Cushman and Wakefield on behalf of Property and Development NSW

Hazardous Materials Assessment 56-58 Knox Street, Goulburn NSW

Purpose:

Reinspection to assess the condition, extent and risk associated with suspected hazardous materials

Prepared for:

Cushman and Wakefield on behalf of Property and Development NSW

Document Date:

June 2023

Reference:

S-05772.HMA.024_56-58 Knox Street, Goulburn_June 2023

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DOCUMENT CONTROL

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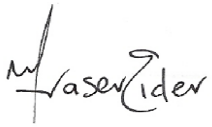
001	11/10/2023	First issue to client	Fraser Elder Principal Consultant LAA000147	

EXECUTIVE SUMMARY

EDP Consultants Pty Ltd (EDP) was engaged by Cushman and Wakefield on behalf of Property and Development NSW (CWPDNSW) to undertake a hazardous materials assessment (assessment) of a property located at 56-58 Knox Street, Goulburn NSW (the site), to identify specific hazardous building materials (HBM) at the site. The materials which were inspected as part of the assessment are as follows:

- Asbestos-Containing Materials (ACM);
- Lead-Containing Paint (LCP);
- Synthetic Mineral Fibre (SMF) materials;
- Polychlorinated Biphenyls (PCB) containing capacitors in fluorescent light fittings; and
- Ozone-Depleting Substances (ODS).

The objective of the assessment was undertaken to fulfil legislative requirements for identifying HBM as part of the day to day management of the site.

The following tables summarise the results of the assessment:

Table 1: Risk Assessment Scores

High Risk (P1)	Medium Risk (P2)	Low Risk (P3)	Very Low Risk (P4)
0	0	4	0

Table 2: Findings

Location:	Non-Friable ACM:	Friable ACM:	LCP:	SMF:	PCB:	ODS:
Main Building 1	-	-	-	✓	-	-
Garage	-	-	-	✓	-	-

It should be noted that the above tables are summaries only and the entire assessment report should be read in conjunction with this Executive Summary.

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1. INTRODUCTION

EDP Consultants Pty Ltd (EDP) was engaged by Cushman and Wakefield on behalf of Property and Development NSW (CWPDNSW) to undertake a hazardous materials assessment (assessment) of a property located at 56-58 Knox Street, Goulburn NSW (the site), to identify specific hazardous building materials (HBM) at the site. Aklesh Chand of EDP conducted the assessment on the 23 June 2023 at the request of Gary Emanuel of CWPDNSW.

2. SITE DETAILS

2.1 Site Details

The following table summarises the details of the site and all buildings included within the assessment:

Table 3: Site Details

Site Details:	
	
Description of Site:	Single-storey building used as offices for Government services
Number of Buildings on Site:	A main building with garage
Approximate Age of Buildings:	1996
Approximate Area (m^2):	550 m^2
Number of Levels:	Single storey
External Construction:	Brick and metal sheet roof
Internal Construction:	Plasterboard walls, carpet and concrete floor and plasterboard ceiling

Source: Image courtesy of https://www.nearmap.com/au

3. OBJECTIVE

The objective of the assessment is to identify specific HBM associated with the site and provide an assessment report outlining findings and recommendations for the management of identified HBM as per legislative requirements.

4. SCOPE OF WORKS

4.1 Detailed Scope of Works

The scope of the assessment included the accessible internal and external areas of the site, specifically, EDP were requested to undertake the following scope for the assessment:

- Conduct the assessment during normal business hours whilst the site was occupied;
- Inspect the site for the following specific HBM:
  - Asbestos-Containing Materials (ACM);
  - Lead-Containing Paint (LCP);
  - Synthetic Mineral Fibre (SMF) materials;
  - Polychlorinated Biphenyls (PCB) containing capacitors in fluorescent light fittings; and
  - Ozone-Depleting Substances (ODS).
- Collect suspected samples for asbestos and lead and have these analysed at an external National Association of Testing Authorities (NATA), Australia accredited laboratory; and
- Document the nature, location and condition of the HBM and include a risk assessment and photographic evidence within a report and include an HBM Register providing full details and recommendations for any HBM at the site.

