



Douglas Partners

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Report on
Hazardous Building Materials (HBM) Survey

Police Citizens Youth Club (PCYC)
600-660 Elizabeth Street, Redfern NSW

Prepared for
EMM Consulting Pty Ltd

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Executive Summary

Douglas Partners Pty Ltd (DP) was engaged by EMM Consulting Pty Ltd (EMM) to conduct a hazardous building materials (HBM) survey of the Police Citizens Youth Club (PCYC) at 600-660 Elizabeth Street, Redfern NSW (the Site). The survey was undertaken to assess the location, extent and condition of asbestos-containing materials (ACM) and other HBM. The survey comprised a non-destructive, non-intrusive visual inspection supplemented by a limited program of sample collection and laboratory analysis.

HBM were identified or assumed present during the survey as indicated in Table 1 below.

Table 1: Summary of Results

Building / Area	Non-Friable Asbestos	Friable Asbestos	SMF	Lead Paint	Lead Dust	PCB	ODS
PCYC Club	✓	✓	✓	✓	✓	✓	✓

SMF = synthetic mineral fibre, PCB = polychlorinated biphenyls, ODS = ozone depleting substances, ✓ = identified or assumed present, ✗ = not identified and/or not assumed present.

Limited or no access was available to certain areas of the Site. Inaccessible areas should be assumed to contain HBM unless assessment of these areas by a Competent Person confirms otherwise.

HBM should be managed in accordance with the requirements of the NSW Work Health and Safety (WHS) Act 2011 (WHS Act), NSW WHS Regulation 2017 (WHS Regulation) and relevant Codes of Practice, Australian Standards and guidelines.

HBM should be removed prior to any significant disturbance including from maintenance, refurbishment and demolition work.

Limitations apply to this HBM survey and report as outlined in Section 7.

This report should be read in its entirety and may not be reproduced other than in full, except with the prior written approval of DP.

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Report on Hazardous Building Materials (HBM) Survey Police Citizens Youth Club (PCYC) 600-660 Elizabeth Street, Redfern NSW

1. Introduction

Douglas Partners Pty Ltd (DP) was engaged by EMM Consulting Pty Ltd (EMM) to conduct a hazardous building materials (HBM) survey of the Police Citizens Youth Club (PCYC) at 600-660 Elizabeth Street, Redfern NSW (the Site). The survey was undertaken to assess the location, extent and condition of the following HBM:

- Asbestos containing materials (ACM);
- Synthetic mineral fibre (SMF) insulation;
- Polychlorinated biphenyls (PCBs) in fluorescent light fittings;
- Lead paint systems;
- Lead dust in ceiling cavities; and
- Ozone depleting substances (ODS).

The survey comprised a non-destructive, non-intrusive visual inspection supplemented by a limited program of sample collection and laboratory analysis.

Notes about this report, and relevant drawings/plans, are contained in Appendix A.

Photographs were taken during the inspection and selected photographs are presented in Appendix B.

The results of the survey, including details of the HBM identified and the results of ACM risk assessments, are provided in the HBM Register (the Register) in Appendix C.

Laboratory analysis certificate(s) for the samples collected and analysed are provided in Appendix D.

Limited or no access was available to certain areas as outlined in the Register and Section 5 of this report.

2. Site Description

The Site is located on a property at the eastern side of Elizabeth Street at its intersection with Phillip Street in Redfern NSW.

The southern section of the property (approx. 4,000 m²) generally comprises a single storey brick building (i.e. PCYC) with car park, sports court and covered playground area. A foundation stone at the western side of the building indicates construction of the main building in 1952.

The northern section of the property (approx. 7,500 m²) is generally vacant with no substantive aboveground buildings/structures.

The PCYC club was operational and occupied at the time of assessment.

3. Survey Method

The survey consisted of a non-intrusive, non-destructive visual inspection of safely accessible areas of the PCYC due to general occupation of the Site. The inspection was supplemented by a limited program of sample collection and laboratory analysis.

Samples of suspected ACM were collected by DP using hand tools (e.g. knife or pliers) and analysed for asbestos by a National Association of Testing Authorities (NATA) accredited laboratory. Sample size is typically limited to minimise disturbance of the material and potential structural or aesthetic impacts. The samples were analysed by polarised light microscopy (PLM) with dispersion staining in accordance with AS4964-2004 *Method for the qualitative identification of asbestos in bulk samples*.

Samples of suspected lead paint were collected by DP and analysed for lead by a NATA accredited laboratory using Inductively Coupled Plasma – Atomic Emission Spectrometry/Mass Spectrometry (ICP-AES/MS). Paint samples contained approximately equal portions of all layers of paint at the location sampled, to the extent reasonably practicable, and therefore typically reflect the average lead content of the overall paint system at the location sampled.

SMF insulation was identified primarily by visual inspection or incidentally as a result of laboratory analysis for asbestos.

Where safe access is provided to DP selected light fittings may be partially dismantled to confirm capacitor details. Where necessary, capacitor details are compared to the list of 'PCB-containing' and 'PCB-free' equipment listed in *Identification of PCB-Containing Capacitors: An Information Booklet for Electricians and Electrical Contractors, 1997* prepared by the Australian and New Zealand Environment and Conservation Council (ANZECC).

Lead dust samples are generally collected from ceiling cavities found to contain significant settled dust loadings. Samples are collected from a specified surface area (normally 100 or 900 cm²) and analysed for lead by a NATA accredited laboratory using ICP-AES/MS. The sampling area and laboratory analysis result (total lead in µg) are then used to calculate the lead dust loading which is expressed as milligrams of lead per square metre (mg/m²).

ODS are identified by visual inspection of air-conditioning and refrigeration plant that form an integral part of the building. Where plant compliance plates are accessible and legible, details of the refrigerants present (such as refrigerant type and mass) are recorded. The type and make of the plant are also generally recorded.

Surveys typically proceed on a 'risk management' basis whereby priority is given to addressing material(s) likely to pose greatest risk as they are encountered. Further, material sampling and analysis programs are necessarily limited and, in the case of similar or repetitive buildings, building elements and/or rooms/areas, it is often necessary to assume consistent use of construction materials including HBM.

4. Asbestos Risk Assessment Method

ACM poses a health risk if asbestos fibres are released to the atmosphere and inhaled. There is also a risk of environmental contamination whenever asbestos is disturbed. The degree of risk associated with any given ACM depends on a range of factors such as the friability, extent, condition, and location/accessibility of the material, the asbestos mineral type(s) present, the nature of site activities and ventilation.

The asbestos risk assessment method employed by DP considers several key factors that influence risk and a numerical score is assigned to each (refer Table 2 below). These scores are then added together to determine an overall risk rating for the ACM (refer Table 3 below). A degree of professional judgement may be applied when determining the final risk rating since, for example, it is not practicable to include in Table 2 all risk factors that may be relevant to a given situation.

Risk assessments for ACM should be reviewed on a regular basis including when:

- The Asbestos Management Plan is reviewed;
- Further asbestos or ACM is identified at the workplace;
- Asbestos is removed, disturbed, sealed, enclosed or undergoes any other change in condition;
- There is evidence that the risk assessment is no longer valid;
- There is evidence that control methods are not effective; or
- A significant change is proposed for the workplace or for work practices or procedures relevant to the risk assessment.

An asbestos risk assessment review is to be conducted at least every 5 years. The review is to be performed by a Competent Person.

