



Asbestos Management Survey Report



BOILER ROOM

Report Production

Survey Conducted by: Haretini Wakefield
Date of Survey: 16th of March 2018
Position in Company: Operations Project Manager
Assessor Number: AA18020017
Expiry Date: 9 February 2023

Signature:

H. Wakefield

Survey Prepared by: Ali Lind
Date Survey Prepared: 26th of March 2018
Position in Company: Operations Project Manager
Assessor Number: AA17090140
Expiry Date: 5 September 2022

Signature:

Ali Lind

Survey Prepared by: Bruce Wakefield
Date Survey Prepared: 02nd of April 2018
Position in Company: Managing Director
Assessor Number: AA16090111
Expiry Date: 5 September 2021

Signature:

B. Wakefield

Report Production

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Introduction

Further to an invitation from Mr. Grant Hood

(WDHB – Whanganui District Health Board.)

AISL - Asbestos Inspection Services Limited was requested to carry out a Management Survey at -

Taihape Hospital, Boiler House.

There are 2 designated categories of Asbestos surveys currently available. These are listed below:

Management Survey

Standard sampling, identification and assessment survey (Sampling Survey), the purpose of which is to locate as far as reasonably Practicable the presence and extent of any suspect asbestos containing materials in the building and their condition. This is done by the collection and analysis of samples of suspect asbestos containing materials.

Refurbishment / Demolition Survey

Full access sampling and identification survey (Pre-demolition/Major Refurbishment Survey). This type of survey is used to locate and describe as far as reasonably practicable, all asbestos containing materials in the building and may involve destructive inspection as necessary to gain access to all areas, including those that may be difficult to reach. A full sampling programme is undertaken to identify possible asbestos containing materials and estimates of the volume and surface areas of asbestos containing materials made.

Access arrangements were made with aid of Mr. Grant Hood (Whanganui District Health Board) to ensure all accessible areas were surveyed during the project.

The survey was carried out on 16/03/2018 and completed 10 days thereafter.

The survey was to include for visual inspection within the above premises.

The survey was undertaken and completed by members of the AISL – Asbestos Inspection Services Limited survey team.

During the survey the building remained un-occupied.

Disclaimer

Every effort has been made to identify all asbestos materials so far as was reasonably practicable to do so within the scope of the survey and the attached report. Methods used to carry out the survey were agreed with the client prior to any works being commenced.

Survey techniques used involves trained and experienced surveyors using the combined approach about visual examination. and bulk sample collections where required.

It is always possible after a survey that asbestos based materials may remain in the property or area covered by that survey, this could be due to several reasons:

- Asbestos materials existing outside the scope of the survey.**
- Materials may be concealed or hidden by other items or covered surfaces i.e. paint, over boarding, concealing etc. Where this is the case then its discovery will be limited.**
- Asbestos may well be hidden as part of the structure to a building and not visible until the structure is demolished later.**
- Fragments from previous asbestos removal projects may well be present in various areas; general asbestos fragments do not form part of this survey however all good intentions are made for its discovery.**

Where an area has been formerly stripped of asbestos i.e. plant rooms, ducts etc. and new coverings added, it must be pointed out that asbestos removal techniques have improved steadily over the years since its initial introduction. Most particularly would be the Health and Safety at Work (Asbestos) Regulations 2016, that outline enforceable strategies. Asbestos removal prior to this regulation would not be of today's standard and therefore fragments may be present beneath new coverings.

This survey will detail areas accessed and all samples taken, where an area is not covered by this survey it will be due to No Access for one reason or other i.e. working technicians, delicate location or just simply no admittance. It may have been necessary for the restrictions of the surveyor's specialist to be confirmed prior to the survey.

Admittance for the survey may be restricted for many reasons outside our control such as height, deadlines to others, steady complications or confined space. Where electrical equipment is present and presumed in the way of the survey no access will be attempted until proof of its safe state is given. Our operatives have a duty of care under the Health and Safety at Work Act (2016) for both themselves and others.

Disclaimer

In the structure where asbestos has been located and not all zones have been examined, any material that is found to be suspicious and not detailed as part of the survey should be treated with caution and sampled accordingly.

Certain materials contain asbestos to variable grades and some may be less densely contaminated at certain locations (Artex for example). Where this is the case the sample taken may not be representative of the whole product throughout, therefore composite sampling is therefore encouraged.

Where a survey is carried out under the guidance of the owner of the property or his representative, then the survey will be as per his/her instructions and supervision at that time.