4.2 Specific Location of Works

The investigation was limited to the following areas and these were checked for HBM only as directed by CWPDNSW.

Table 4: Location of Works

Location:
Main Building 1 and Garage
All accessible areas at the time of assessment.

5. METHODOLOGY

5.1 Site Works

The assessment comprised a review of relevant site information made available to EDP, a visual inspection of any accessible areas and sampling of materials (sampling methodology detailed in **Appendix C**). The assessment was conducted in accordance with the following:

- NSW *Work Health and Safety Act 2011*;
- NSW *Work Health and Safety Regulation 2017*;
- Code of Practice: *How to Manage and Control Asbestos in the Workplace 2022*;
- Code of Practice: *How to Safely Remove Asbestos 2022*;
- Safe Work Australia's *Minor contamination' of asbestos-containing dust or debris fact sheet 2013*;
- Australian Standard (AS) 4964:2004 *Method for the Qualitative Identification of Asbestos in Bulk Samples*;

- Australian and New Zealand Standard (AS/NZS) *Guide to hazardous paint management, Part 2: Lead paint in residential, public and commercial buildings* (AS/NZS 4361.2:2017);
- *Code of Practice for the safe use of Synthetic Mineral Fibres* [NOHSC:2006 (1990)];
- Australian and New Zealand Environment and Conservation Council (ANZECC) *Identification of PCB-containing capacitors, 1997*;
- Montreal Protocol on Substances that Deplete the Ozone Layer;
- United Nations Environment Programme's Division of Technology, Industry and Economics (UNEP DTIE) Inventory of Trade Names of Chemical Products Containing Ozone Depleting Substances and their Alternatives;
- Australian Institute of Refrigeration Air Conditioning and Heating Inc (AIRAH) *Air Conditioning and Refrigeration Industry Refrigeration Selection Guide 2003*;
- Ozone Protection and Synthetic Greenhouse Gas Management Amendment Regulation 2012. and
- AS 1319:1994 *Safety Signs for the Occupational Environment.*

5.2 Samples Collected

The following table shows the number of samples collected and the number of positive results:

Table 5: Samples Collected

Type:	Collected Samples:	Positive Samples:
Asbestos-Containing Materials:	0	0
Lead-Containing Paint:	0	0

Please refer to **Appendix E** for full sample analysis results.

5.3 Areas Not Accessed

Site specific areas or rooms that were not accessed during EDP's assessment which were deemed likely to contain HBM are also listed in **Appendix A**. Areas that are generally not accessed as part of EDP's assessments are listed in **Appendix D**.

6. FINDINGS

6.1 Document Review and Interviews

As part of this assessment, EDP requested copies of previous documentation pertaining to HBM at the site.

CWPDNSW made available to EDP a previous survey report that had been carried out by GHD, dated April 2014. The survey report (Reference: *001088 - Goulburn, 56-58 Knox Street - Report*), is understood to be the most recent survey report for this building. The report identified the following key findings:

- No asbestos and lead materials detected.

Reference has been made to the findings of this report and to the NATA accredited bulk sample analysis.