Table 2: Key Risk Factors

Risk Factor	Score	Description
Friability	0	Non-friable (fibre reinforced vinyls, bituminous materials, adhesives)
	1	Non-Friable (fibre reinforced cement products such as wall and roof sheeting)
	2	Semi-Friable (low density insulation board, millboard, ropes, paper, textiles, gaskets or highly weathered asbestos cement)
	3	Friable (thermal insulation to pipes/boilers, sprayed insulation, loose fill insulation)
Condition	0	Very Good. Very little or no visible indication of damage. Structurally sound. No significant repairs required. Material performs as intended.
	1	Good - Minor damage in small, localised areas. Structurally sound. Minor preventative action may be required as a precaution and/or to prolong material life. Material generally performs as intended.
	2	Fair. Localised damage in various areas. Material is generally structurally sound however local removal and replacement of damaged sections may be required. Material performance may be somewhat impaired in areas.
	3	Poor. Material exhibits significant damage throughout. Overall structural stability may be compromised. Material performance is significantly impaired.
Treatment	0	Fully enclosed, encapsulated or sealed. ACM is entirely contained, and the enclosure/encapsulation/sealing material is in good condition.
	1	Generally enclosed, encapsulated or sealed. ACM is generally contained however enclosure/encapsulation/sealing material may not be completely continuous or exhibits minor damage/penetrations.
	2	Partially enclosed, encapsulated or sealed. ACM is contained in area(s) however enclosure/encapsulation/sealing material is not present, significantly damaged or ineffective in area(s).
	3	Enclosure/encapsulation/sealing material is significantly damaged and/or generally ineffective or there is no treatment.
Accessibility	0	The ACM is not directly accessible to occupants. Contact is highly unlikely unless a significant, dedicated effort is made. Substantial demolition, dismantling and/or special access equipment would be required.
	1	The ACM is generally not accessible to occupants. Contact is unlikely but could be made with special tools or equipment (e.g. elevating work platform) or minor demolition/dismantling.
	2	Some portion(s) of ACM are accessible to occupants. Direct contact may occur periodically but often requires basic tools/equipment (e.g. step ladder).
	3	The majority of the ACM is accessible to occupants. Direct contact is a common occurrence and may be made with minimal or unintentionally.
Activity	0	Area generally not occupied. Normally very little or no activity. Activities may be highly restricted, or the area secured. Examples may include subfloor voids, ceiling cavities, confined spaces and other inaccessible areas.
	1	Low level occupancy. Some activity in parts or area only occupied periodically. Examples may include plant rooms and store rooms.
	2	Moderate level occupancy. Activity normally present throughout area. May include offices, laboratories, classrooms, workshops, and warehouses.
	3	High level occupancy. Generally high levels of activity. Activities may be wide-ranging and/or largely unrestricted. Examples may include production/manufacturing areas, construction sites and public areas/thoroughfares.
Ventilation	0	Exterior area where natural ventilation and associated dilution is largely unlimited. Significant retention and/or build-up of airborne contaminants is unlikely.
	1	Interior area. Natural ventilation and dilution are limited but area is not particularly confined. Limited retention and/or build-up of airborne contaminants is possible.
	2	Confined areas where ventilation and associated dilution is significantly limited. Significant retention and/or build-up of airborne contaminants is possible or likely.
	3	Asbestos material subject to direct ventilation (e.g. inside an AC system or near a fan or air exhaust) which may result in disturbance and/or elevated fibre concentrations in air.

Table 3: Risk Rating

Overall Score	Risk Rating	Description
15-18	High (H)	The ACM poses an elevated and typically unacceptable risk of exposure and/or environmental contamination. Controls should generally be implemented as soon as possible to address the risk. Removal of the whole or part of the ACM is typically required. Other controls such as enclosure, encapsulation and/or sealing may also be necessary if portion(s) of ACM are to remain in place. As an interim measure, access to the area should be appropriately restricted. Air monitoring is often recommended to confirm airborne asbestos concentrations and provide a written record for future reference.
10-14	Moderate (M)	The ACM poses a moderate risk of exposure and/or environmental contamination. Often there has been minor damage or there is potential for disturbance/degradation in the foreseeable future. Consideration should be given to implementing appropriate controls in the short to medium term to address the risk(s) and/or prolong the lifespan of the material. Relevant controls typically include enclosure, encapsulation and/or sealing. Extensive removal is generally not required, and the material can generally be managed on site if desired and serving a useful purpose.
0-9	Low (L)	The risk of exposure and environmental contamination is generally low while the material remains undisturbed and in its present condition. The material may generally remain in place without the requirement for significant, material-specific control measures such as removal, enclosure, encapsulation or sealing.

Note: If the ACM is likely to be disturbed (e.g. by maintenance, refurbishment or demolition work) and/or is no longer serving a useful purpose then the ACM should generally be removed. All ACM should be clearly identified with a label/signage where reasonably practicable.

5. Results

The overall results of the survey are summarised in Table 1 in the Executive Summary of this report. Further details of the HBM identified at the Site, including the results of asbestos risk assessments, are provided in the Register in Appendix C.

A licensed electrician was not provided to DP to certify isolation of light fittings during the survey and therefore it was generally not possible to dismantle and inspect fluorescent light fittings to confirm the presence/absence of capacitors containing PCB.

Limited or no access was available to certain areas as outlined in the Register (Appendix C) and Table 4 below.

Table 4: Access Limitations*

Location / Area	Access Type	Reason(s)
Areas/materials at height (e.g. roofs)	Limited	Access limited to safely accessible areas and use of 1.8 m step ladder. Work at height and use of specialised access equipment not included in survey scope.
Confined spaces	Nil	Not included in survey scope.
Ceiling cavities and subfloor voids	Limited	Access is generally limited by building occupation, height, available light, services and clearance within cavity/void. Inspection of crawl spaces not included in survey scope.
Ceiling cavity above gym/boxing and rooms to the east	Nil	Access prevented on the basis of substantial termite activity in timber roof frame of building and height of ceilings above ground level.
Ceiling cavity above dance studio and adjacent rooms in this wing.	Nil	No access available due to nature and extent of items stored in 'Garden Storage' room where access hatch is located.
Below flooring materials (e.g. carpet, vinyl sheeting, matting etc.)	Limited	Access generally limited due to occupation, fixtures/furnishings and potential for damage to current finish.
Below ceramic tiled surfaces (e.g. walls and floors in wet areas)	Nil	Typically requires destructive removal of tiles and damage to current finish.
Enclosed building cavities and voids (e.g. service risers) and internals of building plant	Nil	Detailed dismantling/demolition typically required. Access generally impractical.
Materials intimately associated with building structure or components (e.g. enclosed within windows/doors)	Nil	Typically requires destructive/intrusive inspection and damage to current finish.
Subsurface areas and contamination in soil/fill	Nil	Not included in survey scope.
Storage rooms in general	Limited to very limited	Access limited by amount and nature of stored items that would require removal for a complete inspection.

* Refer also to the Register (Appendix A).

6. Recommendations

A summary recommendation for each HBM identified or assumed present at the Site is provided in the Register (Appendix C).

The general recommendations in Section 6.1 onwards are provided for informative purposes and should be considered where the relevant HBM has been identified or assumed present by DP or is subsequently suspected to be present based on reasonable grounds.

The presence of identified and assumed HBM at the Site, and the potential presence of any as-yet undetected HBM, should be considered during the risk assessment for any proposed work at the Site or site use. Additional targeted inspection, sampling and analysis for HBM should be considered prior to any work that may result in the disturbance of such HBM. In particular, a destructive/intrusive HBM survey is warranted prior to substantive renovation and/or building demolition work but can normally only be undertaken once the building has been permanently vacated.

6.1 General

HBM should be managed in accordance with the requirements of the WHS Act, WHS Regulation and subordinate Codes of Practice, Australian Standards and guidelines.

An intrusive/destructive HBM survey should be undertaken in all areas of the building(s) once these areas have been permanently vacated, and prior to substantive renovation and/or demolition. This is to help ensure that the location, extent and condition of relevant HBM have been identified to the extent reasonably practicable.

A hazardous materials management plan should be developed to aid compliance with the requirements of the WHS Act and Regulation including those that relate to the identification of hazards and control of associated risks.

HBM should be visually inspected on a regular basis. Any change to the condition of the material or relevant site conditions should be reported.

HBM should be removed prior to any significant disturbance such as maintenance, refurbishment and demolition work.

Prior to any work involving HBM a risk assessment should be conducted and Safe Work Method Statement (SWMS) developed. The SWMS should outline the controls necessary to ensure that the risks of exposure and environmental contamination are adequately controlled.

HBM remediation and removal work should be undertaken in controlled conditions.

Waste should be assessed and classified for disposal in accordance with the NSW Environment Protection Authority (EPA) *Waste Classification Guidelines, Part 1: Classifying Waste*, November 2014 (EPA, 2014).

At the completion of hazardous material remediation and removal work a clearance inspection should be conducted by a Competent Person, or in the case of friable asbestos, by a Licensed Asbestos Assessor.

6.2 Asbestos-containing Material (ACM)

Asbestos and ACM must be managed in accordance the WHS Regulation, the SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* and the SafeWork NSW *Code of Practice: How to Safely Remove Asbestos*.

Exposure to airborne asbestos in the workplace must be eliminated to the extent that is reasonably practicable. If it is not reasonably practicable to eliminate exposure it must be minimised to the extent that is reasonably practicable.

An Asbestos Management Plan must be developed to enable compliance with the WHS Regulation (Clause 429).

The presence and location of asbestos or ACM identified at a workplace must be clearly indicated by a label if it is reasonably practicable to do so.