Asbestos Inspection Services Limited cannot accept any liability for loss, injury, damage or penalty issues due to errors or oversights contained within this report.

Asbestos Inspection Services Limited cannot be held responsible for any damage caused as part of this survey carried out on your behalf. Due to the landscape and stipulation of sampling for asbestos some danger is inevitable and will be limited to just that necessary for the taking of the sample.

General Recommendations for Asbestos Cement Products.

Work with cement products containing asbestos is covered by the Management and Removal of Asbestos (November 2016) Approved Code of Practice.

An assessment of all proposed works which may disturb any asbestos should be carried out to launch the risk existing, the appropriate precautions must be adopted to control any exposure. This should combine the succeeding over-all principles:

- **Where work on asbestos cement is inevitable, keep the materials wet during work and avoid breakage wherever possible. Acceptable PPE must be worn always.**
- **Avoid using power tools. If deemed necessary to use power tools set at the lowest possible speed, exhaust ventilation such as cowls must be fitted to power tool and utilising the “investigation technique” with high efficiency H type vacuum units.**
- **Organise the work in a single controlled location where practicable, to streamline control and supervision. Isolate working areas using warning signs and tape barriers, or in case of significant fibre levels by means of a sealed polythene work enclosure and negative pressure equipment. Air tests must also be carried out by an independent asbestos assessor.**
- **Signify respirator zones where the Control Limit is likely to be exceeded and ensure that all persons entering the zones wear appropriate RPE/PPE are trained in its use.**
- **Ensure that those persons employed in working on asbestos cement are suitably trained in the correct working practices, control methods and anticipation of risks.**
- **Keep the work area clean during the work and use methods that abate dust creation, avoid sweeping and brushing, which will make dust airborne.**
- **Dispose of asbestos cement waste safely as Asbestos Waste under the statutory consignment note procedures in accordance with the Health and Safety at Work (Asbestos) Regulations 2016.**
- **Avoid further disturbance of asbestos cement products wherever possible by relocating or re-routing facilities.**
- **Clearly identify and label any asbestos cement products.**

General Recommendations for Asbestos Insulation, Coatings or Insulating Board (AIB)

Where the materials are in safe condition and the risk of disturbance is small, they can be maintained on site. They should be identified with adequate warning signs and routinely inspected for damages. All asbestos materials should not be drilled, abraded or disturbed in any way.

All asbestos containing materials should be removed prior to any planned refurbishment or demolition works, where damage is likely to be sustained during the occupant's activities or where future decline is likely.

Work on any of these items may only be carried out by a specialist contractor licensed under the Health & Safety at Work Act 2016. The selected contractor is required to notify the WSNZ at least 5 days prior to commencement of the works, and to provide a written Method Statement as follows:

- **Full explanation of the works to be carried out and its duration.**
- **Type, quantity and location of asbestos to be removed.**
- **Anticipated exposure levels and persons affected.**
- **Enclosure construction details, layout and location, signage and ventilation.**
- **Protections to be adopted to minimize exposure to lowest possible level and to control release of asbestos fibre beyond the work area.**
- **Validation for any withdrawal from preferred methods, e.g. where wet stripping cannot be used.**
- **Type, use and decontamination of RPE/PPE**
- **Waste removal and disposal procedures**
- **Training and instruction of employees**
- **Emergency procedures on site**

Material Assessment Methods

total risk score of between 0 and 12 is calculated using four categories that are evaluated by the surveyor against given values. The criteria and the respective values are as follows:

Product Type

- 1 Asbestos reinforced composites such as plastics, resins, mastic, roofing felt, vinyl tiles, paints and decorative finishes, asbestos cement products.
- 2 Asbestos insulation board, mill boards, other low-density insulation boards, asbestos textiles, gaskets, ropes and woven textiles, asbestos paper and felt.
- 3 Thermal insulation (e.g. pipe and boiler lagging), sprayed asbestos, loose asbestos, asbestos mattresses and packing.

Condition/Extent of Damage

- 0 Good condition, no visible damage.
- 1 Low damage, a few scratches or surface marks, broken edges on boards, tiles etc.
- 2 Medium damage, significant breakage of materials or several small areas where material has been damaged, revealing loose asbestos fibres.
- 3 High damage or delamination of materials, sprays and thermal insulation. Visible asbestos debris.

