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# QUARTERLY STACK PARTICULATE REPORT FOR BIRKENHEAD WORKS

**COMPLIANCE DATE: 31/10/18 – Quarter 3, 2018**

**EPA Licence 1126: Stack Particulate Management Plan (U-749)**

**Licensed site: Adelaide Brighton Cement, Birkenhead Works**

**62 Elder Road, Birkenhead, SA 5015**

**Date of Submission: 31 October 2018**

**Version Number: 1a**



Report Submitted by: Environmental Engineer

Certified by: Compliance Manager

***I certify that to the best of my knowledge and ability all the information in this report is a true and accurate reflection of the regulatory monitoring performed.***

## Glossary

<b>Term</b>	<b>Definition</b>
$\mu\text{g}/\text{m}^3$	micrograms per cubic metre
$\text{mg}/\text{m}^3$	milligrams per cubic metre
m	metre
$\text{m}^3$	cubic metres
$\text{m}^3/\text{s}$	cubic metres per second
$\text{Nm}^3$	Gas volume in cubic metres at STP dry basis
<b>Abbreviations</b>	<b>Definition</b>
Air EPP	Environment Protection (Air Quality) Policy 2016
SA EPA	South Australian Environment Protection Authority
STP dry basis	Standard Temperature and Pressure (zero degrees Celsius and 101.3 kilo Pascals absolute)
TSP	Total Suspended Particulates
SPMP	Stack Particulate Management Plan

<p><b><u>Monitoring Objective</u></b></p>	<p>All stack particulate emissions events for the reporting quarter, where levels have exceeded the reporting thresholds:</p> <ul style="list-style-type: none"> <li>• 100mg/Nm<sup>3</sup> (1 hour averaging period) on Kiln Stack 4A</li> <li>• 60 mg/Nm<sup>3</sup> (1 hour averaging period) on Precalciner Stack 4B</li> </ul> <p>Particulate Emissions will be reported in a table format providing the following details:</p> <ul style="list-style-type: none"> <li>• date, time and duration</li> <li>• the measured particulate concentration mg/Nm<sup>3</sup> (STP-dry)</li> <li>• immediate actions taken to reduce particulate emissions</li> <li>• cause and corrective actions taken to prevent future reoccurrence</li> </ul>
<p><b><u>Monitoring Plan</u></b></p>	<p>This monitoring report has been prepared in compliance with Stack Particulate Management Plan, approved 18 June 2018, by SA EPA.</p> <p>The Plan is available on the ABC Birkenhead Community Website:  <a href="http://www.birkenheadcommunity.com.au/">http://www.birkenheadcommunity.com.au/</a></p>

## One Hour Stack Particulate Reporting Events

**4A Stack**  
**1 hr > 100mg/Nm3**  
**Rolling 1hr average**

Date	Time start	Time finish	Duration (min)	Magnitude mg/Nm3	Cause	Immediate Actions Taken	Actions Taken to Prevent a Reoccurrence
12/07/2018	15:17	15:34	17	105.5	Excess build-up within the Bypass process	Checked and cleaned the Bypass system	Regular inspection and cleaning to minimise build-up  Feasibility assessment to install blasters to reduce

**4B Stack**  
**1 hr > 60mg/Nm3**  
**Rolling 1hr average**

Date	Time start	Time finish	Duration (min)	Magnitude mg/Nm3	Cause	Immediate Actions Taken	Actions Taken to Prevent a Reoccurrence
12/07/2018	12:17	13:05	48	87	Dislodged baffle plates at the entrance to the Electrostatic Precipitator were found to be the root cause	Turning the 4B Mill back on reduced the emissions to normal levels	This issue has not occurred before. Maintain existing maintenance and inspection program
12/07/2018	22:13	22:42	29	68	Dislodged baffle plates at the entrance to the Electrostatic Precipitator were found to be the root cause	1. Turning the 4B Mill back on reduced the emissions to normal levels  2. Plant turned off the following morning, 13/07/2018 and partially dislodged baffle plates at the entrance to the Electrostatic Precipitator were found and repaired	This issue has not occurred before  Maintain existing maintenance and inspection program
9/08/2018	5:21	5:37	16	68	4B Mill tripped (unforeseen sudden stop causing upset process conditions)	4B Mill re-started	Operate to Process Control Standards