Warning labels and signs should be consistent with the examples provided in the SafeWork NSW *Code of Practice: How to Manage and Control Asbestos in the Workplace* and comply with AS1319 *Safety Signs for the Occupational Environment*.

Non-friable ACM that are structurally intact and in good to fair condition may typically remain in place provided that they are not significantly disturbed.

Tools and equipment that generate dust must generally not be used on asbestos or ACM. These include high-speed abrasive power and pneumatic tools (e.g. angle grinders, sanders, saws and high-speed drills, brooms and brushes).

Tools and equipment that cause the release of asbestos, including power tools and brooms, may only be used on asbestos if the equipment is enclosed and/or designed to capture or suppress asbestos fibres and/or the equipment is used in a way that is designed to capture or suppress asbestos fibres safely. In such a case, other controls including PPE may also be required based upon the results of a pre-work risk assessment and the SWMS adopted.

The use of high-pressure water spray and compressed air on asbestos or ACM is specifically prohibited under the WHS Regulation.

If ACM become damaged they should be repaired or removed and replaced with an alternative, non-asbestos building product as soon as possible.

The scope of asbestos removal work should be outlined in a technical specification (i.e. Scope of Work Report) developed by a Competent Person (in the case of non-friable asbestos) or a Licensed Asbestos Assessor (in the case of friable asbestos).

Removal of friable asbestos must only be undertaken by a Class A licensed asbestos removalist.

Removal of 10 m² or more of non-friable asbestos must only be undertaken by a Class A or Class B licensed asbestos removalist.

Air monitoring, including background, control and clearance monitoring, is a mandatory requirement during removal of friable asbestos. Air monitoring should also be considered during removal of non-friable asbestos particularly where sensitive receptors exist such as at schools, hospitals, in public areas and at similar sites.

Air monitoring must be undertaken in accordance with the National Occupational Health and Safety Commission (NOHSC) *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres, 2nd Edition* [NOHSC:3003(2005)].

All air monitoring samples must be analysed by a NATA accredited laboratory that holds accreditation for the required analysis.

At the completion of asbestos removal a clearance inspection must be conducted by a Competent Person (for non-friable asbestos removal) or a Licensed Asbestos Assessor (for friable asbestos removal).

Air monitoring and clearance inspections must be performed by person/s independent of the licensed asbestos removalist.

All waste should be classified for disposal in accordance with the EPA (2014). Asbestos waste is preclassified as Special Waste under these guidelines.

Asbestos transporters and facilities receiving asbestos waste must report the movement of asbestos waste to the EPA. Entities involved with the transport or disposal of asbestos waste in NSW, or arranging the transport of asbestos waste in NSW, must use the EPA's online tool, WasteLocate.

All asbestos waste must be disposed at a waste collection facility licensed to receive asbestos waste. All disposal receipts should be retained.

A person who relinquishes management or control of the workplace must ensure that the Asbestos Register is given to the person, if any, assuming management or control of the workplace.

6.3 Synthetic Mineral Fibre (SMF)

SMF insulation materials may generally remain in place providing that they are in good condition and unlikely to be disturbed.

To reduce the potential for disturbance, exposure and environmental contamination SMF insulation materials may be encapsulated or enclosed. Higher risk materials, such as loose fill insulation, may also be removed and replaced.

SMF work is to be undertaken in accordance with the requirements of the WHS Regulation and subordinate Codes of Practice, Guidance Notes and other documents. These include:

- WorkCover NSW *Safe management of synthetic mineral fibres (SMF) – glasswool and rockwool*;
- Safe Work Australia *Guide to Handling Refractory Ceramic Fibres, December 2013*; and
- Guidance Note on the Membrane Filter Method for the Estimation of Airborne Synthetic Mineral Fibres [NOHSC:3006(1989)].

Reference should also be made to the Australian Institute of Occupational Hygienists (AIOH) *Synthetic Mineral Fibres (SMF) And Occupational Health Issues, Position Paper, October 2011* (reformatted January 2018) for guidance.

Where reasonable concern exists over possible respirable fibre concentrations in any application, the first step is often to confirm that the work practices, as recommended for the particular product, are being followed. Air monitoring may not be required when it has been clearly established that appropriate work practices are being carried out.

Notwithstanding the above, exposures to airborne SMF should not exceed the relevant Safe Work Australia (SWA) exposure standards outlined in Table 5 below.

Table 5: SWA Exposure Standards for SMF

Standard Name	Time Weighted Average (TWA) Exposure Standard
Glass wool, rock (stone) wool, slag wool and continuous glass filament and low biopersistence Man Made Vitreous Fibres (MMVF)	2 mg/m ³ (inhalable dust)
Refractory ceramic fibres (RCF), special purpose glass fibres and high biopersistence MMVF	0.5 f/mL (respirable) 2 mg/m ³ (inhalable dust)

SMF waste should be disposed at a licensed waste collection facility. Note that synthetic fibre waste (from materials such as fibreglass, polyesters and other plastics) packaged securely to prevent dust emissions is pre-classified as General Solid Waste (non-putrescible) under EPA (2014).

All disposal receipts should be retained.

6.4 Polychlorinated Biphenyls (PCBs)

Prior to any significant disturbance, such as demolition, refurbishment or maintenance works, fluorescent light fittings should be electrically isolated and inspected in detail for metal canister-type capacitors that may contain PCB's. Any capacitors containing or suspected to contain PCB should be removed by a Competent Person.

PCB containing capacitors should be managed in accordance with the general requirements of the WHS Regulation and the:

- Environmentally Hazardous Chemicals (EHC) Act 2008 and subordinate *Polychlorinated Biphenyl (PCB) Chemical Control Order 1997*; and

- *Polychlorinated Biphenyls Management Plan, Revised Edition, April 2003*, issued by the Environment Protection and Heritage Council (EPHC).

Any PCB containing capacitors that exhibit leakage should be removed and replaced by a Competent Person as soon as possible. Access to areas containing leaking capacitors should be suitably restricted.

The conveyance and disposal of PCB material and PCB waste must be undertaken in accordance with the requirements outlined in the *Polychlorinated Biphenyl (PCB) Chemical Control Order 1997*.

All disposal receipts should be retained.

6.5 Lead Paint

The potential presence of lead paint(s) at the Site should be considered during the risk assessment for any proposed works. Additional, targeted sampling and analysis for lead paints should be considered prior to any work that may result in significant disturbance of paint system(s).

Lead paints should be managed in accordance with the WHS Regulation (including Chapter 7, Part 7.2 Lead) and:

- AS4361.1 – 2017, *Guide to hazardous paint management - Lead and other hazardous metallic pigments in industrial applications*; and
- AS4361.2 – 2017, *Guide to hazardous paint management - Lead paint in residential, public and commercial buildings*.

Generally, when one or more tests from a building or portion of a building indicate that lead is present, the paint should be treated as lead paint. Further, a project should not be classified as free of lead unless all samples within the area are proven to be free of lead and the sampling is comprehensive.

Lead paint that is in sound condition, not directly accessible (e.g. over-painted with lead-free paint) and unlikely to be disturbed may not require any immediate action.

Area(s) of lead paint that are in poor condition (e.g. flaking, delaminating) should generally be removed along with any lead paint debris and associated dust.

Exposed area(s) of lead paint that are intact may be stabilised by over-painting with a lead-free paint, or by covering with a suitable encapsulant. Stabilisation can provide an interim to long-term solution to a lead paint hazard.

The lead paint removal method and control measures adopted should be determined by risk assessment and a detailed knowledge of the workplace and proposed use/activities.

Exposure to airborne lead must be maintained below the relevant SWA exposure standards pertaining to lead. The SWA 8-hour Time Weighted Average (TWA) exposure standard for lead (inorganic dusts and fumes) is 0.05 mg/m³. Other exposure standards apply for substances such as lead chromate.

Air monitoring for lead may be required during lead paint remediation works based on risk assessment and the requirements to maintain airborne lead levels below the abovementioned exposure standards.

At the completion of lead paint removal a clearance inspection should be conducted by a Competent Person. The Competent Person should determine the requirements for clearance including any air monitoring or sample analysis that may be required.

Lead paint waste should be assessed and classified for disposal in accordance with EPA (2014):

- Waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions is pre-classified as general solid waste (non-putrescible); and
- Lead paint waste arising otherwise than from residential premises or educational or child care institutions is pre-classified as hazardous waste.

Based on correspondence with the NSW EPA DP understands that EPA (2014) does not consider AS4361.1 – 2017 or AS4361.2 – 2017, including the definition of lead paint therein, for waste classification assessment. As such, these standards have no bearing on how waste is classified in NSW.

