ASBESTOS MATERIALS REGISTER

Report ID: 28225r1 – Supersedes 28225r0
Prepared for: City of Kalamunda

December 2021

Building 7206 – Bush Fire Station, 20-24 Raymond Rd, Walliston WA 6076

Reinspection conducted by City of Kalamunda

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Document Revision and Updates

Author	Rev	Date	Signature	Revision Details	Authorised Recipient
Elise Chiappalone	r0	25/03/2021		Original Documentation	Aleck Nortje City of Kalamunda
Elise Chiappalone	R1	27/06/2022		Update following annual inspection conducted by City of Kalamunda. NATA Endorsement removed.	Aleck Nortje City of Kalamunda

Prior to use of this Register and Management Plan, QED Environmental Services should be contacted to confirm that this is the latest revision. Please phone 1300 400 733 and quote Report ID 28225r1 – Supersedes 28225r0.

The enclosed report has been authorised by the following QED Environmental Services Signatory

Elise Chiappalone

Senior Consultant
Asbestos Assessor Class A

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ASBESTOS MATERIALS REGISTER

BUILDING 7206 – BUSH FIRE STATION, 20-24 RAYMOND RD, WALLISTON WA 6076

EXECUTIVE SUMMARY

QED Environmental Services was commissioned by City of Kalamunda to audit the building located at Building 7206 – Bush Fire Station, 20-24 Raymond Rd, Walliston WA 6076 (referred to as the "site"). Specifically the scope of works includes the following:

1. Asbestos register

The methodology employed by QED Environmental Services is consistent with the Code of Practice for the Management and Control of Asbestos in workplaces [NOHSC: 2018 (2005)].

The processes and procedures implemented for these works have been independently assessed by the National Association of testing Authorities, Australia (NATA).

Elise Chiappalone from QED Environmental Services (Asbestos Assessor) conducted the site inspection on 25 March 2021.

City of Kalamunda's Asset Inspector (completed CPCCBC4023A – *Plan and undertake site inspection and assessment of asbestos products and materials* through Australian Training Management) conducted a reinspection on 17 December 2021. He has not been trained by QED Environmental Services and has not followed procedures in accordance with our quality management system. This report may therefore not be considered to be endorsed under QED's NATA accreditation. QED accepts no responsibility for the findings of such reinspection which have been incorporated into this report on an as-received and unverified basis.

No asbestos containing materials were identified, suspected or presumed on site as per the class of assessment (Management Survey). As such, there is no requirement for further reviews as per [NOHSC: 2018 (2005)] unless refit or demolition works are planned. In this instance it is recommended that an intrusive survey be conducted on the building which is a different class of assessment

An Asbestos Management Plan has been prepared separately and is available from City of Kalamunda, Coordinator Building Maintenance, Aleck Nortje – (08) 9257 9682.

Limitations

QED Environmental Services has endeavoured by best practice procedures to locate and identify the presence of Asbestos; however, the findings summarised in this report should not be deemed absolute.

This is a non-intrusive, presumptive survey report and is not to be used for any invasive activity that may result in the disturbance of unidentified asbestos. Such activities may include, but are not limited to: whole or part building demolition, rectification of the HVAC system, lift upgrades, electrical upgrades, slab penetrations, roofing works.

This report has been prepared for the use of the City of Kalamunda, and is not to be relied upon by any third party without prior consultation with QED. QED may not be held responsible by City of Kalamunda or any other party for the findings of a reinspection incorporated in this report. This report is not to be used as a contractual document.

Detailed information regarding the report limitations are described in the Introduction section.

INTRODUCTION

Scope

In keeping with the appropriate State and Commonwealth Legislation, the scope of this report is to assess the nature and condition of in-situ asbestos-containing materials within the building fabric and general services, and to assess the potential for building occupants to be exposed to airborne asbestos fibres.

The scope of work specified for the site survey excludes invasive investigative techniques and subsequently this report is not to be used in the event of building demolition.

Class of Assessment

The United Kingdom has developed a minimum standard for the surveying and sampling of asbestos containing material in the commercial sector. The standard identifies two types of survey which may be used, depending on the purpose for which the results of the survey are to be used. The two types are:

Management Survey. The assessor locates, as far as reasonably practicable, the location, extent and condition of suspect asbestos containing material (ACM) that may be damaged or disturbed during normal occupancy or foreseeable maintenance activities. This type of survey may involve minor intrusive work and some disturbance. The materials are assessed in relation to their condition and their ability to release fibres into the air.

