



## Boral Cement Maldon, NSW

### Environmental Protection Licence No. 212

Explanation of units of measure:

mg/m<sup>3</sup> = milligrams per cubic metre

g/m<sup>2</sup>/month = grams per square metre per month

µg/m<sup>3</sup> = micrograms per cubic metre

mg/L = milligrams per litre

NTU = Nephelometric Turbidity Unit

**Record updated on: 22 July 2019**

*Maldon Cement Plant's webpage became live in July 2014. The monitoring data has been uploaded to the internet for public use first time in July 2014 (including historical data back to April 2012) and are updated monthly. This report relates to calendar year 2017 & 2018.*

## 1. Ambient air/dust monitoring

### 2.1 Dust Deposition Gauges

The measurement is expressed as Total Insoluble Matter (g/m<sup>2</sup>-month) (grams/square metre/month).

This test measures the levels of the coarse dust (generated mostly from unsealed roads, raw material handling, open stockpiles, etc.). It is a measure of dust **nuisance** (dust on cars, washings, window panes) in the immediate vicinity of the source, as the heavy dust settles quickly and doesn't travel far. It is not an indication of potential health problems as it doesn't penetrate into the respiratory system due to a large size of dust particles.

**Licence limit:** Not specified.

The NSW State guideline of 4 g/m<sup>2</sup>/month (gram/square metre/month) (presented as 12-month rolling average) was adopted.

	Dust Deposition Gauges (grams per square metre per month as 12-month rolling average)				
	1	4	5	6	7
<b>May 2018</b> Report received 07/06/18 Date published 03 /06/18	3.358	4.90	4.85	3.38	3.42
<b>June 2018</b> Report received 09/07/18 Date published 10 /08/18	3.51	5.18	4.76	3.44	3.46
<b>July 2018</b> Report received 09/08/18 Date published 10 /08/18	3.22	5.38	4.11	3.27	3.64
<b>August 2018</b> Report received 09/08/18 Date published 10 /08/18	3.32	5.67	4.07	3.34	3.96
<b>September 2018</b> Report received 09/10/18 Date published 11 /10/18	2.84	5.58	3.80	3.27	3.85
<b>October 2018</b> Report received 08/11/18 Date published 09 /11/18	2.90	5.47	3.65	3.05	3.77
<b>November 2018</b>	2.99	5.43	3.80	3.15	3.97



Report received 03/12/18 Date published 06/12/18						
<b>December 2018-January 2019</b> Report received 11/02/19 Date published 13/02/19	3.32		5.79	3.87	3.30	4.01
<b>February 2019</b> Report received 07/03/19 Date published 11/03/19	3.36		5.82	3.89	3.37	3.95
<b>March 2019</b> Report received 06/05/19 Date published 07/05/19	-		5.82	3.98	3.47	3.86
<b>April 2019</b> Report received 16/05/19 Date published 07/05/19	-	3.99	5.75	3.74	3.31	3.53
<b>May 2019</b> Report received 20/06/19 Date published 22/07/19	-	3.85	5.28	3.44	3.20	3.38

**Compliance Summary:** The cement plant is NOT compliant with the adopted State guideline value at dust gauge No 4, exceedances reflect limestone gravel movement in Peppertree site, receipt of clinker by trucks. Mitigation process in place by water browser, truck tyre wash and on site water sprayer. Dust gauge no. 1 is under consideration with EPA as the land has been sold to another private entity.

## 2. Water monitoring

Runoff water from the cement works and surrounding agricultural land is captured in various storage dams on site and used as process water. In heavy rain, excess stormwater from the dam called “West Dam A” is allowed to overflow into the Nepean River. The quality of that water is required by the licence to be monitored once per overflow event.

**Licence limits:**

Biological Oxygen Demand: 20 mg/L (milligram/litre)

pH: 6.5-8.5

Turbidity: 150 NTU (Nephelometric Turbidity Unit)

Total Suspended Solids: 30 mg/L (milligram/litre)

Sampling Date	Report received	Date published	Biological Oxygen Demand (mg/L)	Oil and Grease (mg/L)	pH	Turbidity (NTU)	Total Suspended Solids (mg/L)
20.04.15	03.06.15	01.07.15	<5	1.3	8	9.3	16
30.04.15	10.06.15	01.07.15	<5	1.0	7.8	12	6.4
25.06.15	14.07.15	04.08.15	<5	1.5	7.7	6.1	12
05.06.16	14.07.16	04.08.16	<5	0.6	7.5	10	10
22.06.16	14.07.16	04.08.16	<5	1.4	7.4	5.2	3.2
03.03.17	21.03.17	04.04.17	<5	0.5	7.7	9.7	13
15.03.17	24.04.17	03.05.17	<5	1.2	8	13	19
10.06.17	10.07.17	02.08.17	<5	<0.1	7.7	11	12



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### 3. Stack emission monitoring

2016-17: Report Date: 20/11/2017

2017-18: Report Date: 08/08/2018

Assessable Parameter (mg/m <sup>3</sup> ) (milligram/cubic metre)	Licence Limit	2016-17	2017-18
<b>Emission Source: Cement Mill No 2 Stack</b>			
Solid Particles	100	32	23
<b>Emission Source: Cement Mill No 3 Stack</b>			
Solid Particles	100	28	7.7
<b>Emission Source: Dry Mix Plant Dryer</b>			
Solid Particles	30	6.4	24

**Compliance summary:** The cement plant is compliant with the Licence limits.

**REPORT ENDS**