All disposal receipts should be retained.

6.6 Lead Dust

Laboratory analysis results for lead dust should be taken as approximate only since sampling is limited and the concentration of lead in dust may vary considerably between locations within the same general area.

No recognised Australian guidelines have been identified for the direct assessment of lead dust concentrations in ceiling cavities. Notwithstanding this, AS4361.2-1998 *Guide to Lead Paint Management, Part 2: Residential and Commercial Buildings* (superseded) outlined acceptance limits for lead in surface dust after lead paint management activities. These limits were:

- Interior floors: 1 mg/m² (as lead).
- Interior window sills: 5 mg/m² (as lead); and
- Exterior surfaces: 8 mg/m² (as lead).

The United States Environmental Protection Authority (US EPA) 40 CFR Part 745 *Lead; Identification of Dangerous Levels of Lead; Final Rule* identifies the following clearance standards following abatement:

- Floors - 40 µg/ft² (~0.43 mg/m²) lead;
- Interior Window sills - 250 µg/ft² (~2.7 mg/m²) lead; and
- Window troughs - 400 µg/ft² (~4.3 mg/m²) lead.

The above acceptance limits may be used as a guide to assessing lead concentrations in settled dust. As a precaution, and due to the nature of the Site, a lead concentration of 0.5 mg/m² has been used to identify potentially hazardous conditions in this assessment.

Where the concentration of lead in dust exceeds 0.5 mg/m² appropriate control and/or remedial measures may need to be identified via risk assessment and with a detailed knowledge of the workplace and proposed use/activities.

Where ceiling spaces and similar cavities are effectively enclosed and provide very limited or no opportunity for lead dust to enter occupied areas, the dust may typically remain in place. In such a case, access to the cavities should be suitably restricted and all entrances signposted with appropriate warning signs.

Any personnel required to enter building cavities or other areas containing elevated concentrations of lead in dust should undertake an appropriate risk assessment and develop a SWMS for the work. The SWMS must identify controls that ensure the risk of exposure to lead and environmental contamination remains at an acceptable level for the personnel entering the area and for occupants of the building and surrounds.

Consideration should be given to removal of lead containing dust including when:

- There is a significant risk of the lead entering occupied areas;
- Significant disturbance of lead dust is likely due to maintenance, refurbishment, demolition or other reason(s); or
- Removal is a reasonably practical means of eliminating the hazard.

Removal of lead dust should be undertaken by a suitably qualified and experienced removalist.

The lead dust removal method and control measures adopted should be determined by risk assessment and a detailed knowledge of the workplace and proposed use/activities.

Exposure to airborne lead must be maintained below the relevant SWA exposure standards pertaining to lead. The SWA 8-hour TWA exposure standard for lead (inorganic dusts and fumes) is 0.05 mg/m³.

Air monitoring for lead may be required based on the results of risk assessment and the requirement to maintain airborne lead concentrations below the abovementioned exposure standard(s).

At the completion of lead dust removal a clearance inspection should be conducted by a Competent Person. The Competent Person should determine the requirements for clearance including any air monitoring or sample analysis that may be required.

Lead waste should be assessed and classified for disposal in accordance with EPA (2014).

All disposal receipts should be retained.

6.7 Ozone Depleting Substances (ODS)

ODS should be managed in accordance with relevant legislative requirements including the:

- Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Cth);
- Ozone Protection and Synthetic Greenhouse Gas Management Regulations 1995 (Cth); and

- Ozone Protection Act 1989 (NSW).

The relevant state authority should always be consulted to ensure legal requirements are followed.

Refrigerant must not be discharged or 'vented', except in very limited circumstances, and must be recovered by a licensed technician when equipment reaches end of life.

All work on equipment containing refrigerants must be done by appropriately licensed technicians:

- A Refrigerant Handling Licence is required to decant refrigerant, manufacture, install, commission, maintain or service equipment, irrespective of whether or not a controlled refrigerant is present. This licence also covers decommissioning or disposal of equipment containing controlled refrigerant;
- A Refrigerant Trading Authorisation is required for any individual or business that acquires, possesses or disposes of controlled refrigerant;
- A Restricted Refrigerant Recoverer Licence is one of the licence options for individuals (including a repairer or dismantler) who remove controlled refrigerant from any refrigeration or air conditioning systems; and
- Additional licensing requirements apply for working with some or all refrigerants in some States and Territories.

7. Limitations

Douglas Partners (DP) has prepared this report (or services) for this project at the PCYC, 600-660 Elizabeth Street, Redfern NSW in accordance with DP's proposal SYD191128 dated 26 October 2019 and acceptance received from EMM on/about 27 November 2019.

This report is provided for the exclusive use of EMM for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the conditions on the Site only at the specific inspection, sampling and/or testing locations, and then only to the extent practicable and safely accessible at the time the work was carried out. Site conditions may change after DP's field inspection, sampling and testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in site conditions across the Site between and beyond the inspection, sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction.

Although the sampling plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the Site that have not been inspected, sampled and/or tested. This is either due to undetected variations in conditions or to budget constraints (as discussed above), or to parts of the Site being inaccessible or unavailable, or to occupants, furnishings or stored items preventing access. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the Site, between and beyond the inspection, sampling and testing locations, and hence no warranty can be given that all HBM have been identified.

Inspections are limited to areas that are safely accessible at the time of the inspection without undue damage to building finishes or disturbance of occupants. Inspections exclude hidden and inaccessible locations such as within building cavities, voids and enclosed sections of risers/shafts as well as materials encased within the building structure or located below the exposed ground surface (e.g. pipes, drains and formwork). In addition, residual asbestos materials (e.g. asbestos lagging to pipes and vessels) may remain undiscovered below newer, asbestos-free materials (e.g. preformed SMF insulation). Such residual asbestos materials may not be identified without extensive intrusive investigation and/or dismantling/demolition work if at all.

Any disturbance of building materials, such as during renovation, maintenance or demolition work, may reveal additional HBM.

Limitations apply to the laboratory analytical methods used. For example, it can be very difficult or impossible to detect the presence of asbestos in some bulk materials (e.g. vinyl tiles) using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the small length or diameter of asbestos fibres present in the material or attributed to the fact that very fine fibres have been dispersed individually throughout the material.

While work is undertaken in a professional manner the nature of HBM and the limitations of the method(s) used mean that we cannot guarantee that all HBM or issues of concern have been identified. This report should therefore not be considered a definitive account of all HBM that may be present at the Site.

DP personnel are not licenced or accredited quantity surveyors. Any quantities quoted in this report are provided for general guidance only and should not be relied upon. The services of a licenced quantity surveyor should be engaged in order to determine reliable quantities.

The recommendations and conclusions contained in this report shall not abrogate a person of their responsibility to work in accordance with statutory requirements, codes of practice, standards, guidelines, safety data sheets, work instructions or industry best practice.

The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the environmental components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

Douglas Partners Pty Ltd

Appendix A

About This Report
Drawings and Plans

About this Report

Douglas Partners



Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

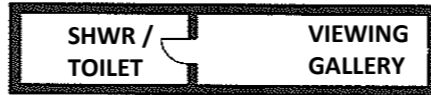
Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

