

Airborne Fibre Monitoring Using the Membrane Filter Method Explanatory Note									
<p><b>Note on 'Fibre Count':</b> The membrane filter method detects 'fibres' which may or may not be asbestos fibres. Many different types of fibres exist within the air that we breathe (for example synthetic mineral fibres such as ceramic fibres, glass fibres; or organic fibres such as cotton and cellulose). Also background levels of asbestos within the atmosphere have been reliably measured at around 10-100 fibres per cubic metre of air. For these reasons, it is common to record a background fibre count of up to 5 fibres per filter when using the membrane filter method. These low fibre counts are below the detection limit of the method and should not be a cause for concern. Further investigation is warranted when the fibre concentration exceeds 0.01f/mL, which equates to roughly 10 fibre counts in 100 fields. The SafeWork Australia exposure standard is listed as 0.1f/mL, which equates to roughly 100 fibres in 100 fields.</p>									
<p><b>Method Summary:</b></p> <ul style="list-style-type: none"> <li>• A known volume of air is drawn through a filter and any 'fibres' are deposited onto the filter.</li> <li>• The filter is prepared within the laboratory and then the number of 'fibres' are counted across a number (normally 100) of random 'fields'.</li> <li>• The total number of 'fibres' is then used together with the volume of air sampled to calculate the concentration of fibres per millilitre of sampled air (f/mL).</li> </ul>									
<b>Report No.:</b>	Reference number – Unique and specific to each report								
<b>URI Number:</b>	Reference number for internal laboratory use only								
<b>Job Number:</b>	Clearsafe's job number for that particular project								
<b>Test Method:</b>	The standard method and aligned Clearsafe internal method reference for the field sampling and laboratory analysis								
<b>Sample Number:</b>	The unique reference for each particular sample								
<b>BL:</b>	The respective 'Blank' quality assurance sample used for each sampling run to ensure that the field and laboratory method does not cause contamination of the samples								
<b>Sample Code:</b>	<table border="1" style="width: 100%;"> <tr> <td>1 – During Removal</td> <td>5 – Background</td> </tr> <tr> <td>2 – Bag Removal</td> <td>6 – Blank</td> </tr> <tr> <td>3 – Enclosure Dismantling</td> <td>7 – Fibre Count Only</td> </tr> <tr> <td>4 – Clearance Sample</td> <td>8 – Personal sample</td> </tr> </table>	1 – During Removal	5 – Background	2 – Bag Removal	6 – Blank	3 – Enclosure Dismantling	7 – Fibre Count Only	4 – Clearance Sample	8 – Personal sample
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<b>Time On / Off:</b>	The beginning and end of the sampling period for each sample								
<b>Airflow:</b>	The flowrate of air through the filter in litres per minute: On – airflow on commencement; Off – airflow on completion; Avg – average flowrate								
<b>Fibres:</b>	An artefact deposited onto the filter that fits the criteria of the method (>5µm length, <3µm width, overall length:width ratio of greater than 3:1)								
<b>Fibre Count:</b>	The number of individual fibres within random 'fields' counted on the filter by the NATA accredited laboratory analyst								
<b>Fields:</b>	A circle approximately 100µm in diameter viewed under the microscope								
<b>Field Count:</b>	The number of fields counted, normally 100 fields.								
<b>Approved Signatory / Counter:</b>	The person approved by NATA to endorse the report								
<b>NATA Accreditation Number:</b>	NATA's reference to the testing laboratory								
<b>NATA:</b>	National Association of Testing Authorities								
<p><b>Further Enquiries:</b> Please contact Clearsafe Environmental Solutions on 1300 042 962 or <a href="mailto:info@clearsafe.com.au">info@clearsafe.com.au</a>.</p>									