6.2 Summary of High-Risk Site Findings

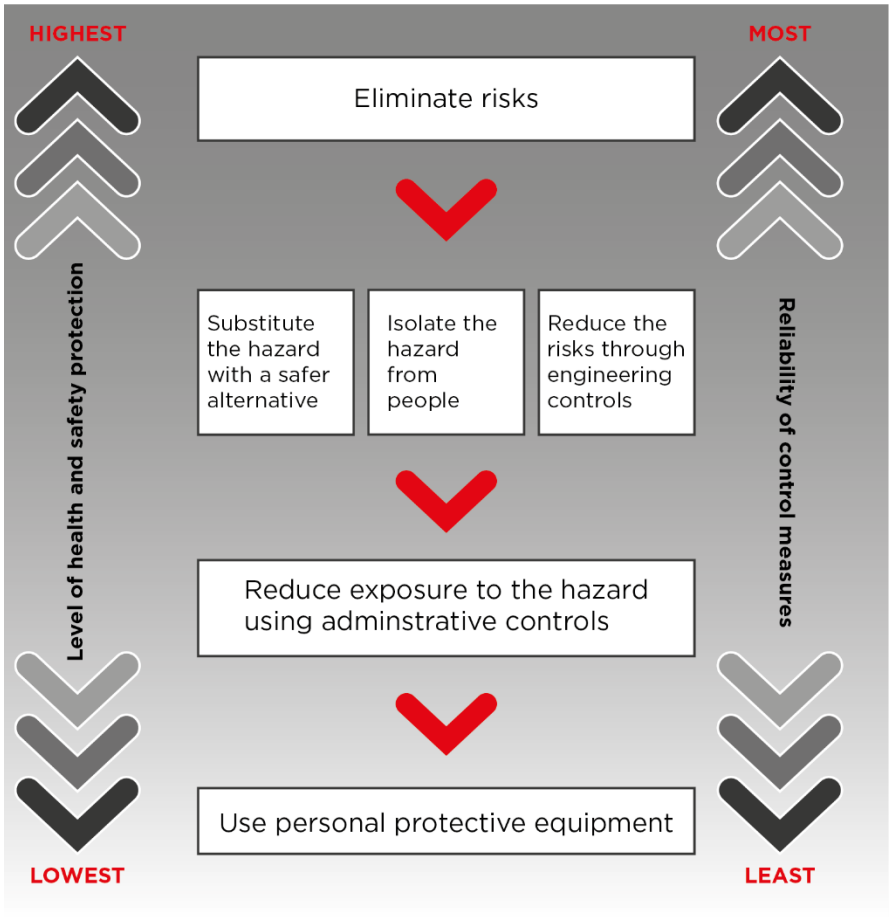
The findings of this assessment are presented in tabulated format in **Appendix A** of this assessment Report. HBM that have been photographed are detailed in **Appendix B** of this assessment report. **Table 6** summarises any high-risk items identified during the assessment:

No high-risk items identified during the assessment.

Refer to **Appendix A** for full details of any HBM listed above from the assessment.

7. MANAGEMENT OPTIONS

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



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

To manage the HBM, a combination of the above techniques may be required.

8. SITE SPECIFIC RECOMMENDATIONS

Based on the findings of this assessment, it is recommended that the following control measures be adopted as part of the management of HBM at the site. Recommendations for specific items of HBM are also presented in **Appendix A** of this assessment report.

8.1 Removal Strategy Recommendations

8.1.1 Synthetic Mineral Fibre Materials

- Engage a suitable contractor to remove all bonded and unbonded SMF materials within the site prior to planned refurbishment or demolition works under controlled condition in accordance with NOHSC: 2006 (1990).

8.2 Inaccessible Areas Management Strategy

The following recommendations are provided for the management of any HBM that were inaccessible at the time of the Assessment taking place:

- Engage a competent person or (LAA) to confirm the status of any suspected ACM or HBM that was unable to be sampled or inspected at the time of this Assessment, prior to any planned demolition or refurbishment works.
- Should suspect ACM or HBM be identified during future works that are not identified within the HBM Register, the material should be inspected, sampled and sent for analysis by a NATA accredited laboratory if possible.
- Works with the potential to disturb any suspect materials are likely to occur, the works are to cease, and the area is to be made safe until an assessment can be made. If the suspect material has already been disturbed, then the overarching provisions of the AMP or HMMP, is to be followed, including advice sought from a competent person or LAA.
- Prior to planned demolition or refurbishment works, a Destructive HBM Audit must be undertaken as per AS 2601:2001 *The demolition of structures* and the Code of Practice: *Demolition work 2019*.

