

11 May 2023

Randwick City Council 30 Frances Street Randwick NSW 2031

Attention: Ryan Zammit

ryan.zammit@randwick.nsw.gov.au

RE: Asbestos Air Monitoring Report

Dear Ryan Zammit

Please find below Asbestos air monitoring report for:

Site:	Little Bay Beach
Location:	Background air monitoring

All works have been completed in accordance with relevant state WHS Legislation and approved Codes of Practices.

See following pages for results.

Regards,

Alex Tam

Licensed Asbestos Assessor 001241 Senior Occupational Hygienist 11/05/2023













Requested by:	
Client Contact Name	Ryan Zammit
Client Contact Number	90936744
Client Contact Email	ryan.zammit@randwick.nsw.gov.au
Site:	
Address	2 Coast Hospital Rd, Little Bay NSW 2036
Local Government Area	Randwick City Council
Site Boundary	
Air Monitoring Locations	0



Air Monitoring Details:	
Date of Field Work:	11/05/2023
Start Time:	11:30
Trinitas Consultant:	Alex Tam Senior Occupational Hygienist
Sampling Type:	Asbestos
Temperature	19°C













Wind Speed	20km/h
Scope of Work:	Background air monitoring

Methodology:

Asbestos fibre static air monitoring and analysis was conducted in accordance with Guidance Note on the Membrane Filter Method for the Estimation of Airborne Asbestos Fibres (NOHSC:3003: April 2005) and in-house procedures of NATA accredited laboratory for the estimation of airborne fibres.

The sample collection was performed using SKC portable sampling pumps fitted with sampling cassettes containing 25 mm membrane filters that were flow tested at the commencement and completion of sampling.

Exposure Standard

The Australian exposure standard for asbestos fibers is 0.1 fibres/ml of air and the action limit for asbestos fibres is 0.01 fibres/ml as per the NSW WHS Regulations 2017.

Sample Location / Person Name	AM Type	Sample ID	Average Flow Rate (L/Min)	Time On	Total Sampling Time (Min)	Total Volume (L)	Results
Exclusion zone (Southern end)	В	DH645033	4.0	11:30	133	532.00	<0.01 f/ml
Exclusion zone (Northern end)	В	DH061916	4.0	11:34	132	528.00	<0.01 f/ml
Field Blank	BI	DH061887					0 fibres / 100 fields

AM Type Legend

B = Background	Co= Control	CI = Clearance	BI = Field Blank	Pe= Personal

Comments/Recommendations:

All air monitoring results were below the exposure standard for asbestos fibers during removal works < 0.01

NATA accredited laboratory results are provided within Appendix 2.

Disclaimer:

The results within this report relate only to the sampling locations specified and their analysis. This report shall not be reproduced, except in full.

Prepared By Approved By

Alex Tam

Licensed Asbestos Assessor 001241 Senior Occupational Hygienist

11/05/2023

Denny Bolatti

Principal Occupational Hygienist Licensed Asbestos Assessor 001132

12/05/2023











Appendix 1: Air Monitoring Locations



Location: Exclusion zone (Southern end)

Result: <0.01 f/ml

Image Id: 230511-113809



Location: Exclusion zone (Northern end)

Result: <0.01 f/ml

Image Id: 230511-113922



Location: Field Blank Result: 0 fibres / 100 fields Image Id: 230511-143237















How to Contact Us

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ABN 12 161 759 708

Disclaimer: This report is prepared for the use of the recipient for the purpose of risk evaluation, risk improvement and or loss control. It is based upon prevailing conditions at the time of inspection, our observations and information provided by the client contact/s at the site. No responsibility is accepted, and liability disclaimed for the use of this report for any other purpose, or by any third party, nor does it imply that no other hazardous













Appendix 2: Laboratory Analysis Results













Certificate of Analysis

Environment Testing

Trinitas Group Pty Ltd Level 3, 24 Hunter Street Parramatta NSW 2150 lac-MRA



NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025—Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: - RESULTS/SRAs

Report 988657-AFA

Project Name LITTLE BAY BEACH

Received Date May 11, 2023 **Date Reported** May 12, 2023

METHODOLOGY:

Asbestos Counting Conducted in accordance with the National Occupational Health & Safety Commission -

Guidance Note on The Membrane Filter Method For Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC:3003(2005)] and in-house Method LTM-ASB-8010.

Report Number: 988657-AFA



Environment Testing

Project Name

LITTLE BAY BEACH

Project ID

Date Sampled May 11, 2023 Report 988657-AFA

Eurofins Sample No.	Client Sample ID	Location	Fibres/100 fields
23-My0027810	DH061887	BLANK	0/100
23-My0027811	DH061916	EXCLUSION ZONE (NORTHERN END)	0/100
23-My0027812	DH645033	EXCLUSION ZONE (SOUTHERN END)	0/100



Date Reported: May 12, 2023

Environment Testing

Sample History

Where samples are submitted/analysed over several days, the last date of extraction is reported.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

DescriptionTesting SiteExtractedHolding TimeAsbestos - LTM-ASB-8010SydneyMay 11, 2023Indefinite



web: www.eurofins.com.au email: EnviroSales@eurofins.com

Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne Geelong 6 Monterey Road 19/8 Lewalan Street Dandenong South Grovedale VIC 3175 VIC 3216 Tel: +61 3 8564 5000 Tel: +61 3 8564 5000