Refurbishment and Demolition Survey. The assessor locates, as far as reasonably practicable, all asbestos containing materials in the area to be refurbished or demolished. The survey is fully intrusive and will involve destructive inspection. This type of inspection may also be necessary prior to more intrusive maintenance or repair work will be carried out, or where plant is to be removed or dismantled.

The surveys are completed by appropriately trained and experienced surveyors, who assess the following aspects of any ACM identified:

- product type
- location
- extent
- accessibility
- likelihood of disturbance
- amount of damage/deterioration (in the case of the *Refurbishment and Demolition Survey*, this is only required if the asbestos removal may not take place for some time.)

Source: HSG264 *Asbestos: The survey guide* (Health and Safety Executive (2012).

In this case a *Management Survey* has been used by QED in order to develop the appropriate Asbestos Register and Management Plan. Sampling of materials has been conducted wherever practical. The Asbestos Register and Management Plan also include findings of a reinspection by City of Kalamunda for which QED may not be held responsible.

Sampling during the original inspection was conducted by QED, and the samples deposited at the City of Kalamunda building maintenance office at the works depot. The City of Kalamunda was responsible for the handling of the samples from this time. QED is not liable for breakdown in the chain of custody or other procedural errors or omissions, and is also not liable for sampling and handling of samples during any reinspection.

Methodology

The general methodology employed by QED is consistent with HSG264 *Asbestos: The survey guide* (Health and Safety Executive (2012) and is also in accordance with National Code of Practice for the Control of Workplace Hazardous Substances [NOHSC: 2007(1994)] and Asbestos (April 2005) in Workplaces.

Code of Practice for the Management and Control of Asbestos in Workplaces, NOHSC: 2018, (2005) National Occupational Health & Safety Commission, Canberra, April 2005.

This involves 3 phases; Identification, Evaluation and the Control Phase. This report details the Identification and Evaluation Phases, and provides recommendations of the Control Phase. The sampling and assessment of suspect materials was conducted by QED personnel from visible building and plant materials with minimal disturbance, and samples sent to an independent NATA certified laboratory for analysis.

Following a survey by QED, a reinspection was conducted by staff of City of Kalamunda who have not been trained by QED Environmental Services and have not followed procedures in accordance with our quality management system. This report may therefore not be considered to be endorsed under QED's NATA accreditation.

Limitations

Non-destructive sampling is restricted by physical, safety and security constraints of access, and a number of operational limitations, protocols and codes of practice (WorkSafe) that restrict any building inspection.

Note that no inspection can guarantee to identify all materials subject to investigation present in a building, thus due to accessibility and scope constraints there is a possibility that additional Asbestos material may exist within the building which are not identified in the registers. In some instances, materials subject to investigation may be present in inaccessible areas such as:

• Wall cavities

• Locked or blocked off areas

• Beneath floors

• Elevator shafts

• Slabs

• Integral parts of boilers, pumps, machinery, plant and pipework

• Reheat units within air conditioning ducts; and

• Fire doors.

Confirmation of lagged pipework in wall cavities and that which may be "chased" into walls is not possible with a visual inspection in a non-destructive survey. Any scheduled demolition or upgrading works should allow for specific inspections to be undertaken in order to determine if asbestos is present in such areas.

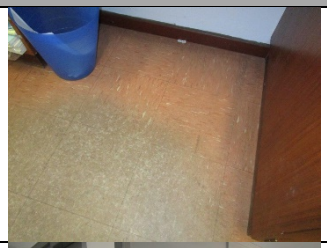
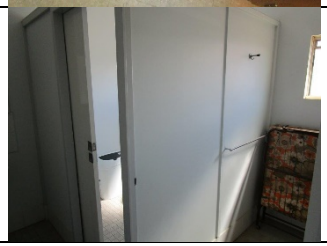
In addition, the following areas specific to this site were inaccessible on this occasion:

- No Areas

NON-ASBESTOS MATERIAL REGISTER

Building Address: Building 7206 – Bush Fire Station, 20-24 Raymond Rd, Walliston WA 6076
Year of Construction: 1989
Assessor: Graeme Clarke
Date of Assessment: 17 December 2021

No asbestos containing materials were identified, suspected or presumed on site as per the class of assessment (Management Survey).