9. REPORT LIMITATIONS

This report has been prepared by EDP Consultants Pty Ltd (EDP) solely for the client listed in **Section 1 (Client)**. This report may only be used and relied upon by the Client and must not be copied to, used by, or relied upon by any person other than the Client or altered, amended or abbreviated, issued in part or issued incomplete without the prior written consent of EDP. The report relates only to the buildings located and detailed within **Section 4** and as described in this report and must not be used in relation to any other buildings.

EDP, its employees, agents and contractors expressly disclaim responsibility to any person other than the Client arising from or in connection with the report. Other than as stated in this report, to the maximum extent permitted by law, all implied warranties and conditions in relation to the services provided by EDP and the report are excluded.

The services undertaken by EDP in connection with preparing the report were limited to those expressly detailed in the Scope of Works. The opinions, conclusions and any recommendations in the report are based on the conditions encountered, inspection findings and reviewed information and documentation only.

Please note that subsequent to the date of this report, works or site conditions may have resulted in changes to the status of any identified materials. All changes should be documented and provided to EDP as a supplement to this report.

The data and advice provided herein relate only to the project and structures described in the report. EDP accepts no responsibility for any other use of the data or advice.

Surveys are conducted in a conscientious and professional manner. The nature of the task however, and the likely disproportion between any damage or loss which might arise from the work or reports prepared as a result, and the cost of our services, is such that EDP cannot guarantee that all hazardous building materials have been identified and/or addressed.

Where applicable, if a third party conducted survey work, reports (such as laboratory reports) or provided verbal information that has been relied upon by EDP the responsibility for the accuracy of such data remains with the original entity and not with EDP.

Therefore, while we carry out the work to the best of our ability, we totally exclude any loss or damages which may arise from services we have provided to our client and/or any other associated parties.

EDP expressly disclaims responsibility for any error in, or omission from, the report arising from or in connection with any of the assumptions above being incorrect.

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

Appendix A: Hazardous Materials Registers

ASBESTOS MATERIALS REGISTER

SITE DETAILS: NSW State Emergency Services (SES) - 56-58 Knox Street, Goulburn NSW

SURVEY DATE: Friday, 23 June 2023

JOB NO. : S-05772.HMA.024

Material Location	Material Type	Photo Number	Sampled	Sample ID	Analysis Result	Material Status	Friability	Quantity, Area or Extent	Unit or Metric	Condition	Disturbance Likelihood	Risk	Risk Rating	Re-Inspection Timeframe	Recommendations / Comments:
Ground floor, external, eaves linings all sides	fibre cement sheeting	1	Not sampled: previously sampled	Previously sampled GOUL/KNOX/01	No asbestos detected	non-asbestos	-	-	-	-	-	-	-	-	Nil recommendations.
Ground floor, external, front entrance awning	fibre cement sheeting	1	Not sampled: previously sampled	Previously sampled GOUL/KNOX/01	No asbestos detected	non-asbestos	-	-	-	-	-	-	-	-	Nil recommendations.
Ground floor, internal, gable ends at eaves end	fibre cement sheeting	2	Not sampled: previously sampled	Previously sampled GOUL/KNOX/01	No asbestos detected	non-asbestos	-	-	-	-	-	-	-	-	Nil recommendations.
Ground floor, internal, electrical board ceiling	fibre cement sheeting	3	Not sampled: previously sampled	Previously sampled GOUL/KNOX/02	No asbestos detected	non-asbestos	-	-	-	-	-	-	-	-	Nil recommendations.

End of Asbestos Materials Register

LEAD MATERIALS REGISTER

SITE DETAILS: NSW State Emergency Services (SES) - 56-58 Knox Street, Goulburn NSW

SURVEY DATE: Friday, 23 June 2023

JOB NO. : S-05772.HMA.024

Material Location and Description	Photo Number	Sampled	Material Type	Sample ID	Result	Metric	Material Status	Quantity, Area or Extent	Unit or Metric	Condition	Disturbance Likelihood	Risk	Risk Rating	Re-Inspection Timeframe	Recommendations / Comments:
No lead materials suspected at the time of the inspection.															

