



## 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 04 September 2020

*Maldon Cement Plant's webpage became live in July 2014. The monitoring data has been uploaded to the internet for public use since that time.*

## 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 the large size of dust particles.

**License 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 meter per month as 12-month rolling average)					
	1	2	4	5	6	7
<b>August 2019</b> Report received 18/09/19 Date published 19/10/19	-	3.57	4.58	2.63	2.88	2.54
<b>Sept 2019</b> Report received 17/10/19 Date published 04/11/19	-	3.55	4.57	2.52	2.65	2.46
<b>Oct 2019</b> Report received 18/11/19 Date published 17/12/19	-	3.46	4.69	2.57	2.65	2.36
<b>Nov 2019</b> Report received 17/01/20 Date published 30/01/2020	-	3.43	4.84	2.65	2.65	2.20
<b>Dec 2019</b> Report received 23/01/2020 Date published 06/04/2020	-	3.32	4.76	2.75	2.76	2.28
<b>Jan 2020</b> Report received 19/02/2020 Date published 06/04/2020	-	3.36	4.75	3.13	3.00	2.45
<b>Feb 2020</b> Report received 23/03/2020	-	3.37	4.79	3.44	3.10	2.52



Building something great™

Date published 06/04/2020						
<b>Mar 2020</b>						
Report received 21/04/2020	-	2.92	4.74	3.34	3.03	2.52
Date published 05/05/2020						
<b>Apr 2020</b>						
Report received 18/05/2020	-	2.87	4.62	3.31	2.99	2.58
Date Published 05/06/2020						
<b>May 2020</b>						
Report received 12/06/2020	-	2.79	4.41	3.29	3.01	2.62
Date published 06/07/2020						
<b>Jun 2020</b>						
Report received 21/07/2020	-	2.61	4.02	3.15	2.93	2.56
Date published 05/08/2020						
<b>Jul 2020</b>						
Report received 25/08/2020	-	2.60	3.88	3.13	3.00	2.64
Date Published 04/09/2020						

**Compliance Summary:** Currently all the dust gauges are compliant with state guidelines. A continuous mitigation process in place by water browser, truck tire 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.

	Reported Month	Dust Deposition Gauges (4 Years Data) (grams per square meter per month as at actual tested)					
		1	2	4	5	6	7
1	July 2016	4.51		5.17	10.91	3.77	3.05
2	August 2016	3.37		4.29	13	2.77	5.31
3	September 2016	2.14		2.35	15.99	1.88	2.88
4	October 2016	8.66		4.55	7.3	4.94	2.91
5	November 2016	4.23		3.02	2.72	2.53	4.32
6	December 2016	5.76		4.29	2.63	3.71	3.33
7	January 2017	4.90		3.16	3.03	3.19	4.42
8	February 2017	5.43		6.09	5.12	3.31	4.60
9	March 2017	2.73		1.75	3.42	2.54	2.26
10	April 2017	1.93		2.93	9.96	1.9	4.99
11	May 2017	2.45		4.94	5.6	2.48	1.82
12	June 2017	2.71		2.52	5.54	2.7	2.37
13	July 2017	4.07		5.35	12.85	4.74	3.80
14	August 2017	1.63		4.04	5.35	2.08	1.64
15	September 2017	4.48		5.82	6.11	3.85	3.57
16	October 2017	7.26		4.03	4.1	6.55	3.52
17	November 2017	3.12		5.17	1.68	3.28	4.19
18	December 2017	2.8		3.82	3.66	3.25	4.45
19	January 2018	1.54		2.77	2.14	2.95	3.59
20	February 2018	5.17		3.44	4.33	3.32	4.75
21	March 2018	2.36		10.78	5.31	2.71	2.86
22	April 2018	2.22		4.97	3.59	2.05	2.49
23	May 2018	2.78		6.12	3.48	3.06	3.78
24	June 2018	2.78		6.12	3.48	3.06	3.78
25	July 2018	2.45		7.49	6.07	3.07	5.08



Building something great™

26	August 2018	2.91		7.56	4.92	2.94	5.43
27	September 2018	2.84		4.71	2.78	3.01	2.28
28	October 2018	3.83		2.74	2.31	3.88	2.52
29	November 2018	4.18		4.6	3.48	4.5	6.67
30	Dec18-Jan19	6.76		8.12	4.51	5.08	4.93
31	February 2019	3.84		6.21	4.13	4.18	3.23
32	March 2019		7.70	2.75	3.4	4.19	2.42
33	April 2019		1.55	2.58	1.22	1.36	0.41
34	May 2019		1.85	4.67	1.31	1.19	0.88
35	June 2019		2.89	6.07	2.17	1.56	2.03
36	July 2019		1.87	4.36	1.45	1.01	0.92
37	August 2019		2.72	3.59	2.18	1.77	1.63
38	September 2019		1.92	4.56	1.56	0.39	1.40
39	October 2019		1.98	4.12	2.82	3.92	1.45
40	November 2020		4.43	6.2	4.44	4.51	4.85
41	December 2020		2.11	3.9	3.81	3.95	3.26
42	January 2020		6.21	7.93	9.04	7.99	6.90
43	February 2020		5.25	6.76	7.85	5.36	4.07
44	March 2020		2.21	2.18	2.22	3.29	2.47
45	April 2020		0.97	1.15	0.86	0.99	1.04
46	May 2020		0.95	2.06	1.03	1.39	1.37
47	June 2020		0.70	1.37	0.49	0.60	1.33
48	July 2020		1.78	2.69	1.24	1.79	1.88



### 3. 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 license 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)
30.04.15	10.06.15	01.07.15	<5	1.0	7.8	12.0	06.4
25.06.15	14.07.15	04.08.15	<5	1.5	7.7	06.1	12.0
05.06.16	14.07.16	04.08.16	<5	0.6	7.5	10.0	10.0
22.06.16	14.07.16	04.08.16	<5	1.4	7.4	05.2	3.2
03.03.17	21.03.17	04.04.17	<5	0.5	7.7	09.7	13.0
15.03.17	24.04.17	03.05.17	<5	1.2	8.0	13.0	19.0
10.06.17	10.07.17	02.08.17	<5	<0.1	7.7	11.0	12.0
11.08.20	31.08.20	02.09.20	<5	0.4	7.8	-	12.0

### 4. Stack emission monitoring

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

2018-19: Report Date: 11/11/2019

Assessable Parameter (mg/m <sup>3</sup> ) (milligram/cubic metre)	License Limit	2017-18	2018-19
<b>Emission Source: Cement Mill No 2 Stack</b>			
Solid Particles	100	23	19
<b>Emission Source: Cement Mill No 3 Stack</b>			
Solid Particles	100	7.7	26
<b>Emission Source: Dry Mix Plant Dryer</b>			
Solid Particles	30	24	10.55

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

**REPORT ENDS**