Item Description	Lab No.	Location		Comments
Vinyl flooring	Greencap report No. 42066 QED ID: 28108	Communication office		No asbestos detected.
Toilet dividers	N/A - Observed	Toilets		Material is chipboard

COPIES OF LABORATORY CERTIFICATES OF ANALYSES

GREENCAP
Going Further in Managing Risk

Greencap Pty Ltd
ABN: 76 006 318 010
12 Greenhill Road
Wayville SA 5034 Australia
T: 08 8299 9955

Serpentine by XRD Report: 42066

CLIENT:	QED Environmental Services	**ORDER NO:**	EC28225
ATTENTION:	Elise Chiappalone	**RECEIVED IN LAB:**	31 March 2021
SAMPLED BY:	Elise Chiappalone	**DATE ANALYSED:**	6 April 2021
CLIENT CONTACT:	1300 400 733		

All sample analysis was performed using X-ray diffraction in our Adelaide Laboratory by the in-house method LAB05 Serpentine detection by X-ray diffraction.

Client ID	Description	Chrysotile* detected
28108	Ochre vinyl layer	No

*Chrysotile (*commonly known as white asbestos)* is the only asbestos type reported, because it is the only type of asbestos known to be added to vinyl layers.

Approved Identifier (PLM) and Testing Officer (XRD) and Signatory (PLM/XRD)
Sophie Toth

Please note that the results contained in this report relate only to the sample(s) submitted for testing Sample Descriptions are approximate only. X-ray diffraction (XRD) is a technique for detecting crystalline substances and minerals via their crystal structure. Chrysotile (*a Serpentine-group mineral commonly known as white asbestos)* is the only asbestos type reported, because it is the only type of asbestos known to be added to vinyl layers.
If the symbol ^ is used above, this indicates that the presence specifically of chrysotile is not covered by NATA accreditation. A serpentine mineral was detected by XRD, a result which is covered by our NATA accreditation.
42066-ID, EC28225, 2021-04-06 Report Date: 7 April 2021 Page 1 of 1
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GLOSSARY OF TERMS

Accredited Laboratory: Means a testing laboratory accredited by the National Association of Testing Authorities (NATA) Australia

Asbestos: Includes chrysotile, amosite, crocidolite, tremolite, anthophyllite, actinolite, and any of these minerals that has been chemically treated and/or altered.

ACM: Asbestos-containing material.

Asbestos Management Planner: Means a person employed to interpret survey results make hazard assessment, evaluation and selection of control options or develop an operation and maintenance plan.

Authorised Person: Means any person authorized by the employer and required by work duties to be present in regulated areas.

Code of Practice: A code of practice is defined in the Occupational Health and Safety Act as a document prepared for the purpose of providing:

- practical advice on preventive strategies; and
- practical means of achieving any code, standard, rule, provision or specification relating to occupational safety or health in Western Australia.

Competent Person: Means a person who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure

Demolition: Means the wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of products.

Disturbance: Means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris from ACM or PACM. This term includes activities that disrupt the matrix of ACM or PACM, render ACM or PACM friable, or generate visible debris.

Encapsulate: Means the application of any material onto any asbestos containing material to bridge or penetrate the material to prevent fibre release.

Enclosure: Means the permanent confinement of friable asbestos containing materials with an airtight barrier in an area not use or designed as an air plenum.

Fibre: Means a particulate form of asbestos, 5 micrometres or longer, with a length-to-diameter ratio of at least 3 to 1

Friable: Means material which is capable of being crumbled, pulverized or reduced to powder by hand pressure and which under normal use or maintenance, emits or can be expected to emit, asbestos fibres into the air

Hazard: A source of potential harm or a situation with a potential to cause loss

Hazard Identification: The process of recognizing that a hazard exists and defining its characteristics.

High efficiency particulate air (HEPA) filter: Means a filter capable of trapping and retaining at least 99.97 percent of all particles at least 0.3 micrometres or more in diameter.

Incident: Any unplanned event resulting in, or having a potential for injury, ill-health, damage or other loss.

Likelihood: Used as a qualitative description of probability or frequency.

NAD – No Asbestos Detected: A common abbreviation reported when laboratory analysis for asbestos fibres has detected no asbestos fibres.

Presumed: Taken for granted. Used when it is taken for granted that the item contains the nominated hazardous material. This presumption is based on the belief that the item is the same as another that has been tested and confirmed to contain the nominated hazardous material (e.g. one sheet lining the eaves has been sampled and confirmed to contain asbestos, the one next to it is presumed to contain asbestos) or, by visual observation, the item is determined to contain the hazardous material. Conversely, an item can be presumed *not to* contain a hazardous material. This may presumption is typically based on the belief that, due to the age and type of the material or building i.e. >2004, it should not contain asbestos.

Regulations: Regulations have the effect of spelling out specific requirements of the legislation. Regulations may prescribe minimum standards and have a general application, or define specific requirements related to a particular hazard or particular type of work. They may also allow licensing or granting of approvals and certificates etc.

