

www.erc.net.au PO Box 235 North Beach WA 6920

22 December 2023

Darrell Monteiro Manager Waste and Fleet Shire of Serpentine Jarrahdale 6 Paterson Street Mundijong WA 6123

Dear Darrell,

RE: OCCUPATIONAL AND BACKGROUND AIR MONITORING MUNDIJONG WASTE AND RECYCLING TRANSFER STATION 40 WATKINS ROAD, MUNDIJONG WA 6123

ER Consultants Pty Ltd (ERC) was engaged by the Shire of Serpentine Jarrahdale (the Client) to undertake a period of airborne respirable fibre monitoring at the Mundijong Waste Recycle and Transfer Facility (the site), located at 40 Watkins Road, Mundijong WA 6123 (Figure 1).

Further to the daily updates and email advice provided by ER Consultants Pty Ltd (ERC) throughout the duration of the project, please find attached the complete set of respirable fibre air monitoring results for control (perimeter) air monitoring carried out between 18 and 20 December 2023 December at the site.

It is noted that ERC also completed preliminary exposure (on-worker/machine) and control air monitoring (static locations) at the site on 29 August 2023 as part of a separate scope of work commissioned by the Client. The results of this round of air monitoring have also been included in this letter.

- Control/background air monitoring was conducted by placing the monitoring pumps in a static location within the green waste processing area and along the site boundary, to assess risk of respirable fibre inhalation at/surrounding the site.
- Exposure air monitoring was conducted by placing an air pump on an excavator which was conducting preliminary asbestos in soil investigations, by digging a series of test pits into the Green Waste (former landfill) area of the site. It is noted, however, that the pump was not places directly in the breathing space of the excavator driver, and as such has been used on a preliminary basis only.

The following scope of work was undertaken as part of this project:

1) Development of a site specific JHA to manage the risks associated with ERC's project tasks.



Mundijong Waste Recycling and Transfer Station 22 December 2023

- 2) At the start of each shift, four air monitoring stations were placed at locations surrounding the perimeter and in the centre of the Green Waste area, dependent on the expected atmospheric conditions at the site as determined by the field scientist at the start of each day.
- 3) Each pump was run for a minimum of 90 minutes up to the entire duration of the shift.
- 4) The flow rate of each pump was set by the field scientist to ensure collection of >300L of air across the monitoring period.
- 5) The pumps were collected by the field scientist (as per the timing above) and the samples immediately taken to a NATA accredited laboratory for analysis, with a request for same day analysis.
- 6) Provision of a daily summary of results (by email) to the Shire of Serpentine Jarrahdale, confirming that there were no exceedances of the acceptable DoH (2021) criteria (0.01 f/mL).

* * *

A summary of the laboratory results is provided below. Laboratory analytical results are attached at the rear of this document. The air monitoring locations are shown in Figure 1.

Table 1
Summary of Laboratory Analytical Results

Summary of Laboratory Analytical Results					
ample Location Date					
nary Exposure Air Moi	nitoring				
29/08/2023	<0.01				
Control/Background Air Monitoring					
29/08/2023	<0.01				
	<0.01				
40/40/00	<0.01				
10/12/23	<0.01				
	<0.01				
	<0.01				
10/12/22	<0.01				
19/12/23	<0.01				
	<0.01				
	Date nary Exposure Air Mor 29/08/2023 I/Background Air Mor				



Item 10.2.4 - Attachment 1 RESPIRABLE FIBRE AIR MONITORING RESULTS SHIRE OF SERPENTINE JARRAHDALE

Mundijong Waste Recycling and Transfer Station 22 December 2023

Sample Location	Date	Concentration (Fibres/mL)
BG9		<0.01
BG10	20/12/22	<0.01
BG11	20/12/23	<0.01
*BG12		*<0.02

BG = Background Monitoring Station CO = Control Monitoring Station

To conclude, the air monitoring results presented in this letter did not indicate any cause for concern with regard to the presence of respirable fibres (including asbestos) at any of the monitoring stations and on any of the monitoring days documented in this letter.