End of Lead Materials Register

SMF REGISTER

SITE DETAILS: NSW State Emergency Services (SES) - 56-58 Knox Street, Goulburn NSW

SURVEY DATE: Friday, 23 June 2023

JOB NO. : S-05772.HMA.024

Material Location and Description	Photo Number	Visually Confirmed	Sample ID	Sample Analysis Result	Material Status	Bonded / Unbonded	Quantity, Area or Extent	Unit or Metric	Material Condition	Disturbance Likelihood	Risk	Recommendations / Comments:
Ground floor, internal, ceiling cavity, insulation batts	4	Yes	-	Positive	SMF-containing	Bonded	80	m sq	Good	Unlikely	Low	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per guidance materials.
Ground floor, internal, ceiling cavity, sarking insulation	5	Yes	-	Positive	SMF-containing	Bonded	320	m sq	Good	Unlikely	Low	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per guidance materials.
Ground floor, internal, ceiling cavity, ducting's, insulation material	4	Yes	-	Positive	SMF-containing	Bonded	100	m sq	Good	Unlikely	Low	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per guidance materials.
Ground floor, internal, garage ceiling cavity, sarking insulation	6	Yes	-	Positive	SMF-containing	Bonded	120	m sq	Good	Unlikely	Low	Maintain in current condition if to remain in-situ. Remove under controlled SMF conditions as per guidance materials.

End of SMF Materials Register

PCB REGISTER

SITE DETAILS: NSW State Emergency Services (SES) - 56-58 Knox Street, Goulburn NSW

SURVEY DATE: Friday, 23 June 2023

JOB NO. : S-05772.HMA.024

Material Location and Description	Photo Number	Visually Inspected	Capacitor Model / Make	ANZECC Register Listing	Positive / Suspected / Negative	Material Status	Quantity	Units	Material Condition	Disturbance Likelihood	Risk	Recommendations / Comments:
No PCB materials suspected at the time of the inspection.												

End of PCB Materials Register

ODS REGISTER

SITE DETAILS: NSW State Emergency Services (SES) - 56-58 Knox Street, Goulburn NSW

SURVEY DATE: Friday, 23 June 2023

JOB NO. : S-05772.HMA.024

Material Location and Description	Photo Number	Visually Inspected	Model / Make	Refrigerant Type	Positive / Suspected / Negative	ODS Status	Quantity	Units	Material Condition	Disturbance Likelihood	Risk	Recommendations / Comments:
No ODS materials suspected at the time of the inspection.												

End of ODS Register

Appendix B: Photographic Log

Key to Photographs:

 = Negative HBM

 = Positive SMF

 = Positive ACM

SITE DETAILS: NSW State Emergency Services (SES) - 56-58 Knox Street, Goulburn NSW

JOB NO. : S-05772.HMA.024 Survey Date: Friday, 23 June 2023

Photo 1:	Ground floor, external, eaves linings all sides and entrance awning - presumed negative fibre cement sheeting

Photo 2:	Ground floor, internal, gable ends at eaves end - non-asbestos fibre cement sheeting

Photo 3:	Ground floor, internal, electrical board ceiling - non-asbestos fibre cement sheeting

Photo 4:	Ground floor, internal, ceiling cavity - SMF-containing insulation batts and insulation to ducting

Photo 5:	Ground floor, internal, ceiling cavity - SMF-containing sarking insulation

Photo 6:	Ground floor, internal, garage ceiling cavity - SMF-containing sarking insulation

End of Photographic Log

Appendix C: Sampling Methodology and Risk Assessment Factors

Sampling Methodologies

Asbestos-Containing Materials

Suspected ACM were sampled by EDP in accordance with AS 4964:2004. Where collected, representative samples were placed into clip-lock plastic bags and analysed by an external NATA-accredited laboratory, for the presence of asbestos by polarised light microscopy and dispersion staining techniques.

