical properties and therefore, identification
- **MMMf**: Man Made Mineral Fibre      **MFUT**: Mineral Fibre of Unknown Type



Sally Ann Snook  
NATA Approved Identifier



This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with International Standard ISO17025. This document should not be reproduced except in full. Sampling is not covered by the scope of NATA accreditation.



Sally Ann Snook  
ELS Approved Signatory

## **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 2009 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 Services Australia – Work Health and Safety Section:

Phone: 02 9406 1000 Email: [WHS\\_Support@Coffey.com](mailto:WHS_Support@Coffey.com) Web: [www.coffey.com](http://www.coffey.com)

## 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.

STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Management and Labelling/Signage Requirements	Other Requirements
<b>COMMONWEALTH</b> <b>NEW SOUTH WALES</b> <b>QUEENSLAND</b> <b>NORTHERN TERRITORY</b> <b>TASMANIA</b> <b>SOUTH AUSTRALIA</b>  <i>Work Health and Safety Act 2011 (Cth, NSW, NSW, TAS, SA)</i> <i>Work Health and Safety Regulation 2017 (Cth, NSW, NSW, TAS, SA)</i> <i>Work Health and Safety (National Uniform Legislation) Act and Regulations 2017 (NT)</i> <i>Supported by:</i> <i>Code of Practice - How to Manage and Control Asbestos in the Workplace (2019)</i> <i>Code of Practice - How to Safely Remove Asbestos (2019)</i>	<p>A person conducting a business or undertaking (PCBU) must, for work place buildings/ structures that are constructed prior to December 31, 2003;</p> <ul style="list-style-type: none"> <li>• survey to identify and locate any Asbestos-containing Materials (ACM); and,</li> <li>• Compile and keep at the workplace a site specific Asbestos Register.</li> </ul> <p>If ACM is identified at the work place, an Asbestos Management Plan (AMP) is to be compiled for the management of the identified ACM.</p> <p>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.</p>	<p>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.</p>	<p>The site specific Asbestos Register needs to include the date, type, location, condition and ACM identified during the survey.</p> <p>The Asbestos Register must be maintained and also updated if:</p> <ul style="list-style-type: none"> <li>• the AMP is under review,</li> <li>• further ACM is identified and/or,</li> <li>• ACM is removed, disturbed or encapsulated.</li> </ul> <p>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.</p> <p>The AMP must be maintained and updated:</p> <ul style="list-style-type: none"> <li>• when the Asbestos Register is under review,</li> <li>• if asbestos is removed, disturbed or encapsulated,</li> <li>• if the AMP is no longer adequate for managing the ACM,</li> <li>• if a Health and Safety Officer requests a review and/or at least</li> <li>• Once every 5 years.</li> </ul>	<p>Generally, health monitoring is not required excepting for workers involved in asbestos removal works.</p> <p>Training is required for persons involved in asbestos removal work or carrying out asbestos related works.</p> <p>All identified ACM in a workplace has to be labelled to indicate clearly asbestos presence and location of the asbestos item.</p> <p>Before refurbishment or demolition:</p> <ul style="list-style-type: none"> <li>• ensure Asbestos Register is current</li> <li>• undertake necessary inspections</li> </ul> <p>A licenced asbestos removalist is required unless:</p> <ul style="list-style-type: none"> <li>• ACM &lt; 10m2 and non-friable and then by a competent person</li> </ul>	<p>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:</p> <ul style="list-style-type: none"> <li>• managing risk;</li> <li>• sampling, identification and analysis;</li> <li>• maintenance</li> <li>• removal/disposal</li> <li>• other exemptions per s.419 (3)</li> </ul>