



Adelaide Brighton Cement Ltd

an **ADBRI** company

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QUARTERLY AIR PARTICULATE MANAGEMENT REPORT FOR BIRKENHEAD WORKS

COMPLIANCE DATE: 30/04/24 – Quarter 1, 2024
EPA Licence 1126: Dust Management Plan (U - 1549)

Licensed site: Adelaide Brighton Cement, Birkenhead Works

62 Elder Road, Birkenhead, SA 5015

Date of Submission: 30 April 2024

Version Number: 1



Report Submitted by: Advisor Environment - C&L (SA/NSW/NT)

Glossary

Term	Definition
$\mu\text{g}/\text{m}^3$	micrograms per cubic metre
μm	micrometre
$^{\circ}\text{C}$	degrees Celsius
m	metre
m^3	cubic metre
m^3/s	cubic metres per second

Nomenclature	Definition
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PM_{10}	Particulate matter with a diameter less than 10 micrometres
$\text{PM}_{2.5}$	Particulate matter with a diameter less than 2.5 micrometres
24 hour average	Calendar day (midnight to midnight)

Abbreviations	Definition
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ABC	Adelaide Brighton Cement
Air EPP	South Australian Environment Protection (Air Quality) Policy 2016
DMP	Dust Management Plan
EPA	Environment Protection Authority
TARP	Trigger Action Response Plan

Purpose	The purpose of the Air Particulate Management Plan (APMP) is to facilitate the ongoing implementation of dust control measures to minimise offsite dust from the Facility.
Background Information	<p>The APMP contains a Trigger Action Response Plan (TARP) to proactively manage fugitive dust emissions.</p> <p>The TARP uses three levels of trigger:</p> <ul style="list-style-type: none"> • Low (watch and wait) – early warning to increase awareness of potential dust issues • Medium (investigate) – there may be a potential dust issue and investigate • High (escalate) – dust concentrations are higher than normal, and action may be required <p>Triggers and responses have been defined for:</p> <ul style="list-style-type: none"> • Ambient dust monitoring from on-site monitors • Meteorological parameters (forecasts and observations (e.g. extended dry period with less than 1 mm of rain over 20 days)) • Visual observations <p>Trigger levels and responses are documented in the Air Particulate Management Plan All triggers associated responses and actions are captured in the Dust Management Dashboard and Control System, for reporting and analysis.</p> <p>The APMP is available on the ABC Birkenhead Community Website: https://adelaidebrightoncommunity.com.au/</p>
Reporting Objective	<p>To report on actions taken in response to triggers defined in the Trigger Action Response Plan (TARP), contained within the approved Air Particulate Management Plan (APMP), including;</p> <ul style="list-style-type: none"> • the date, time and trigger value exceeded • action and response strategies implemented <p>To provide a summary report of 24-hour exceedances of PM₁₀ and PM_{2.5} Air (EPP) criteria on ambient particulate monitors in the community.</p>

**Particulate
Monitor
Locations**



Map showing sampling locations, major infrastructure, sensitive environmental receptors, and north arrow

Sampling locations are indicated by colour-coded dots on the above map.

NB: Four sampling points are located on the Birkenhead Works site; the other sampling points are in the community (corner of Gunn/ Well streets and Community Park).

The property (not owned by ABC), on which the Gunn Street Monitor was located, was sold for redevelopment and was no longer available for use. As a consequence the monitor was removed on 28 June 2022. A new monitoring location is currently being determined.

TARP Reports	Appendix 1, contains monthly TARP reports detailing the following; <ul style="list-style-type: none"> • date, time and trigger value exceeded • details of the response and action strategies implemented. 																																																																																
Exceedance Reports	There were no 24-hour exceedances of PM ₁₀ and PM _{2.5} Air (EPP) criteria on ambient particulate monitors in the community, during this reporting period.																																																																																
Summary	<p>Summary of TARP alerts and actions for the quarter (refer to appendix 1):</p> <ul style="list-style-type: none"> • A total of 284 trigger alerts were rased for the quarter • A total of 1901 actions in response to the alerts were implemented for the quarter • An average of 6 actions per trigger <table border="1" data-bbox="439 592 1397 932"> <thead> <tr> <th colspan="5">Number of alerts by type</th> </tr> <tr> <th>Monitor</th> <th>Low</th> <th>Medium</th> <th>High</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>DT1 Southern</td> <td>12</td> <td>12</td> <td>1</td> <td>25</td> </tr> <tr> <td>DT2 Eastern</td> <td>50</td> <td>36</td> <td>13</td> <td>99</td> </tr> <tr> <td>DT3 Block 9</td> <td>15</td> <td>12</td> <td>1</td> <td>28</td> </tr> <tr> <td>DT5 Northern</td> <td>60</td> <td>49</td> <td>22</td> <td>131</td> </tr> <tr> <td>Meteorological Observations</td> <td></td> <td>1</td> <td></td> <td>1</td> </tr> <tr> <td>Totals</td> <td>137</td> <td>110</td> <td>37</td> <td>284</td> </tr> </tbody> </table> <table border="1" data-bbox="439 999 1406 1335"> <thead> <tr> <th colspan="5">Number of actions by alert type</th> </tr> <tr> <th>Monitor</th> <th>Low</th> <th>Medium</th> <th>High</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>DT1 Southern</td> <td>19</td> <td>53</td> <td>11</td> <td>83</td> </tr> <tr> <td>DT2 Eastern</td> <td>99</td> <td>132</td> <td>49</td> <td>280</td> </tr> <tr> <td>DT3 Block 9</td> <td>23</td> <td>35</td> <td>3</td> <td>61</td> </tr> <tr> <td>DT5 Northern</td> <td>115</td> <td>259</td> <td>215</td> <td>589</td> </tr> <tr> <td>Meteorological Observations</td> <td></td> <td>888</td> <td></td> <td>888</td> </tr> <tr> <td>Totals</td> <td>256</td> <td>1367</td> <td>278</td> <td>1901</td> </tr> </tbody> </table>	Number of alerts by type					Monitor	Low	Medium	High	Total	DT1 Southern	12	12	1	25	DT2 Eastern	50	36	13	99	DT3 Block 9	15	12	1	28	DT5 Northern	60	49	22	131	Meteorological Observations		1		1	Totals	137	110	37	284	Number of actions by alert type					Monitor	Low	Medium	High	Total	DT1 Southern	19	53	11	83	DT2 Eastern	99	132	49	280	DT3 Block 9	23	35	3	61	DT5 Northern	115	259	215	589	Meteorological Observations		888		888	Totals	256	1367	278	1901
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Air Particulate Complaints

Air particulate related complaints for the reporting period are tabled below

Date	Time	Location	Description	Action Taken
28/02/2024	12:29	Hilton Street Birkenhead	Dust on Car	Car had been washed - unable to take sample Advised process for future
7/03/2024	18:30	Recreation Parade Semaphore Park	Dust on Car - Enquiry	Sample taken for analysis - dust not cementitious
17/03/2024	13:47	Wells Street Birkenhead	Dust on Car	Sample taken for analysis - not Cementitious

Difficult to provide wind speed and direction data as specific time and date of occurrence was not available.

Appendix 1

TARP reports for January, February and March