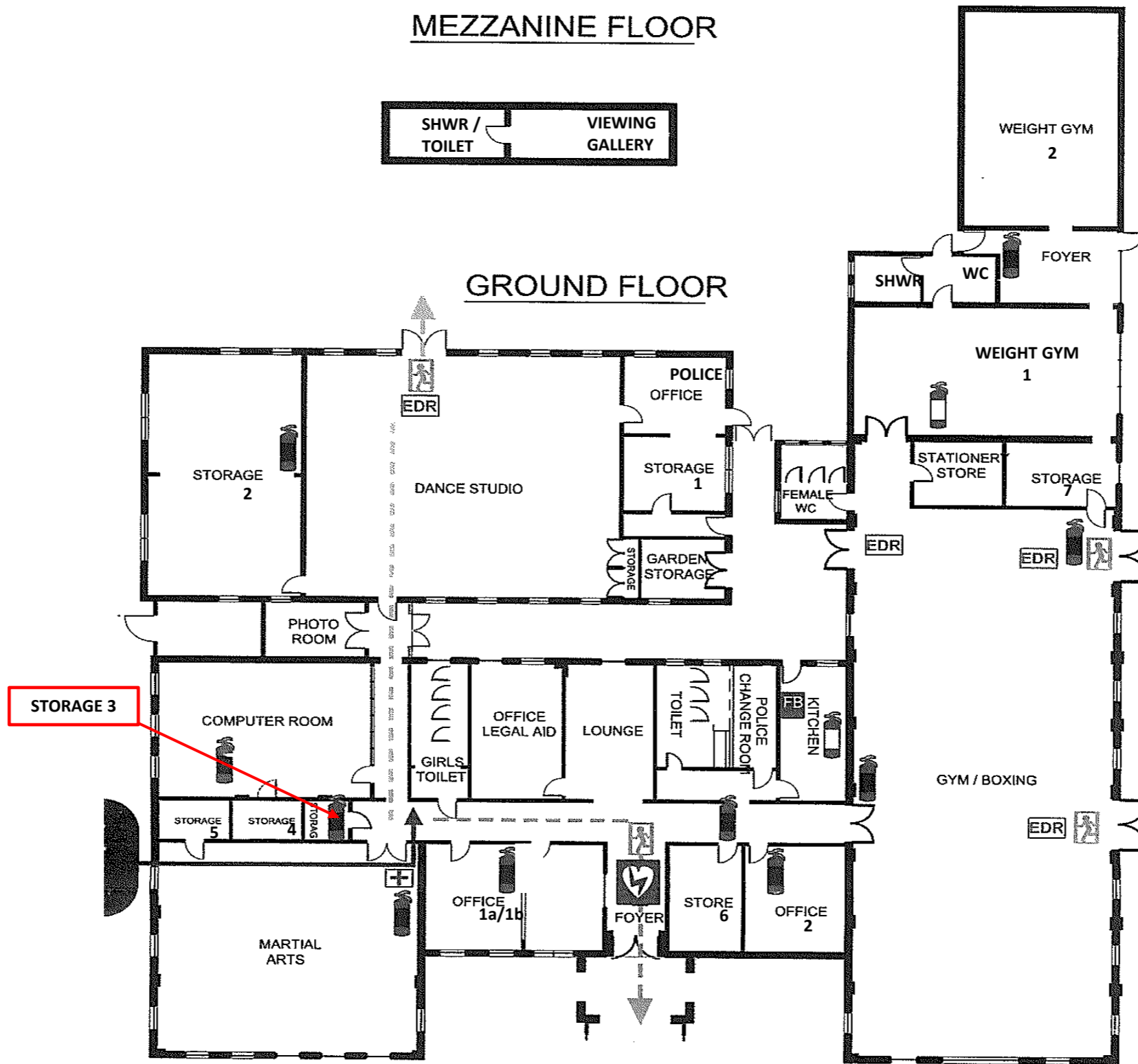
Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

MEZZANINE FLOOR



GROUND FLOOR



Appendix B


Photographic Plates



Photograph 1: PCYC, exterior, western façade, northern end, eave lining, fibre cement sheeting, asbestos detected by analysis



Photograph 2: PCYC, exterior, central passageway, dance studio, western eave lining, fibre cement sheeting, asbestos detected by analysis


 Douglas Partners Geotechnics Environment Groundwater	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 1
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 3: PCYC, exterior, covered courtyard at centre of building, electrical cabinet, internal components, electrical backing board, fuse insulation and/or other materials, asbestos (assumed)



Photograph 4: PCYC, interior, dance studio, southwestern corner, cupboards, ceiling lining, fibre cement sheeting, asbestos (assumed)


	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 2
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 5: PCYC, interior, photo room, continuation of eave linings throughout, fibre cement sheeting, asbestos (assumed)



Photograph 6: PCYC, interior, male toilets (adjacent north of police change room), partitions, possible fibre cement product, asbestos (assumed)


 Douglas Partners Geotechnics Environment Groundwater	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 3
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 7: PCYC, interior, male toilets (adjacent north of police change room), rear side of urinal, possible bituminous lining/coating, asbestos (assumed)



Photograph 8: PCYC, interior, storage 7, portion wall linings, fibre cement sheeting, asbestos detected by analysis


	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 4
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19

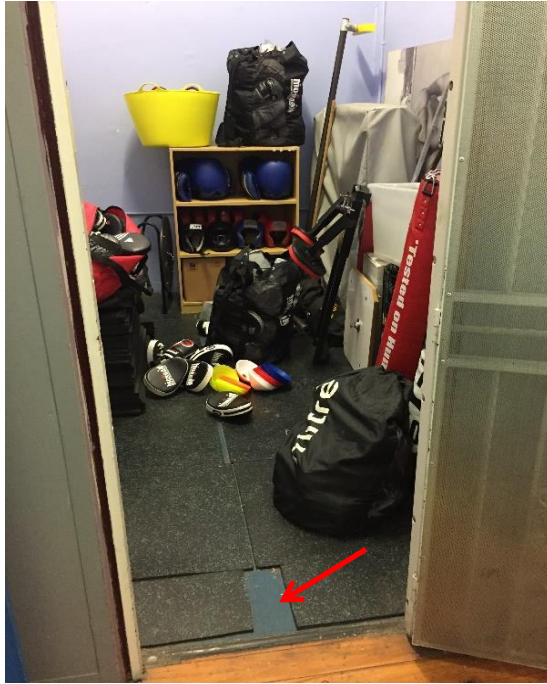


Photograph 9: PCYC, interior, storage 7, floor, below carpet, blue vinyl tiles, asbestos detected by analysis



Photograph 10: PCYC, interior, gym/boxing, eastern wall (adjacent storage 7 and stationary store), fibre cement sheeting, asbestos detected by analysis


	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 5
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 11: PCYC, interior, stationary store, floor, blue vinyl tiles, asbestos detected by analysis



Photograph 12: PCYC, interior, stationary store, portion of wall linings, fibre cement sheeting, asbestos detected by analysis


 Douglas Partners Geotechnics Environment Groundwater	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 6
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 13: PCYC, interior, police changing room, partitions, possible fibre cement product, asbestos (assumed)



Photograph 14: PCYC, interior, office 1a/1b, safe, internal insulation, asbestos (assumed)


 Douglas Partners Geotechnics Environment Groundwater	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 7
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 15: PCYC, interior, ceiling cavity , hot water tanks (x2) in vicinity of main entrance foyer, internal insulation, asbestos (assumed)



Photograph 16: PCYC, exterior, below dance studio, subfloor area, ground surfaces, fibre cement sheeting debris, asbestos (assumed)


 Douglas Partners Geotechnics Environment Groundwater	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 8
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 17: PCYC, exterior, below dance studio, subfloor area, packing materials to brick piers, fibre cement sheeting, asbestos (assumed)



Photograph 18: PCYC, exterior, western façade, north end building, typical window frame, brown paint, lead paint (>0.1% lead w/w)


	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 9
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 19: PCYC, exterior, southern façade, western awning, metal supports posts, typical blue and underlying green paint, lead paint (>0.1% lead w/w)



Photograph 20: PCYC, exterior, eastern façade, southern end of building, fascia, typical cream paint, lead paint (>0.1% lead w/w)

	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 10
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 21: PCYC, exterior, covered courtyard at centre of building, southern side, timber window frame, typical burgundy paint, lead paint (>0.1% lead w/w)



Photograph 22: PCYC, exterior, eastern façade, eastern side of dance studio, Fujitsu AC unit, refrigerant, refrigerant R32


	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 11
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 23: PCYC, exterior, western façade, adjacent north of main entrance, Fujitsu AC unit, refrigerant, refrigerant R32



Photograph 24: PCYC, exterior, western façade, adjacent north of main entrance, Fujitsu AC unit, refrigerant, refrigerant 410A


	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 12
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 25: PCYC, exterior, western façade, adjacent south of main entrance, AC unit, refrigerant, refrigerant R32



Photograph 26: PCYC, exterior, central passageway / courtyard, Daikin AC unit, refrigerant, refrigerant R32


	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 13
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 27: PCYC, exterior, sports court, light poles, internal components, capacitors (if present), PCB (assumed)



Photograph 28: PCYC, interior, dance studio, ceiling, fluorescent light fittings x 10, capacitors, insulating oil, PCB (assumed)


	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 14
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 29: PCYC, interior, storage 6, ceiling, fan x 1, capacitors, insulating oil, PCB (assumed)



Photograph 30: PCYC, interior, gym/boxing, above perforated metal sheeting to ceiling, insulation, SMF (assumed)


	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 15
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19



Photograph 31: PCYC, interior, mezzanine off weight gym 2, amenities area, hot water unit, insulation, SMF (assumed)