Removal: Means all operations where ACM and/or PACM are taken out or stripped from structures or substrates, and includes demolition operations.

Renovation: Means the modifying of any existing structure, or portion thereof

Risk: The chance of something happening that will have an impact. It is measured in terms of consequences and likelihood

Risk Analysis: A systematic use of available information to determine how often specified events may occur and the magnitude of their consequences

Risk Assessment: The overall process of risk analysis and risk evaluation

Risk Evaluation: The process used to determine risk management priorities by comparing the level of risk against predetermined standards, target risk levels or other criteria

Suspected: Thought to be likely. Used when the item is likely to contain the nominated hazardous material because it appears to be similar to items that historically have been found to contain that material (e.g. the eaves appear to be similar to other buildings of a similar age, which have been confirmed to contain asbestos). All suspected hazardous materials must be treated as though they are hazardous unless sampling and analysis demonstrates otherwise.

ASBESTOS MATERIAL REGISTER COMPOSITION & RISK ASSESSMENT

The Workplace Registers

Since 1996, owners & employers have been required to record and maintain a "register" of Asbestos Materials in the workplace.

Regulation 3.1, 5.15 & 5.43 of OHS Regs 1996 requires the employer, main contractor, any self-employed person or the person having control of the workplace to identify each hazard, assess the risk of injury or harm to a person resulting from each hazard and consider the means by which the risk may be reduced.

Content

In keeping with the code at a minimum the register should contain five critical parameters, nominally:

Location

Identification

Condition

Risk Assessment

Control Measures

Additionally there are three phases to an Asbestos materials workplace register: -

Identification Phase

Evaluation Phase

Control Phase

Identification Phase

The identification phase is based on observations, findings, and substance samples, from a systematic inspection of the building structure, tenancy areas, plant rooms, services risers, lift motor rooms, ceiling spaces, car parking and basement areas, and general areas accessible through the supplied keying system.

Simplistically, the methodology involves a multi-step process:

1. Retrieve and review building documentation (if available)
2. Develop an investigation procedure
3. Commence the building inspection, record findings and obtain samples
4. Laboratory test and/or analyse samples

Identification and subsequent classification of substances, is by visual examination and laboratory assessments from samples of substances that are, or may be, installed, used, produced or stored in the workplace.

Generally, samples are taken from "suspect" accessible fixtures, fittings and process products, specifically in the absence of local identification, MSD Sheets, labels and/or, on site registers.

Such samples are sent, under code, to independent laboratories for identification and, subsequently, are assessed, classified and recorded in the workplace register.

Evaluation Phase

The evaluation phase is based on observations from site and the analysis of samples reported from the independent NATA accredited laboratory.

In reviewing Asbestos substances and asbestos, it is important to understand the terms ***hazard*** and ***risk***, which in everyday use are commonly used as synonyms, but not so in industrial hygiene, where the difference is significant.

A hazard is something or condition, which has the capability of producing adverse health or safety consequences to humans. The mere presence of the capability to harm is sufficient to classify a substance, action, or condition as a hazard or to describe such as Asbestos.

Risk is a statement, either quantitative, via statistical expression, or qualitative, via subjective expression, of the probability or likelihood that harm will actually occur.

For example, asbestos insulation in a building presents a hazard, but the risk is nil if no asbestos is released into the air.

Asbestos within Buildings is evaluated using the following;

- Existing condition
- Potential for disturbance
- Subsequent risk of exposure and risk to health

Existing Condition is assessed and rated 1 to 5 from Good to Poor.

5	**Poor**: Surface of material has extensive amounts of damage or deterioration and appears friable. Surface covering of material is heavily torn or in poor condition (paint heavily flaking, insulation is extensively torn). Surface shows amounts of visible fibres, dust and debris.
4	Fair to Poor
3	**Fair**: Surface of material shows moderate amounts of damage. Surface covering of material is torn or in moderately poor condition (small flakes of paint, thermal insulation is torn). Moderate amount of visible dust and debris.
2	Good to Fair
1	**Good**: Surface of material shows no visible amounts of damage or deterioration. Surface of material is covered and generally intact (painted, galvanised, coated with bitumen, thermal insulation is intact). Small amount of visible dust and debris.