Please don't hesitate to contact the undersigned on 0404 342 098 if you have any gueries regarding the results provided.

Yours sincerely

ER CONSULTANTS PTY LTD

Victoria Todd

Senior Environmental Scientist I

Jonathan Brown

Principle Environmental Geologist I Director

Attachments:

Figure 1 – Background Air Monitoring Locations

Laboratory Analytical Results

^{*}The result dated 20/12/23 for BG12 are reported with a slightly raised LOR (0.02f/mL). This was due to an air pump failure that caused the air volume to drop to 320L. Given that there were no fibres detected at all on this sample slide and there were no results reported equal to/exceeding 0.01 Fibres/mL at any other location, ERC consider there to be no cause for concern regarding this anomaly.



Item 10.2.4 - Attachment 1 RESPIRABLE FIBRE AIR MONITORING RESULTS SHIRE OF SERPENTINE JARRAHDALE

Mundijong Waste Recycling and Transfer Station 22 December 2023

DISCLAIMER:

The summary and attached laboratory results are based on site conditions at the time at which respirable fibre air monitoring was conducted and as such temporal variations are possible and were collected from a limited number of data collection points. ERC did not perform any other site assessment or remedial services other than the provision of daily respirable fibre air monitoring (for asbestos).

Asbestos containing material is known to be present at the site and as such the contents of this document must not be exclusively relied upon to confirm an absence of risk to human health with respect to asbestos and/or airborne respirable fibres (including asbestos).



Certificate² of Amalysis

ER Consultants P/L - WHS PO Box 235 North Beach WA 6920

Jonathan Brown Attention: 1021251-AFC Report

MWTS Project Name Project ID 1449

Received Date Sep 29, 2023 **Date Reported** Aug 31, 2023





NATA Accredited Accreditation Number 2377 Site Number 2370

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.

METHODOLOGY:

Sampling

Parties conducting sampling are detailed below and volume measurements have been calculated from the accompanying Chain of Custody record. The requirements of the NATA Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Life Sciences – Annex, Asbestos sampling and testing (2021), have been met and all results are traceable to Eurofins who are responsible for the data contained in this report. Fibre Concentration (Fibres/mL) results are covered by the facility's NATA scope of accreditation.

Fibre counting is 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. Unless specifically noted, analysis is undertaken by approved analysts at the base Analysis

facility. Fibre Count (Fibres/Fields) results are covered by the facility's NATA scope of accreditation.

Eurofins Sample No.	Client Sample ID	Date Sampled	Location	Sample Volume (L)	Result (Fibres/Fields)	Result (Fibres/mL)
23-Au0075187	DH123126	Aug 29, 2023	CO1	780	1.5 / 100	< 0.01
23-Au0075188	DH123191	Aug 29, 2023	CO2	780	0 / 100	< 0.01
23-Au0075189	DH123113	Aug 29, 2023	FB1		0 / 100	

Comments

Volume Air Measurement undertaken by Adam Scott of ER Consultants P/L, who has been trained by Eurofins.

Volume Air Measurement equipment calibrated and maintained by Eurofins.

Sample History

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

Description **Testing Site Extracted Holding Time** Asbestos - LTM-ASB-8010 Welshpool Aug 30, 2023 Indefinite

Yes



Sample Integrity

Appropriate sample containers have been used

Volume Air Measurement

Pump ID	Flowmeter ID	Compliant
ERC-02	ERC-R1	Yes
ERC-04	ERC-R1	Yes
Field Blank	N/A	Yes



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
- 5. This report replaces any interim results previously issued

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

g/kg L, mL

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

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

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.

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

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

NEPM (also ASC NEPM)

WA DOH

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)]. 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.