Surface Treatment

- 0 Composite materials containing asbestos, such as reinforced plastics, resins, vinyl tiles.
- 1 Enclosed sprays and lagging, asbestos insulation board with exposed surface painted or encapsulated, asbestos cement products.
- 2 Unsealed asbestos insulation board or encapsulated lagging and sprays.
- 3 Unsealed lagging and sprays.

Material Assessment Methods

Asbestos Type

- 1 Chrysotile (white) asbestos.
- 2 Amosite (brown) asbestos.
- 3 Crocidolite (blue) asbestos.

The algorithms shown against each situation are added together to give a total material risk score, for conciseness, the register we have prepared contains only the total risk score rather than the component scores.

The total score for each situation can be broadly classified using the following bands:

Material Risk Score

0 - 3 Very Low Risk

4 - 6 Low Risk

7 – 9 Medium Risk

10 – 12 High Risk

It is likely that high risk items will be highlighted in the report text and that some immediate action will be required.

Other items may also be measured for consideration where the decision of the surveyor recommends this would be beneficial.

Priority Assessment Formula

A priority risk score of between 0 and 12 is calculated using four categories that are evaluated by the duty holder.

Although a surveyor may have some of the information which will contribute to the risk assessment and may be part of an assessment team, the duty holder is required to make a risk assessment based on the survey findings and their detailed knowledge of the activities carried out within the premises. The criteria and the respective values are as follows:

Normal occupant activity

Assessment factor	Score	Examples of score variables
Main type of activity in area	0	Rare disturbance activity (e.g. little used store room)
	1	Low disturbance activities (e.g. office type activity)
	2	Periodic disturbance (e.g. industrial or vehicular activity which may contact ACMs)
	3	High levels of disturbance, (e.g. fire door with asbestos insulating board)
Secondary activities for area	As above	

Priority Assessment Formula

Likelihood of disturbance

Assessment factor	Score	Examples of score variables
Location	0	Outdoors
	1	Large rooms or well-ventilated areas
	2	Rooms up to 100 m ²
	3	Confined spaces
Accessibility	0	Usually inaccessible or unlikely to be disturbed
	1	Occasionally likely to be disturbed
	2	Easily disturbed
	3	Routinely disturbed
Extent/amount	0	Small amounts or items (e.g. strings, gaskets)
	1	<10 m ² or <10 m
	2	10 m ² to 50 m ² or 10 m to 50 m
	3	>50 m ² or >50 m

Human exposure potential

Assessment factor	Score	Examples of score variables
Number of occupants	0	None
	1	1 to 3
	2	4 to 10
	3	>10
Frequency of use of area	0	Infrequent
	1	Monthly
	2	Weekly
	3	Daily
Average time area is in use	0	<1 hour
	1	1 to 3 hours
	2	3 to 6 hours
	3	>6 hours

Priority Assessment Formula

Maintenance activity

Assessment factor	Score	Examples of score variables
Type of maintenance activity	0	Minor disturbance (e.g. possibility of contact when gaining access)
	1	Low disturbance (e.g. changing light bulbs in asbestos insulating board ceiling)
	2	Medium disturbance (e.g. lifting one or two asbestos insulating board ceiling tiles to access a valve)
	3	High levels of disturbance (e.g. removing many asbestos insulating board ceiling tiles to replace a valve or for re-cabling)
Frequency of maintenance activity	0	ACM unlikely to be disturbed for maintenance
	1	≤1 per year
	2	>1 per year
	3	>1 per month

The score for each variable is determined by calculating the average score of the appropriate factors.

The algorithms shown against each section are added together to give a total priority risk score, for conciseness, the register we have prepared contains only the overall risk score rather than the component scores.

Priority Risk Score

0 - 3 Very Low Risk

4 - 6 Low Risk

7 – 9 Medium Risk

10 – 12 High Risk

Overall Hazard Risk Assessment Formulae

The material and priority assessment scores provide an overall hazard risk score for each situation which can be broadly classified using the following table:

		Material Assessment			
		10-12	7-9	5-6	1-4
Priority Assessment	10-12				
	7-9				
	4-6				
	0-3				

Key		
	High Risk	Total score = 19-24
	Medium Risk	Total score = 13-18
	Low Risk	Total score = 7-12
	Very Low Risk	Total score = 1-6

Specific Locations that may contain asbestos based material's or Presumed to Contain Asbestos Containing material's.