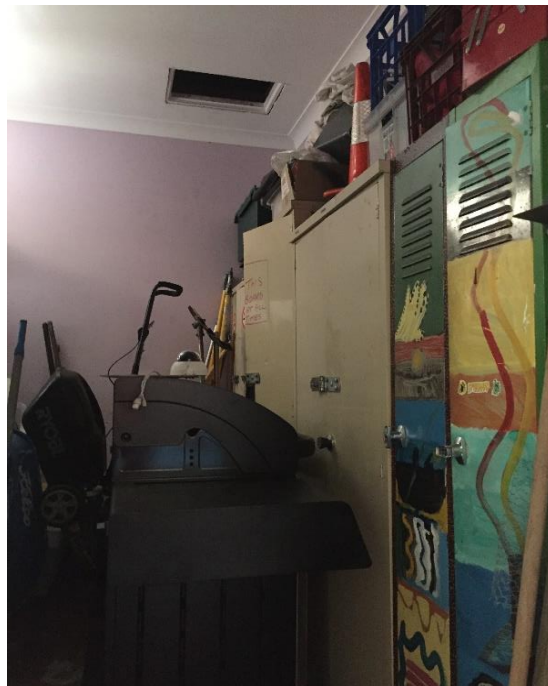


Photograph 32: PCYC, interior, ceiling cavity, northern end of building (near storage 4), settled dust/debris, 280 mg/m2 lead


	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 16
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19

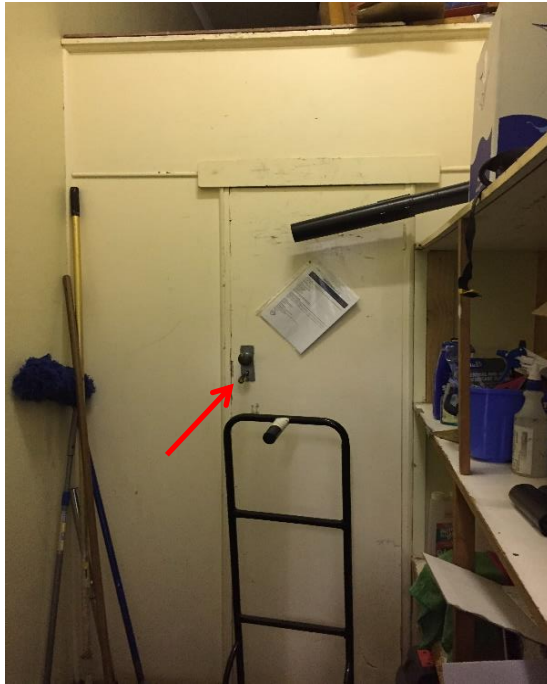


Photograph 33: PCYC, interior, ceiling cavity, toward southern end of building (near office 2), settled dust/debris, 380 mg/m2 lead




Photograph 34: PCYC, interior, garden storage room, materials in general, generally inaccessible (due storage)

 Douglas Partners Geotechnics Environment Groundwater	Site Photographs		PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register		PLATE No: 17
	PCYC, 600-660 Elizabeth Street, Redfern NSW		REV: A
	CLIENT: EMM Consulting Pty Ltd		DATE: Nov-19



Photograph 35: PCYC, interior, storage 4, materials in general, generally inaccessible (door locked and handle removed/broken)

 Douglas Partners <i>Geotechnics Environment Groundwater</i>	Site Photographs	PROJECT: 99510.01
	Hazardous Building Materials (HBM) Register	PLATE No: 18
	PCYC, 600-660 Elizabeth Street, Redfern NSW	REV: A
	CLIENT: EMM Consulting Pty Ltd	DATE: Nov-19

Appendix C

Hazardous Building Materials (HBM) Register

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority		
PCYC	exterior, western façade	northern end, eave lining	fibre cement sheeting	A01	asbestos detected by analysis	1	1	1	2	2	2	9	Low	1	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
PCYC	exterior, central passageway	dance studio, western eave lining	fibre cement sheeting	A10	asbestos detected by analysis	1	1	1	2	2	2	9	Low	2	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
PCYC	façade in general	eave linings throughout	fibre cement sheeting	refer A01 and A10	asbestos (assumed)	1	1	1	2	2	2	9	Low	refer 1-2	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
PCYC	exterior, western façade	northern end of building, typical timber window frame	glazing putty	A02	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	exterior northern side of main entrance alcove, infill panel	fibre cement sheeting	A03	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	interior northern side of main entrance alcove, infill panel	fibre cement sheeting	A04	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	interior southern side of main entrance alcove, infill panel	fibre cement sheeting	A05	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	main entrance alcove, walls	textured coating	A06	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation	
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
PCYC	exterior, western façade	exterior southern side of main entrance alcove, infill panel	fibre cement sheeting	A07	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	southern end of building, typical window frame	window putty	A08	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, covered courtyard at centre of building	electrical cabinet, internal components	electrical backing board, fuse insulation and/or other materials	N/A	asbestos (assumed)	2	1	2	1	2	1	9	Low	3	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
PCYC	interior, dance studio	southwestern corner, cupboards, ceiling lining	fibre cement sheeting	N/A	asbestos (assumed)	1	1	2	2	2	1	9	Low	4	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
PCYC	interior, dance studio	ceilings generally	perforated plaster	A11	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, photo room	continuation of eave linings throughout	fibre cement sheeting	refer A01 and A10	asbestos (assumed)	1	1	1	2	2	2	9	Low	5	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
PCYC	interior, photo room	southern end of room, ceiling cavity, ceiling sheeting	fibre cement sheeting	A14	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, northern corridor, outside photo room	ceiling	fibre cement sheeting	A12	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation	
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
PCYC	interior, northern corridor, outside computer room	floor, below green vinyl sheeting	grey adhesive	A19	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, male toilets (adjacent north of police change room)	partitions	possible fibre cement product	N/A	asbestos (assumed)	1	1	1	3	2	1	9	Low	6	Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) (e.g. by destructive sampling and analysis) prior to any disturbance.	
PCYC	interior, male toilets (adjacent north of police change room)	rear side of urinal	possible bituminous lining/coating	N/A	asbestos (assumed)	0	0	0	0	2	1	3	Low	7	Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) (e.g. by destructive sampling and analysis) prior to any disturbance.	
PCYC	interior, girls toilet (adjacent north of office legal aid)	partitions	possible fibre cement product	N/A	asbestos (assumed)	1	1	1	3	2	1	9	Low	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) (e.g. by destructive sampling and analysis) prior to any disturbance	
PCYC	interior, storage 7	portion wall linings	fibre cement sheeting	A13	asbestos detected by analysis	1	1	1	3	2	1	9	Low	8	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
PCYC	interior, storage 7	floor, below carpet	blue vinyl tiles	A16	asbestos detected by analysis	0	1	1	2	2	1	7	Low	9	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
PCYC	interior, gym/boxing	eastern wall (adjacent storage 7 and stationary store)	fibre cement sheeting	A17	asbestos detected by analysis	1	1	1	3	2	1	9	Low	10	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).	
PCYC	interior, weight gym 1, shower	water closet, partition	fibre cement sheeting	A18	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority		
PCYC	interior, stationary store	floor	blue vinyl tiles	refer A16	asbestos detected by analysis	0	1	1	3	2	1	8	Low	11	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
PCYC	interior, stationary store	portion of wall linings	fibre cement sheeting	A15	asbestos detected by analysis	1	1	1	3	2	1	9	Low	12	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
PCYC	interior, police changing room	partitions	possible fibre cement product	N/A	asbestos (assumed)	1	1	1	3	2	1	9	Low	13	Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) (e.g. by destructive sampling and analysis) prior to any disturbance.
PCYC	interior, office 1a/1b	safe	internal insulation	N/A	asbestos (assumed)	2	0	0	0	2	1	5	Low	14	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) (e.g. by destructive sampling and analysis) prior to any disturbance
PCYC	interior, ceiling cavity	hot water tanks (x2) in vicinity of main entrance foyer	internal insulation	N/A	asbestos (assumed)	3	1	1	2	2	2	11	Moderate	15	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) (e.g. by destructive sampling and analysis) prior to any disturbance
PCYC	exterior, below dance studio	subfloor area, ground surfaces	fibre cement sheeting debris	N/A	asbestos (assumed)	1	3	3	1	1	2	11	Moderate	16	Asbestos (damaged) - Ensure access is suitably restricted. Remove material prior to any disturbance including demolition work. Removal must be undertaken by a licensed asbestos removalist.
PCYC	exterior, below dance studio	subfloor area, packing materials to brick piers	fibre cement sheeting	N/A	asbestos (assumed)	1	2	2	1	1	2	9	Low	17	Reinspect hazardous material - Reinspect condition on a regular basis. Remove material prior to any significant disturbance (e.g. renovation, demolition or maintenance work).
PCYC	interior, dance studio	northern end, eastern side, below subfloor access hatch	soil below subfloor access hatch	AS01	no asbestos detected by analysis	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority		
PCYC	exterior, below building in general	subfloor areas in general	fibre cement sheeting debris	N/A	asbestos (assumed)	1	3	3	1	1	2	11	Moderate	similar 16	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	exterior, below building in general	subfloor areas in general	fibre cement sheeting	N/A	asbestos (assumed)	1	2	2	1	1	2	9	Low	similar 17	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	exterior, western façade	north end building, typical window frame	brown paint	LP01	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18	Lead paint - Any areas of damaged/flaking lead paint and any associated debris should be removed by a suitably qualified and experienced contractor. Consider sealing or enclosing any remaining lead paint per AS4361. Reinspect condition on a regular basis. Avoid disturbance.
PCYC	exterior, western façade	centre of building, brick wall	typical red paint	LP02	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	centre of building, brick wall	typical blue paint	LP03	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, western façade	inside main entrance alcove, walls	typical white paint	LP04	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	exterior, southern façade	western awning, metal supports posts	typical blue and underlying green paint	LP06	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	Lead paint - Any areas of damaged/flaking lead paint and any associated debris should be removed by a suitably qualified and experienced contractor. Consider sealing or enclosing any remaining lead paint per AS4361. Reinspect condition on a regular basis. Avoid disturbance.