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

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

> 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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Melbourne

VIC 3175

NATA# 1261

Site# 1254

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ABN: 50 005 085 521 Geelong 6 Monterey Road 19/8 Lewalan Street Dandenong South Grovedale VIC 3216

NATA# 1261

Site# 25403

Asbestos Fibre Count & Concentration

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Canberra Brisbane Unit 1.2 Dacre Street 1/21 Smallwood Place 1/2 Frost Drive Mitchell Murarrie ACT 2911 QLD 4172 Tel: +61 3 8564 5000 Tel: +61 3 8564 5000 Tel: +61 2 9900 8400 Tel: +61 2 6113 8091 Tel: +61 7 3902 4600 NATA# 1261 NATA# 1261 NATA# 1261

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NZBN: 9429046024954 Auckland Item 1902 4ch Attachmental 35 O'Rorke Road 43 Detroit Drive 1277 Cameron Road. Penrose, Rolleston. Gate Pa. Auckland 1061 Christchurch 7675 Tauranga 3112 Tel: +64 9 526 4551 Tel: +64 3 343 5201 Tel: +64 9 525 0568 IANZ# 1327 IANZ# 1290 IANZ# 1402

Company Name:

ER Consultants P/L - WHS

Address:

PO Box 235 North Beach WA 6920

Project Name: Project ID:

Date Reported: Aug 31, 2023

MWTS 1449

Site# 18217 Order No.:

Report #: 1021251 Phone: 08 6102 0025 08 9385 7930 Fax:

Site# 25466

Received: Sep 29, 2023 4:00 PM Due: Oct 2, 2023 **Priority:** 1 Day

Eurofins Environment Testing NZ Ltd

Contact Name: Jonathan Brown

Eurofins Analytical Services Manager: Rhys Thomas

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370						Χ	
External Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	DH123126	Aug 29, 2023		Filter paper	L23-Au0075187	Χ	
2	DH123191	Aug 29, 2023		Filter paper	L23-Au0075188	Χ	
3 DH123113 Aug 29, 2023 Filter paper L23-Au0075189							
Test	Counts					3	



Asbestos Counter/Identifier:

Angela Tan Senior Analyst-Asbestos

Authorised by:

Rhys Thomas Senior Analyst-Asbestos

Kim Rodgers 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

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



Certificate² of Amalysis

ER Consultants P/L PO Box 235 North Beach WA 6920





NATA Accredited Accreditation Number 2377 Site Number 2370

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.

Adam Scott Attention: Report 1054936-AFC

STATE AIR MONITORING **Project Name**

Project ID 1449-2

Received Date Dec 18, 2023 **Date Reported** Dec 18, 2023

METHODOLOGY:

Sampling

Parties conducting sampling are detailed below and volume measurements have been calculated from the accompanying Chain of Custody record. The requirements of the NATA Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Life Sciences – Annex, Asbestos sampling and testing (2021), have been met and all results are traceable to Eurofins who are responsible for the data contained in this report. Fibre Concentration

(Fibres/mL) results are covered by the facility's NATA scope of accreditation.

Fibre counting is 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. Unless specifically noted, analysis is undertaken by approved analysts at the base **Analysis**

facility. Fibre Count (Fibres/Fields) results are covered by the facility's NATA scope of accreditation.

Eurofins Sample No.	Client Sample ID	Date Sampled	Location	Sample Volume (L)	Result (Fibres/Fields)	Result (Fibres/mL)
23-De0041480	DJ213181	Dec 18, 2023	BG1	360	0 / 100	< 0.01
23-De0041481	DJ213208	Dec 18, 2023	BG2	360	0 / 100	< 0.01
23-De0041482	DJ213225	Dec 18, 2023	BG3	360	0 / 100	< 0.01
23-De0041483	DJ213250	Dec 18, 2023	BG4	360	0 / 100	< 0.01
23-De0041484	DJ213301	Dec 18, 2023	FIELD BLANK		0 / 100	

Comments

Volume Air Measurement undertaken by Adam Scott of ER Consultants P/L, who has been trained by Eurofins.

Volume Air Measurement equipment calibrated and maintained by Eurofins.