Potential for disturbance is then assessed based on influencing factors, such as:

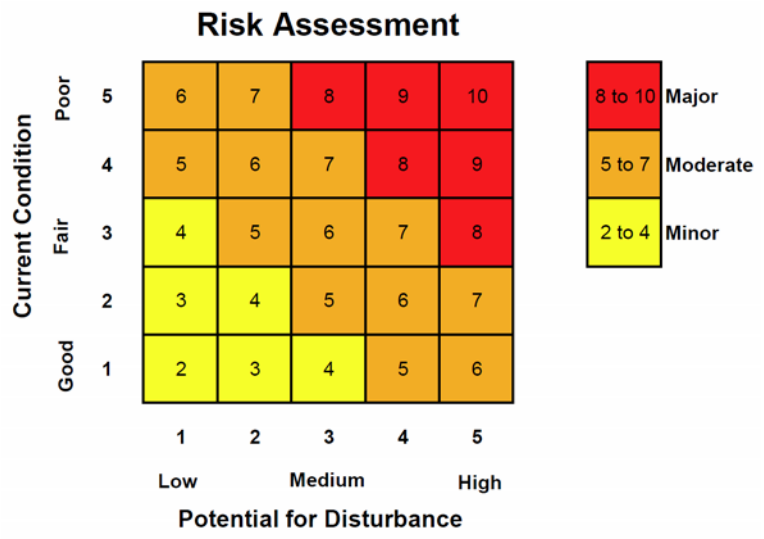
Score 0 or 1 No = 0 Yes = 1	Typical Influencing Factors
	Accessible during normal operations? i.e. common areas, accessible without ladders or steps, area unsecured
	Maintenance activities on/or in area? i.e. regularly accessed and serviced, servicing requires use of electric tools
	Subjected to Mechanical Influences? i.e. vibration of machinery, involved with moving parts, within the HVAC air supply stream, subjected to mechanical exhaust
	Subjected to Environmental Influences? i.e. weathering, rainfall, surface runoff, wind, river and coastal influences
	No Current Management Plan (<1 year), Not labelled (Score 1 for not adequately managed, Score 0 for adequately managed)

Score ≤1 Low potential for disturbance

Score 3 Medium potential for disturbance

Score 5 High potential for disturbance

The inherent risk is then calculated using the risk assessment matrix.



The Code of Practice for the Management of Asbestos in Workplaces defines a required action that must be undertaken, dependent on the level of risk. They are:

For inherent risks rated at 2 to 4: The ACM are not friable and are in stable condition. In accordance with [NOHSC: 2018 (2005)], ensure that they remain clearly labelled and regularly inspect to ensure they are not deteriorating or otherwise contributing to an unacceptable health risk.

For inherent risks rated at 5 to 7: IMMEDIATE ACTION REQUIRED. The ACM are friable but are in a stable condition and are accessible. In accordance with [NOHSC: 2018 (2005)], serious consideration should be given to their removal. If removal is not immediately practicable, short-term control measures, such as sealing and enclosure, may be able to be used until removal is possible. [NOHSC: 2018 (2005)].

For inherent risks rated at 8 to 10: IMMEDIATE ACTION REQUIRED. The ACM are friable and not in a stable condition, and there is a risk to health from exposure. In accordance with [NOHSC: 2018 (2005)], they should be removed by an appropriately licensed asbestos removalist as soon as is practicable.

When materials of unknown composition, or materials suspected of containing asbestos, are encountered, and are not listed in the Workplace Register, such materials should be treated as if they are asbestos until sample analysis confirms otherwise.

In the event that additional Asbestos materials are identified, a risk assessment should be conducted by an appropriately qualified and competent person, and the workplace register updated accordingly.

Control Phase

The "Hierarchy of Control Measures" is a list, in priority order, of control measures that may be employed to eliminate and/or reduce exposure to asbestos.

Notwithstanding elimination as the optimum solution, practical and cost effective control measures may be "and/or" classified as follows: -

Classification	Description
A – Elimination	A permanent solution should be attempted in the first instance.
B – Substitution	Involves replacing the material with a product that presents a lower and/or no risk.
C – Isolation	Isolation involves separation of the material from people by distance or use of barriers /encapsulation to prevent exposure.
D – Engineering Controls	Involves some structural change to the work environment or work process to place a barrier to, or interrupt the transmission path between, the worker or environment and the Asbestos material aspect. i.e. isolation and/or enclosure and/or sealing of the Asbestos material.
E – Administrative (procedural) Controls	Reduce or eliminate exposure of individuals to the Asbestos materials, by adherence to procedures or instructions. The documentation should emphasize all the steps to be taken and the controls to be used in carrying out the task both safely and with minimum impact to the environment.
F – Personal Protective Equipment (PPE)	Relates only to hazards and their impact on personal safety risks. It is worn as a barrier between personnel and the Asbestos material. The success of this control procedure is dependent on the protective equipment selected, as well as fitted correctly and worn at all times when required.