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority		
PCYC	exterior, eastern façade	southern end of building, fascia	typical cream paint	LP09	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	20	Lead paint - Any areas of damaged/flaking lead paint and any associated debris should be removed by a suitably qualified and experienced contractor. Consider sealing or enclosing any remaining lead paint per AS4361. Reinspect condition on a regular basis. Avoid disturbance.
PCYC	exterior, covered courtyard at centre of building	southern side, timber window frame	typical burgundy paint	LP10	lead paint (>0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21	Lead paint - Any areas of damaged/flaking lead paint and any associated debris should be removed by a suitably qualified and experienced contractor. Consider sealing or enclosing any remaining lead paint per AS4361. Reinspect condition on a regular basis. Avoid disturbance.
PCYC	exterior, covered courtyard at centre of building	awning, timber framework	typical cream paint	LP11	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, dance studio	southern wall	typical pale blue paint	LP12	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, martial arts	northern wall	typical cream paint	LP14	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, lounge opposite entrance foyer	typical wall	typical white paint	LP15	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, gym/boxing	southern wall, eastern end	typical white paint	LP17	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.
PCYC	interior, viewing gallery above southern foyer	handrails	typical red paint	LP18	non-lead paint (≤0.1% lead w/w)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No hazardous material identified.

DP Project No: 99510.01
 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority		
PCYC	exterior, eastern façade	eastern side of dance studio, Fujitsu AC unit	refrigerant	N/A	refrigerant R32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22	Ensure AC units are decommissioned and refrigerant is reclaimed by an appropriately licensed technician prior to general demolition. The refrigerant must not be discharged or vented to the environment.
PCYC	exterior, western façade	adjacent north of main entrance, Fujitsu AC unit	refrigerant	N/A	refrigerant R32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23	Ensure AC units are decommissioned and refrigerant is reclaimed by an appropriately licensed technician prior to general demolition. The refrigerant must not be discharged or vented to the environment.
PCYC	exterior, western façade	adjacent north of main entrance, Fujitsu AC unit	refrigerant	N/A	refrigerant 410A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	24	Ensure AC units are decommissioned and refrigerant is reclaimed by an appropriately licensed technician prior to general demolition. The refrigerant must not be discharged or vented to the environment.
PCYC	exterior, western façade	adjacent south of main entrance, AC unit	refrigerant	N/A	refrigerant R32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	25	Ensure AC units are decommissioned and refrigerant is reclaimed by an appropriately licensed technician prior to general demolition. The refrigerant must not be discharged or vented to the environment.
PCYC	exterior, central passageway / courtyard	Daikin AC unit	refrigerant	N/A	refrigerant R32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	26	Ensure AC units are decommissioned and refrigerant is reclaimed by an appropriately licensed technician prior to general demolition. The refrigerant must not be discharged or vented to the environment.
PCYC	exterior, sports court	light poles, internal components	capacitors (if present)	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	exterior, western façade, main entrance alcove	ceiling, fluorescent light fittings x 2	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.

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 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation	
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
PCYC	exterior, dance studio	eaves, minor fluorescent light fittings	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, storage 1	ceiling, fluorescent light fittings x 2	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, dance studio	ceiling, fluorescent light fittings x 10	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, storage 2	ceiling, fluorescent light fittings x 4	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, photo room	fluorescent light fittings x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, storage 3	ceiling, fluorescent light fittings x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, entry vestibule to male toilets (adjacent north of police change room)	ceiling, fluorescent light fittings x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, storage 3	ceiling, fluorescent light fittings x 2	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.

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 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation	
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
PCYC	interior, southern side, entrance foyer	ceiling, fluorescent light fittings x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, police changing room	ceiling, fluorescent light fittings x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, office 1a/1b	ceiling, fan x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, storage 6	ceiling, fan x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	29	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, office 2	ceiling, fan x 1	capacitors, insulating oil	N/A	PCB (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, generally	sheet and framed walls where present, wall cavities	insulation and/or associated debris	N/A	SMF (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, ceiling cavities	above dance studio, weight gym 1 and weight gym 2	insulation and/or associated debris	N/A	SMF (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, gym/boxing	above perforated metal sheeting to ceiling	insulation	N/A	SMF (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.

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 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation	
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
PCYC	interior, mezzanine off weight gym 2	amenities area, hot water unit	insulation	N/A	SMF (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, police change room	hot water unit	insulation	N/A	SMF (assumed)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 31	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior, ceiling cavity	northern end of building (near storage 4)	settled dust/debris	LD01	no asbestos detected by analysis however SMF detected	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 32	SMF dust in ceiling cavity - Restrict access and avoid disturbance. Implement controls to prevent exposure and dispersal during normal operations, maintenance, renovation and demolition work.
PCYC	interior, ceiling cavity	toward southern end of building (near office 2)	settled dust/debris	LD02	no asbestos detected by analysis however SMF detected	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	similar 33	SMF dust in ceiling cavity - Restrict access and avoid disturbance. Implement controls to prevent exposure and dispersal during normal operations, maintenance, renovation and demolition work.
PCYC	interior, ceiling cavity	northern end of building (near storage 4)	settled dust/debris	LD01	28 mg/m ² lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32	Lead dust in ceiling cavity - Restrict access and avoid disturbance. Implement controls to prevent exposure and dispersal during normal operations, maintenance, renovation and demolition work.
PCYC	interior, ceiling cavity	toward southern end of building (near office 2)	settled dust/debris	LD02	38 mg/m ² lead	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	33	Lead dust in ceiling cavity - Restrict access and avoid disturbance. Implement controls to prevent exposure and dispersal during normal operations, maintenance, renovation and demolition work.
PCYC	exterior, southern facade	top of concrete awnings	possible waterproofing membrane	N/A	inaccessible (due height)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior	garden storage room	materials in general	N/A	generally inaccessible (due storage)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	34	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.

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 Hazardous Building Materials (HBM) Register
 PCYC, 600-660 Elizabeth Street, Redfern NSW

Building	Location (General)	Location (Specific)	Material	Sample No.	Material Status	Asbestos Risk Assessment								Photo No.	Summary Recommendation	
						Friability	Condition	Treatment	Accessibility	Activity	Ventilation	Risk Score	Action Priority			
PCYC	interior	police office (off dance studio)	materials in general	N/A	generally inaccessible (no keys available)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.
PCYC	interior	storage 4	materials in general	N/A	generally inaccessible (door locked and handle removed/broken)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	35	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.	
PCYC	interior	female WC, northeast corner gym/boxing	materials in general	N/A	generally inaccessible (no keys available)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Inaccessible Area/Material - Hazardous material(s) assumed present as a precaution. Confirm status of hazardous material(s) when safe access available and prior to any disturbance.