Sample History

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

Description **Testing Site Extracted Holding Time** Asbestos - LTM-ASB-8010 Welshpool Dec 18, 2023 Indefinite

Yes



Sample Integrity

Appropriate sample containers have been used

Volume Air Measurement

Pump ID	Flowmeter ID	Compliant
ERC-01	ERC-R1	Yes
ERC-04	ERC-R1	Yes
ERC-05	ERC-R1	Yes
ERC-06	ERC-R1	Yes
Field Blank	N/A	Yes



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
- 5. This report replaces any interim results previously issued

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

g/kg L, mL

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

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

HSG248

WA DOH

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

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.

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

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.

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

Fibre Count

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 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

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

> 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).



Eurofins ARL Pty Ltd Eurofins Environment Testing Australia Pty Ltd

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Welshpool

WA 6106

NATA# 2377

Site# 2370

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Asbestos Fibre Count & Concentration

5

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Newcastle Mayfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289

Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland Auckland (Asb) Itemch0s2c4urcAttachmenta1 35 O'Rorke Road Unit C1/4 Pacific Rise, 43 Detroit Drive 1277 Cameron Road. Penrose. Mount Wellington, Rolleston, Gate Pa, Auckland 1061 Christchurch 7675 Tauranga 3112 Auckland 1061 +64 9 526 4551 +64 3 343 5201 +64 9 525 0568 +64 9 525 0568 IANZ# 1327 IANZ# 1308 IANZ# 1290 IANZ# 1402

Company Name:

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web: www.eurofins.com.au

ER Consultants P/L

+61 8 6253 4444

Address:

PO Box 235 North Beach WA 6920

Project Name:

STATE AIR MONITORING

Project ID:

Test Counts

Date Reported: Dec 18, 2023

1449-2

Double Laboratory NATA # 2277 Cite # 2270

Order No.:

Canberra

Mitchell

ACT 2911

Report #: 1054936 Phone: 08 6102 0025 08 9385 7930 Fax:

Received: Dec 18, 2023 1:10 PM Due: Dec 18, 2023 Priority: Same day **Contact Name:** Adam Scott

Eurofins Analytical Services Manager: Rhys Thomas

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370							
External Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	DJ213181	Dec 18, 2023		Filter paper	L23-De0041480	Χ	
2	DJ213208	Dec 18, 2023		Filter paper	L23-De0041481	Χ	
3	DJ213225	Dec 18, 2023		Filter paper	L23-De0041482	Χ	
4	DJ213250	Dec 18, 2023		Filter paper	L23-De0041483	Χ	
5	DJ213301	Dec 18, 2023		Filter paper	L23-De0041484	Χ	



Asbestos Counter/Identifier:

Emilie Nelson Senior Analyst-Asbestos

Authorised by:

Rhys Thomas Senior Analyst-Asbestos

Kim Rodgers 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

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



Certificate² of Amalysis

ER Consultants P/L PO Box 235 North Beach WA 6920





NATA Accredited Accreditation Number 2377 Site Number 2370

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.

Victoria Todd Attention: 1055390-AFC-V2 Report

MUNDIJONG WASTE FACILITY **Project Name**

Project ID 1449-2

Received Date Dec 19, 2023 **Date Reported** Dec 20, 2023

METHODOLOGY:

Sampling

Parties conducting sampling are detailed below and volume measurements have been calculated from the accompanying Chain of Custody record. The requirements of the NATA Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Life Sciences – Annex, Asbestos sampling and testing (2021), have been met and all results are traceable to Eurofins who are responsible for the data contained in this report. Fibre Concentration

(Fibres/mL) results are covered by the facility's NATA scope of accreditation.

Fibre counting is 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. Unless specifically noted, analysis is undertaken by approved analysts at the base **Analysis**

facility. Fibre Count (Fibres/Fields) results are covered by the facility's NATA scope of accreditation.

