

23 May 2023

Randwick City Council 30 Frances Street Randwick NSW 2031

Attention: Joe Santangelo joe.santangelo@randwick.nsw.gov.au

# **RE: Asbestos Air Monitoring Report**

Dear Joe Santangelo

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,

Karim Nazemi Licensed Asbestos Assessor #001359 Senior Occupational Hygienist 23/05/2023



PAGE



Requested by:	
Client Contact Name	Joe Santangelo
Client Contact Number	0436839760
Client Contact Email	joe.santangelo@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
Coast Chapel Bay - A Nurses Coast Hospital Rd	
Air Monitoring Details:	
Date of Field Work:	23/05/2023
Start Time:	09:30
Trinitas Consultant:	Karim Nazemi Senior Occupational Hygienist
Sampling Type:	Asbestos
Temperature	18°C









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.         Image: Standard Standard Standard 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.         Image: Standard St	Wind Speed 29km/h										
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Karim Nazemi Denny Bolatti	Karim Nazemi		Denny Bolatti								
Licensed Asbestos Assessor #001359 Principal Occupational Hygienist	Licensed Asbestos Assess										
Senior Occupational Hygienist Licensed Asbestos Assessor 001132	Senior Occupational Hygier										
23/05/2023 26/05/2023			26/05/2023								





# **Appendix 1: Air Monitoring Locations**











### How to Contact Us

Mail	Trinitas Group
	PO Box 1376 Parramatta NSW 2124
Email	admin@trinitasgroup.com.au
Address	Level 3, 24 Hunter Street, Parramatta NSW 2150
Website	www.trinitasgroup.com.au
Telephone	1800 4 TRINITAS
Facsimile	02 8016 0875

### **Trinitas Group Pty Ltd**

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

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



**Environment Testing** 

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	992732-AFA
Project Name	LITTLE BAY BEACH
Received Date	May 24, 2023
Date Reported	May 25, 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.



# Project NameLITTLE BAY BEACHProject IDMay 23, 2023Date SampledMay 23, 2023Report992732-AFA

Eurofins Sample No.	Client Sample ID	Location	Fibres/100 fields
23-My0061949	DH125503	WESTERN ELEVATION, BEACH ENTRY, ON FENCE	0/100
23-My0061950	DH125505	BLANK	0/100
23-My0061951	DH125535	SOUTHERN ELEVATION, ON POLE	0/100
23-My0061952	DH125543	NORTHERN ELEVATION, ON STONE RETAINING WALL	0/100



### **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.

### Description

Asbestos - LTM-ASB-8010

Testing SiteExtractedSydneyMay 24, 2023

Holding Time

Eurofins         Eurofins         Eurofins         Australia         Pty         Ltd           ABN: 50 005 085 521         Melbourne         Geelong         Sydney									Eurofins ARL Pty Ltd ABN: 91 05 0159 898	Eurofins Environn NZBN: 942904602495	•		
web: w	ww.eurofins.com.au		Melbourne 6 Monterey Road Dandenong Sour VIC 3175 Tel: +61 3 8564	Geelong           d         19/8 Lewa           th         Grovedale           VIC 3216         5000	Girrawee NSW 21 8564 5000 Tel: +61	45 2 9900 84	Mitchell ACT 2911 00 Tel: +61 2 6113 809	Murarrie QLD 4172	Newcastle 1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 4 Site# 25079 & 25289	Perth 46-48 Banksia Road Welshpool WA 6106 Tel: +61 8 6253 4444 NATA# 2377 Site# 2370	N2EN: 9429040024954           Auckland         Christchur           35 O'Rorke Road         43 Detroit I           Penrose,         Rolleston,           Auckland 1061         Christchur           Tel: +64 9 526 4551         Tel: +64 3 3           IANZ# 1327         IANZ# 1327		
	ompany Name: Trinitas Group Pty Ltd ddress: Level 3, 24 Hunter Street Parramatta NSW 2150						Phone:	992732 02 8810 4445 02 8016 0875		Received: Due: Priority: Contact Name:	May 24, 2023 6:59 May 25, 2023 1 Day - RESULTS/SRAs		
Pro	oject Name:	LITTLE BAY	/ BEACH							Eurofins Analytical	Services Manager	: Bonnie Pu	
Sample Detail					Asbestos (amount of fibres in air)								
Sydı	ney Laboratory	- NATA # 1261	Site # 18217	,		Х							
	rnal Laboratory												
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID								
1	DH125503	May 23, 2023	9:30AM	Air	S23-My0061949	Х							
2	DH125505	May 23, 2023		Air	S23-My0061950	Х							
3	DH125535	May 23, 2023		Air	S23-My0061951	Х							
4		May 23, 2023	9:37AM	Air	S23-My0061952	Х							
Test	Counts					4							



### Internal Quality Control Review and Glossary General

- 1. 2. 3.
- 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. 4. 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	
% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w)
F/fld	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL g, kg	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)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM ( $V = r \times t$ )
L/min min	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
Calculations	
Airborne Fibre Concentration:	$C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right)$
Asbestos Content (as asbestos):	$\% w/w = \frac{(m \times P_A)}{M}$
Weighted Average (of asbestos):	$\mathscr{H}_{WA} = \sum \frac{(m \times P_A)_x}{x}$
Terms	
%asbestos	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 <sub>A</sub> ).
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	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
	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	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos	s) 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.
FA	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 generally corresponds to material larger than 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.
K Factor	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 graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
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	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
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	Sample Receipt Advice.
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.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
WA DOH	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).



### 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 Managing Director

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 click here.

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