Lead-Containing Paint

Suspected LCP were sampled by EDP in accordance with AS/NZS 4361.2:2017. Where collected, representative samples of paint were placed in a clip-lock plastic bags and then analysed by Envirolab Services an external NATA-accredited laboratory, for determination of lead concentration by inductively coupled plasma atomic emission spectroscopy techniques.

AS/NZS 4361.2:2017 defines lead content in excess of 0.1 percent by weight of the dry film determined by laboratory testing to be LCP. Results were expressed in percent weight per weight (%w/w).

Synthetic Mineral Fibre Materials

The assessment of SMF materials was carried out by EDP through visual identification of SMF materials with reference NOHSC:2006(1990).

Polychlorinated-Biphenyls

Fluorescent light fixtures were disassembled, where safe to do so, as part of the Audit. The assessment for the potential presence of PCB capacitors was made based on a visual assessment of the age and condition of light fixtures. Furthermore, the PCB capacitor serial numbers were cross referenced with ANZECC Identification of PCB-containing Capacitors, 1997.

Ozone-Depleting Substances

This component of the assessment comprised a visual inspection of air conditioning units and any chillers (if applicable) at the site and included a review of the air conditioners' refrigerant types.

Risk Assessment Factors

To assess the health risk posed by the presence of HBM, all relevant factors must be considered. These factors that are taken into consideration are as follows:

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

Where these factors have indicated that there is a possibility of exposure, this provides the consultant with a risk priority rating and the ability to provide the most appropriate recommendations for repair, maintenance or abatement of the material. The following risk factors are defined to assist in determining the relative health risk posed by each item.

Condition of the Material

The condition of the HBM identified during the assessment is reported as being good, fair or poor.

- *Very Good* refers to a material being undamaged and in an original condition with no deterioration and sealed i.e. no exposed asbestos fibres.
- *Good* refers to a material that is in sound condition with no or very minor damage or deterioration.
- *Fair* refers to a material that is generally in a sound condition, with some areas of damage or deterioration.
- *Poor* refers to a material that is extensively damaged or deteriorated.

Disturbance Potential

HBM can be classified as having low, medium or high disturbance potential:

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

Friability of the Material

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

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

Table 6: Health Risk Status

Condition:	Likelihood of Disturbance:		
	High (highly likely)	Medium (likely)	Low (unlikely)
Poor	Very High	High	Medium
Fair	High	Medium	Low
Good	Medium	Low	Low
Very Good	Low	Low	Very Low

Health Risk Status

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

- A *very low health risk* describes a material that poses a very low health risk to workers, contractors and the general public as the material in very good condition and is unlikely to be disturbed.
- A *low health risk* describes a material that poses a negligible or low health risk to occupants of the area due to the materials not readily releasing fibres (or other toxic/hazardous constituents) unless seriously disturbed.
- A *medium health risk* describes a material that poses a moderate health risk due to the material status and activity in the area.
- A *high health risk* describes a material that poses a high health risk to personnel or the public in the area of the material.
- A *very high risk* describes a material that poses a very high risk of exposure to workers, contractors and the general public working in the area of the material and therefore the area is not suitable for occupancy. Urgent remediation is required of the material. There is an imminent risk of harm to the health of persons in proximity of the material. Sites that require demolition or undergoing refurbishment works and the material identified will be impacted warrant a very high-risk rating.

ACM Priority Rating System for Control Recommendations

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

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

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

Priority 1 (P1): ACM with Very High or High Risk Potential - Requiring Immediate Action

Status: ACM which are either damaged or are being exposed to continual disturbance. Due to these conditions there is an increased potential for exposure and/or transfer of the material to other parts of the property if unrestricted use of the area containing the material is allowed.