Eurofins Client **Date** Sample Result Result Location Sample ID (Fibres/Fields) Sample No. Sampled Volume (L) (Fibres/mL) 23-De0044665 DH710412 BG5 490 1/100 < 0.01 Dec 19, 2023 23-De0044666 DH710407 BG6 480 1/100 < 0.01 Dec 19, 2023 23-De0044667 DH710492 Dec 19, 2023 BG7 480 0 / 100 < 0.01 23-De0044668 DH710426 Dec 19, 2023 BG8 420 0 / 100 < 0.01 DH710484 23-De0044669 0 / 100 Dec 19, 2023 FB₂ **BI ANK**

Comments

V2 report issued with client sample ID as the location.

Volume Air Measurement undertaken by Victoria Todd of ER Consultants P/L, who has been trained by Eurofins.

Volume Air Measurement equipment calibrated and maintained by Eurofins.

Sample History

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

Testing Site Extracted Holding Time Description Asbestos - LTM-ASB-8010 Welshpool Dec 19, 2023 Indefinite



Sample Integrity

Appropriate sample containers have been used

Yes

Volume Air Measurement

Pump ID	Flowmeter ID	Compliant
ERC-01	ERC-R1	Yes
ERC-04	ERC-R1	Yes
ERC-05	ERC-R1	Yes
ERC-06	ERC-R1	Yes
FIELD BLANK	N/A	Yes



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
- 5. This report replaces any interim results previously issued

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)

F/fld

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) g, kg

g/kg L, mL

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

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). This estimate is not NATA-accredited. %asbestos

ACM stos 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.

ΑF 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.

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).

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

NEPM (also ASC NEPM)

WA DOH

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)]. 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

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

> 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).



email: EnviroSales@eurofins.com

Eurofins ARL Pty Ltd Eurofins Environment Testing Australia Pty Ltd

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Asbestos Fibre Count & Concentration

5

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Mavfield West NSW 2304 +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289 **Eurofins Environment Testing NZ Ltd**

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Company Name:

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ER Consultants P/L

+61 8 6253 4444

Address:

PO Box 235 North Beach WA 6920

Perth

Welshpool

WA 6106

NATA# 2377

Site# 2370

Project Name:

MUNDIJONG WASTE FACILITY

Project ID:

1449-2

Order No.:

Report #: 1055390 Phone: 08 6102 0025 08 9385 7930 Fax:

Due: Dec 19, 2023 Priority: Same day Victoria Todd **Contact Name:**

Eurofins Analytical Services Manager: Rhys Thomas

Dec 19, 2023 1:40 PM

Sample Detail

Perth Laboratory - NATA # 2377 Site # 2370							
External Laboratory							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID		
1	DH710412	Dec 19, 2023		Filter paper	L23-De0044665	Х	
2	DH710407	Dec 19, 2023		Filter paper	L23-De0044666	Χ	
3	DH710492	Dec 19, 2023		Filter paper	L23-De0044667	Χ	
4	DH710426	Dec 19, 2023		Filter paper	L23-De0044668	Χ	
5	DH710484 - BLANK	Dec 19, 2023		Filter paper	L23-De0044669	Χ	

Test Counts



Asbestos Counter/Identifier:

Julien Gerard Senior Analyst-Asbestos

Authorised by:

Rhys Thomas Senior Analyst-Asbestos

Kim Rodgers 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

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



Certificate of Amalysis

ER Consultants P/L PO Box 235 North Beach WA 6920





NATA Accredited Accreditation Number 2377 Site Number 2370

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.

Victoria Todd Attention: 1055793-AFC Report

MUNDIJONG WASTE FACILITY **Project Name**

Project ID 1449-2

Received Date Dec 20, 2023 Dec 20, 2023 **Date Reported**

METHODOLOGY:

Sampling

Parties conducting sampling are detailed below and volume measurements have been calculated from the accompanying Chain of Custody record. The requirements of the NATA Specific Accreditation Criteria: ISO/IEC 17025 Application Document, Life Sciences – Annex, Asbestos sampling and testing (2021), have been met and all results are traceable to Eurofins who are responsible for the data contained in this report. Fibre Concentration

(Fibres/mL) results are covered by the facility's NATA scope of accreditation.