ID: CARD NO:001

Photograph No.	DSCN0333
Location/Area	South Wall: Spouting System
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	5.0m2



ID: CARD NO:002

Photograph No.	DSCN0334
Location/Area	Lower Roof: Air Vents
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	16.0m2



ID: CARD NO:003

Photograph No.	DSCN0335
Location/Area	Lower Roof: Chimney 2
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	40.0m2



ID: CARD NO:004

Photograph No.	DSCN0336
Location/Area	Lower Roof: Chimney 1
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	6.0m2



ID: CARD NO:005

Photograph No.	DSCN0337
Location/Area	East Wall: Spouting System
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	15.0m2



ID: CARD NO:006

Photograph No.	DSCN0338
Location/Area	West Wall: Spouting System
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	8.0m2

**ID: CARD NO:007**

Photograph No.	DSCN0339
Location/Area	Furnace Room: Cement Sheeting (Ceiling)
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	12.0m2

**ID: CARD NO:008**

Photograph No.	DSCN0340
Location/Area	Main Boiler: Valve Gaskets
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	34x100 Dia

**ID: CARD NO:009**

Photograph No.	DSCN0341
Location/Area	Work Room: Toilet (Vinyl Floor)
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	5.0m2

**ID: CARD NO:010**

Photograph No.	DSCN0342
Location/Area	Ash Storage Shed: Building Paper
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	56.0m2

**ID: CARD NO:011**

Photograph No.	DSCN0343
Location/Area	Ash Storage Shed: Soil/Ash
Sample No.	Presumed the presence of ACM.
Laboratory Analysis Findings	Sample not taken.
Quantity	30.0m2





Inspection Personnel

Taihape Hospital, Boiler House

Date	Name	Company Name	Competency Attained	License No	Expiry Date	Phone Number	Email Address
16 th March 2018	Haretini Wakefield	Asbestos Inspection Services Limited	Licensed Asbestos Assessor	AA18020017	09 th of February 2023	+24 22 3234534	Haretini.wakefield@aisl.co.nz
16 th March 2018	Ali Lind	Asbestos Inspection Services Limited	Licensed Asbestos Assessor	AA17090140	05 th of September 2022	+24 27 8565624	Ali.lind@aisl.co.nz
16 th March 2018	Bruce Wakefield	Asbestos Inspection Services Limited	Licensed Asbestos Assessor	AA16090111	05 th of September 2021	+64 27 7655123	Bruce.wakefield@aisl.co.nz



Survey Record Sheet

Ref: WDHB

Site Address: Boiler Room, Taihape Hospital

Date: 16/03/2018

Survey Type:

Management Survey

ID Card No	Photo No	Location/Area Description	Sample Ref /Presumed	Quantity	Product Description	Asbestos Type	Product Type	Condition	Surface Treatment	Asbestos Type	Material Risk Score	Normal Occupant Activity	Likelihood of Disturbance	Human Exposure Potential	Maintenance Activity	Priority Risk Score	Overall Risk Score	Action	
001	DSCN0333	South Wall: Spouting System	Presumed	5.0m2	Suspect ACM material	Spouting Lining	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
002	DSCN0334	Lower Roof: Air Vents	Presumed	16.0m2	Suspect ACM material	ACM material	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
003	DSCN0335	Lower Roof: Chimney 2	Presumed	40.0m2	Suspect ACM material	ACM material	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
004	DSCN0336	Lower Roof: Chimney 1	Presumed	6.0m2	Suspect ACM material	ACM material	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
005	DSCN0337	East Wall: Spouting System	Presumed	15.0m2	Suspect ACM material	Spouting System	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
006	DSCN0338	West Wall: Spouting System	Presumed	8.0m2	Suspect ACM material	Spouting lining	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
007	DSCN0339	Furnace Room: Cement Sheeting (Ceiling)	Presumed	12.0m2	Suspect ACM material	Compressed Board	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
008	DSCN0340	Boiler Room: Gasket Valves	Presumed	34x100 diameter	Suspect ACM material	ACM gasket material	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
009	DSCN0341	Work Room: Toilet (Floor)	Presumed	5.0m2	Suspect vinyl or backing	Vinyl resin	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
010	DSCN0342	Ash Storage Shed	Presumed	56.0m2	Suspect ACM building paper	ACM material	1	0	0	1	0	0	0	0	0	0	0	Very low risk	Complete a Risk Assessment.
011	DSCN0343	Ash Storage Shed (Floor)	Presumed	30.0m2	Suspect ACM Soil	Soil Contamination	1	5	0	1	5/6	9	0	6	6/7	6	6	Medium risk	Complete a Risk Assessment.