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

Priority 2 (P2): ACM with Medium Risk Potential – May Require Action in the Short Term

Status: ACM with a potential for disturbance due to the following conditions:

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

Recommendation: If the ACM is easily accessible but in a stable condition, removal is preferred. However, if removal is not immediately practicable, short-term control measures (i.e. restrict access, sealing, enclosure etc.) may be employed until removal can be facilitated as soon as is practicable. Minor health risks are anticipated if material remains undisturbed under the control of an AMP.

Priority 3 (P3): ACM with Low Risk Potential – May Require Action in the Medium Term

Status: ACM with a low potential for disturbance due to the following conditions:

- The condition of any friable ACM is stable and has a low potential for disturbance i.e. is encased in metal cladding.
- The ACM is in a non-friable condition, however further disturbance or damage is unlikely other than during maintenance or service and does not present an exposure risk unless cut, drilled, sanded or otherwise abraded.

Recommendation: Negligible health risks are anticipated if the material is left undisturbed under the control of an AMP. Consider removal or encapsulation within 12 months of the damaged non-friable ACM being identified.

Priority 4 (P4): ACM with Very Low (negligible) Risk Potential - Requiring Ongoing Management or Longer-Term Remedial Action

Status: The ACM is in a non-friable form and in good condition. It is unlikely that the material can be disturbed under normal circumstances. Even if it were subjected to minor disturbance the ACM poses a minor health risk.

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

Appendix D: Areas Not Accessed

Areas Not Accessed

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

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

Documented below are the areas where the EDP consultant encountered access restrictions during the assessment:

Areas Not Accessed:
Underneath the concrete slab of all building structures at the site.
Exposed soils surrounding the building structures of the site.
Energised services, gas, electrical, pressurised vessel and chemical lines.
Within cavities that cannot be accessed by the means of a manhole or inspection hatch.
Within voids or internal areas of plant, equipment, air-conditioning ducts etc.
Within service shafts, ducts etc., concealed within the building structure.
Within those areas accessible only by dismantling equipment.
Within totally inaccessible areas such as voids and cavities present but intimately concealed within the building structure.
All areas outside the Scope of Work.

Note:

If proposed works entail possible disturbance of any suspect materials in the above locations, or any other location not mentioned in **Appendix A: Hazardous Materials Register** or this report, further investigation may be required as part of a HBM management and abatement program prior to the commencement of such works.

The presence of residual asbestos insulation on steel members, concrete surfaces, pipe work, equipment and adjacent areas remaining from prior removal works cannot normally be determined without extensive removal and damage to existing insulation, fixtures and fittings at the site.

Appendix E: NATA Accredited Sample Analysis Results

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
enquiries@envirolabservices.com.au
www.envirolabservices.com.au

CERTIFICATE OF ANALYSIS 95383

Client:
GHD Pty Ltd (Sydney)
Level 15, 133 Castlereagh St
Sydney
NSW 2000

Attention: Matt Goodwin, Bianca Iverson

Sample log in details:

Your Reference:	**21/22686, Goulburn**
No. of samples:	2 Materials
Date samples received:	12/08/2013
Date completed instructions received:	12/08/2013

Analysis Details:
Please refer to the following pages for results and methodology summary.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Note, even after disintegration it can be difficult to detect the presence of asbestos in some asbestos containing bulk materials using PLM and dispersion staining. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.

Report Details:

Date results requested by:	20/08/13
Date of Preliminary Report:	Not Issued
Issue Date:	16/08/13

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

Results Approved By:

Asbestos was analysed by Approved Identifier:	Lulu Guo
Asbestos was authorised by Approved Signatory:	Lulu Guo

Lulu Guo
Approved Signatory

ACCREDITED FOR TECHNICAL COMPETENCE

Envirolab Ref: –	Sample ID: –	Date analysed -	Mass / Dimension of Sample -	Sample Description -	Asbestos ID in materials -
95383-1	Goul/Knox/01	15/08/2013	13x13x1mm	Beige fibre cement material	No asbestos detected
95383-2	Goul/Knox/02	15/08/2013	25x8x1mm	Grey fibre cement material	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.

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