Fibre counting is 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. Unless specifically noted, analysis is undertaken by approved analysts at the base **Analysis**

facility. Fibre Count (Fibres/Fields) results are covered by the facility's NATA scope of accreditation.

Eurofins Sample No.	Client Sample ID	Date Sampled	Location	Sample Volume (L)	Result (Fibres/Fields)	Result (Fibres/mL)
23-De0047821	DH710507	Dec 20, 2023	BG9	360	0 / 100	< 0.01
23-De0047822	DH710476	Dec 20, 2023	BG10	360	0 / 100	< 0.01
23-De0047823	DH710483	Dec 20, 2023	BG11	360	0 / 100	< 0.01
23-De0047824	DH710404	Dec 20, 2023	BG12	320	0 / 100	< 0.02
23-De0047825	DH710488 - BLANK	Dec 20, 2023	FB3		0 / 100	

Comments

Volume Air Measurement undertaken by Victoria Todd of ERC Consulting, who has been trained by Eurofins.

Volume Air Measurement equipment calibrated and maintained by Eurofins.

Sample De0047824: The LOR has been raised due to insufficient sample volume.

Sample History

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

Description **Testing Site Extracted Holding Time** Asbestos - LTM-ASB-8010 Welshpool Dec 20, 2023 Indefinite



Sample Integrity

Appropriate sample containers have been used

Yes

Volume Air Measurement

Pump ID	Flowmeter ID	Compliant
ERC-01	ERC-R1	Yes
ERC-04	ERC-R1	Yes
ERC-05	ERC-R1	Yes
ERC-06	ERC-R1	Yes
Field Blank	N/A	Yes



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
- 5. This report replaces any interim results previously issued

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)

F/fld

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)

g, kg

g/kg L, mL

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

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). This estimate is not NATA-accredited. %asbestos

ACM stos 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.

ΑF 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.

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

NEPM (also ASC NEPM)

WA DOH

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)]. 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

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

> 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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Asbestos Fibre Count & Concentration

Χ

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Site# 25466

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Company Name:

Address:

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ER Consultants P/L

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WA 6920

Project Name:

Project ID: 1449-2

MUNDIJONG WASTE FACILITY

Received: Order No.: Dec 20, 2023 11:45 AM Report #: 1055793

Due: Dec 20, 2023 Priority: Same day Victoria Todd **Contact Name:**

Eurofins Analytical Services Manager: Rhys Thomas

Sample Detail

Perth Laboratory - NATA # 2377 Site # 237

External Laboratory								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	DH710507	Dec 20, 2023		Filter paper	L23-De0047821	Х		
2	DH710476	Dec 20, 2023		Filter paper	L23-De0047822	Х		
3	DH710483	Dec 20, 2023		Filter paper	L23-De0047823	Х		
4	DH710404	Dec 20, 2023		Filter paper	L23-De0047824	Х		
5	DH710488 - BLANK	Dec 20, 2023		Filter paper	L23-De0047825	х		
Test Counts								



Asbestos Counter/Identifier:

Emilie Nelson Senior Analyst-Asbestos

Authorised by:

Reagan Neal Senior Analyst-Asbestos

Kim Rodgers 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

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



Site Lot Boundary
Site Fence Boundary

Site Fence Boundary
Air Monitoring Sample Location

*CO1 located inside the excavator cab.

Ž,	and the second	100000	The second secon		
	DRG. No.	1449-T1		Shire of Serpentine Jarrahdale	FIGURE 1
	DRAWN:	AS	22/12/2023	Preliminary Site Assessment	
	REVIEWED:	VT	22/12/2023	Background Air Monitoring Locations	ERC
	SOURCE:	Landgate		Ordinary Council Meeting - 17 Jun	
	PAPER SIZE:	A4		40 Watkins Rd, Mundijong WA 6123	ER Consultants Pty Ltd