Sydney 179 Magowar Road Girraween NSW 2145 Tel: +61 2 9900 8400

Asbestos (amount of fibres in air)

Brisbane Unit 1.2 Dacre Street 1/21 Smallwood Place Murarrie QLD 4172

Newcastle 1/2 Frost Drive Tel: +61 2 4968 8448 Tel: +61 7 3902 4600 NATA# 1261

Mayfield West NSW 2304 NATA# 1261 Site# 1254 NATA# 1261 Site# 25403 NATA# 1261 Site# 18217 NATA# 1261 Site# 25466 NATA# 1261 Site# 20794 Site# 25079 & 25289

Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370

Perth

ABN: 91 05 0159 898

46-48 Banksia Road

Christchurch 43 Detroit Drive Rolleston, Christchurch 7675 Tel: +64 9 526 45 51

Tel: 0800 856 450 IANZ# 1290

Company Name:

Project Name:

Date Reported: May 12, 2023

Address:

Trinitas Group Pty Ltd

LITTLE BAY BEACH

Level 3, 24 Hunter Street Parramatta

NSW 2150

Order No.: Report #:

Canberra

Mitchell

ACT 2911

Tel: +61 2 6113 8091

988657 02 8810 4445

Phone: Fax: 02 8016 0875 Received: May 11, 2023 4:34 PM

Due: May 12, 2023 Priority: 1 Dav

- RESULTS/SRAs **Contact Name:**

Eurofins Analytical Services Manager: Bonnie Pu

Eurofins ARL Pty Ltd Eurofins Environment Testing NZ Ltd

35 O'Rorke Road

Auckland 1061

IANZ# 1327

Auckland

Penrose,

NZBN: 9429046024954

Sample Detail

Sydney Laboratory - NATA # 1261 Site # 18217

External Laboratory						
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID	
1	DH061887	May 11, 2023		Air	S23-My0027810	Χ
2	DH061916	May 11, 2023	1:46PM	Air	S23-My0027811	Χ
3	DH645033	May 11, 2023	1:43PM	Air	S23-My0027812	Х
Test Counts						



Environment Testing

Internal Quality Control Review and Glossary General

- QC data may be available on request. All soil results are reported on a dry basis, unless otherwise stated
- Samples were analysed on an 'as received' basis.
- Information identified on this report with the colour blue indicates data provided by customer that may have an impact on the results
- This report replaces any interim results previously issued 5.

Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported. Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w) Airborne fibre filter loading as Fibres (N) per Fields counted (n) Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C) Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m) % w/w

F/fld

g, kg

Concentration in grams per kilogram Volume, e.g. of air as measured in AFM (**V** = **r** x **t**) g/kg L, mL

Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r) Time (t), e.g. of air sample collection period L/min

min

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{p}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{p}\right) \times \left(\frac{1}{V}\right)$

Asbestos Content (as asbestos): $\% w/w = \frac{(m \times P_A)}{M}$ Weighted Average (of asbestos): $\%_{WA} = \sum_{x} \frac{(m \times P_A)_x}{x}$

Terms

Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 *Appendix 2*, else assumed to be 15% in accordance with WA DOH *Appendix 2* (**P**_A). %asbestos

Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the ACM

NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.

Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable ΑF

material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable"

AFM Airborne Fibre Monitoring, e.g. by the MFM.

Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004. Amosite

AS

Asbestos Content (as asbestos) Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).

Chrysotile Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004

COC Chain of Custody

Crocidolite Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.

Dry Sample is dried by heating prior to analysis

DS Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.

Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA FA

generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.

Fibre Count Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003 Fibre ID

Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos. Friable Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is

outside of the laboratory's remit to assess degree of friability

HSG248 UK HSE HSG248, Asbestos: The Analysts Guide, 2nd Edition (2021).

HSG264 UK HSE HSG264, Asbestos: The Survey Guide (2012)

ISO (also ISO/IEC) International Organization for Standardization / International Electrotechnical Commission.

Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece K Factor

graticule area of the specific microscope used for the analysis (a).

LOR

MFM (also NOHSC:3003) Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission. Guidance Note on the Membrane

Filter Method for Estimating Airborne Asbestos Fibres, 2nd Edition [NOHSC:3003(2005)].

NEPM (also ASC NEPM) National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).

Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004. Organic

PCM Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.

Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004. PLM Sampling Unless otherwise stated Eurofins are not responsible for sampling equipment or the sampling process

SMF Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.

SRA

WA DOH

Date Reported: May 12, 2023

Trace Analysis Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.

UK HSE HSG United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication,

Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. UMF May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos

> Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (updated 2021), including Appendix Four: Laboratory analysis

Weighted Average Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%wA).

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Eurofins Environment Testing 179 Magowar Road, Girraween NSW, Australia, 2145

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Environment Testing

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	N/A
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Asbestos Counter/Identifier:

Bennel Jiri Senior Analyst-Asbestos

Authorised by:

Sayeed Abu Senior Analyst-Asbestos

Glenn Jackson

General Manager

Final Report - this report replaces any previously issued Report

- Indicates Not Requested
- * Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please $\underline{\text{click here.}}$

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Report Number: 988657-AFA