Appendix D

Laboratory Certificate(s) of Analysis



CERTIFICATE OF ANALYSIS 232385

Client Details

Client	Douglas Partners Pty Ltd
Attention	Tim Kulmar
Address	96 Hermitage Rd, West Ryde, NSW, 2114

Sample Details

Your Reference	99510.01 Redfern
Number of Samples	13 Paint, 18 Material, 2 Swab, 1 Soil
Date samples received	05/12/2019
Date completed instructions received	05/12/2019

Analysis Details

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

Report Details

Date results requested by	12/12/2019
Date of Issue	11/12/2019

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Asbestos Approved By

Analysed by Asbestos Approved Identifier: Lucy Zhu, Wonnie Condos
Authorised by Asbestos Approved Signatory: Lucy Zhu

Results Approved By

Jaimie Loa-Kum-Cheung, Metals Supervisor
Lucy Zhu, Senior Asbestos Analyst

Authorised By

Nancy Zhang, Laboratory Manager

Client Reference: 99510.01 Redfern

Lead in Paint						
Our Reference		232385-1	232385-2	232385-3	232385-4	232385-5
Your Reference	UNITS	LP01	LP02	LP03	LP04	LP06
Date Sampled		28/11/2019	28/11/2019	28/11/2019	28/11/2019	28/11/2019
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Lead in paint	%w/w	0.60	0.005	<0.005	<0.005	0.30

Lead in Paint						
Our Reference		232385-6	232385-7	232385-8	232385-9	232385-10
Your Reference	UNITS	LP09	LP10	LP11	LP12	LP14
Date Sampled		28/11/2019	28/11/2019	28/11/2019	28/11/2019	28/11/2019
Type of sample		Paint	Paint	Paint	Paint	Paint
Date prepared	-	09/12/2019	09/12/2019	09/12/2019	09/12/2019	09/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019	10/12/2019	10/12/2019
Lead in paint	%w/w	1.8	0.46	0.091	0.03	0.03

Lead in Paint				
Our Reference		232385-11	232385-12	232385-13
Your Reference	UNITS	LP15	LP17	LP18
Date Sampled		28/11/2019	28/11/2019	28/11/2019
Type of sample		Paint	Paint	Paint
Date prepared	-	09/12/2019	09/12/2019	09/12/2019
Date analysed	-	10/12/2019	10/12/2019	10/12/2019
Lead in paint	%w/w	0.086	<0.005	0.05

Asbestos ID - materials						
Our Reference		232385-14	232385-15	232385-16	232385-17	232385-18
Your Reference	UNITS	A01	A02	A03	A04	A05
Date Sampled		28/11/2019	28/11/2019	28/11/2019	28/11/2019	28/11/2019
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Mass / Dimension of Sample	-	20x20x2mm	38x24x4mm	32x28x3mm	25x22x3mm	42x30x3mm
Sample Description	-	Beige fibre cement material	Beige hardened mastic	Beige fibre cement material	Beige fibre cement material	Beige fibre cement material
Asbestos ID in materials	-	Chrysotile asbestos detected Amosite asbestos detected	No asbestos detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected	No asbestos detected Organic fibres detected
Trace Analysis	-	Not tested	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - materials						
Our Reference		232385-19	232385-20	232385-21	232385-22	232385-23
Your Reference	UNITS	A06	A07	A08	A10	A11
Date Sampled		28/11/2019	28/11/2019	28/11/2019	28/11/2019	28/11/2019
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Mass / Dimension of Sample	-	40x31x4mm	38x20x6mm	27x23x5mm	32x27x5mm	47x50x7mm
Sample Description	-	White mastic	Beige fibre cement material	Beige quartz-like material	Beige fibre cement material	White plaster
Asbestos ID in materials	-	No asbestos detected	No asbestos detected	No asbestos detected	Chrysotile asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected		Amosite asbestos detected	
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	Not tested	No asbestos detected

Asbestos ID - materials						
Our Reference		232385-24	232385-25	232385-26	232385-27	232385-28
Your Reference	UNITS	A12	A13	A14	A15	A16
Date Sampled		28/11/2019	28/11/2019	28/11/2019	28/11/2019	28/11/2019
Type of sample		Material	Material	Material	Material	Material
Date analysed	-	06/12/2019	06/12/2019	06/12/2019	06/12/2019	06/12/2019
Mass / Dimension of Sample	-	39x20x2mm	25x20x2mm	30x30x2mm	25x20x2mm	85x75x2mm
Sample Description	-	Beige fibre cement material	Beige fibre cement material & paint	Beige fibre cement material	Beige fibre cement material & paint	A)Blue vinyl tile B)Fibrous backing
Asbestos ID in materials	-	No asbestos detected	Chrysotile asbestos detected	No asbestos detected	Chrysotile asbestos detected	A) Chrysotile asbestos detected
			Organic fibres detected	Organic fibres detected	Organic fibres detected	B) No asbestos detected
						Organic fibres detected
Trace Analysis	-	No asbestos detected	Not tested	No asbestos detected	Not tested	No asbestos detected

Asbestos ID - materials				
Our Reference		232385-29	232385-30	232385-31
Your Reference	UNITS	A17	A18	A19
Date Sampled		28/11/2019	28/11/2019	28/11/2019
Type of sample		Material	Material	Material
Date analysed	-	06/12/2019	06/12/2019	06/12/2019
Mass / Dimension of Sample	-	40x40x2mm	40x30x3mm	20x15x2mm
Sample Description	-	Beige fibre cement material	Beige fibre cement material	Yellow mastic
Asbestos ID in materials	-	Chrysotile asbestos detected	No asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	Not tested	No asbestos detected	No asbestos detected

Asbestos ID - Swab			
Our Reference		232385-32	232385-33
Your Reference	UNITS	LD01	LD02
Date Sampled		28/11/2019	28/11/2019
Type of sample		Swab	Swab
Date analysed	-	06/12/2019	06/12/2019
Mass / Dimension of Sample	-	(180x165x<1mm) x2	180x165x<1mm
Sample Description	-	Brown fibrous debris on swab	Brown fibrous debris on swab
Asbestos ID on Swab	-	No asbestos detected	No asbestos detected
		Organic fibres detected	Organic fibres detected
		Synthetic mineral fibres detected	Synthetic mineral fibres detected

Lead in swab			
Our Reference		232385-32	232385-33
Your Reference	UNITS	LD01	LD02
Date Sampled		28/11/2019	28/11/2019
Type of sample		Swab	Swab
Date prepared	-	10/12/2019	10/12/2019
Date analysed	-	10/12/2019	10/12/2019
Lead in Swabs	µg/swab	280	380

Asbestos ID - soils		
Our Reference		232385-34
Your Reference	UNITS	AS01
Date Sampled		28/11/2019
Type of sample		Soil
Date analysed	-	06/12/2019
Sample mass tested	g	Approx. 25g
Sample Description	-	Beige fine-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg Organic fibres detected
Asbestos comments	-	NO
Trace Analysis	-	No asbestos detected

Method ID	Methodology Summary
ASB-001	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
Metals-004	Digestion of Paint chips/scrapings/liquids for Metals determination by ICP-AES/MS and or CV/AAS.
Metals-005	Digestion of Dust wipes/swabs and /or miscellaneous samples for Metals determination by ICP-AES/MS and/or CV-AAS

Client Reference: 99510.01 Redfern

QUALITY CONTROL: Lead in Paint							Duplicate		Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			09/12/2019	1	09/12/2019	09/12/2019		09/12/2019	[NT]
Date analysed	-			10/12/2019	1	10/12/2019	10/12/2019		10/12/2019	[NT]
Lead in paint	%w/w	0.005	Metals-004	<0.005	1	0.60	0.59	2	103	[NT]

QUALITY CONTROL: Lead in Paint							Duplicate		Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	12	09/12/2019	09/12/2019		[NT]	[NT]
Date analysed	-			[NT]	12	10/12/2019	10/12/2019		[NT]	[NT]
Lead in paint	%w/w	0.005	Metals-004	[NT]	12	<0.005	<0.005	0	[NT]	[NT]

Client Reference: 99510.01 Redfern

QUALITY CONTROL: Lead in swab					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Date analysed	-			10/12/2019	[NT]	[NT]	[NT]	[NT]	10/12/2019	[NT]
Lead in Swabs	µg/swab	1	Metals-005	<1	[NT]	[NT]	[NT]	[NT]	118	[NT]

Result Definitions

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

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

Laboratory Acceptance Criteria

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

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

Spikes for Physical and Aggregate Tests are not applicable.

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

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

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

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

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

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

Measurement Uncertainty estimates are available for most tests upon request.

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

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

Report Comments

Asbestos: Excessive sample volume was provided for asbestos analysis. A portion of the supplied sample was sub-sampled according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g (50mL) of sample in its own container as per AS4964-2004.

Note: Sample 232385-34 was sub-sampled from a bag provided by the client.

Sample 232385-28; The supplied sample was sub-sampled (A & B) in order to accurately report the analytical results representative of the entire sample, as per AS4964-2004.