# **Boral Cement Maldon, NSW**

# **Environmental Protection Licence No. 212**

Explanation of units of measure:

mg/m3 = milligrams per cubic metre

g/m2/month = grams per square metre per month

μg/m3 = micrograms per cubic metre

mg/L = milligrams per litre

NTU = Nephelometric Turbidity Unit

**Record updated on: 17 December 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 the calendar year 2017 & 2018.*

## ***Ambient air/dust monitoring***

### **2.1 Dust Deposition Gauges**

The measurement is expressed as Total Insoluble Matter (g/m2.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/m2/month (gram/square metre/month) (presented as 12-month rolling average) was adopted.

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| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Dust Deposition Gauges (grams per square meter per month as 12-month rolling average)** | | | | |
| **1** |  | **4** | **5** | **6** | **7** |
| **October 2018**  Report received 08/11/18  Date published 09 /11/18 | 2.90 |  | 5.47 | 3.65 | 3.05 | 3.77 |
| **November 2018**  Report received 03/12/18  Date published 06/12/18 | 2.99 |  | 5.43 | 3.80 | 3.15 | 3.97 |
| **December2018-Januanry2019**  Report received 11/02/19  Date published 13/02/19 | 3.32 |  | 5.79 | 3.87 | 3.30 | 4.01 |
| **February 2019**  Report received 07/03/19  Date published 11/03/19 | 3.36 |  | 5.82 | 3.89 | 3.37 | 3.95 |
| **March 2019**  Report received 06/05/19  Date published 07/05/19 | - |  | 5.82 | 3.98 | 3.47 | 3.86 |
| **April 2019**  Report received 16/05/19  Date published 07/05/19 | - | 3.99 | 5.75 | 3.74 | 3.31 | 3.53 |
| **May 2019**  Report received 20/06/19  Date published 22/07/19 | - | 3.85 | 5.28 | 3.44 | 3.20 | 3.38 |
| **June 2019**  Report received 18/07/19  Date published 08/08/19 | - | 3.80 | 5.23 | 3.30 | 3.18 | 3.26 |
| **July 2019**  Report received 15/08/19  Date published 10/09/19 | - | 3.69 | 4.94 | 2.88 | 2.99 | 2.88 |
| **August 2019**  Report received 18/09/19  Date published 19/10/19 | - | 3.57 | 4.58 | 2.63 | 2.88 | 2.54 |
| **Sept 2019**  Report received 17/10/19  Date published 04/11/19 | - | 3.55 | 4.57 | 2.52 | 2.65 | 2.46 |
| **Oct 2019**  Report received 18/11/19  Date published 17/12/19 | - | 3.46 | 4.69 | 2.57 | 2.65 | 2.36 |

**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, receive of clinker by trucks. 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.

## ***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)** |
| 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 |

## ***Stack emission monitoring***

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

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

|  |  |  |  |
| --- | --- | --- | --- |
| **Assessable Parameter (mg/m3)** (milligram/cubic metre) | **License Limit** | **2017-18** | **2018-19** |
| **Emission Source: Cement Mill No 2 Stack** | | | |
| Solid Particles | 100 | 23 | 19 |
| **Emission Source: Cement Mill No 3 Stack** | | | |
| Solid Particles | 100 | 7.7 | 26 |
| **Emission Source: Dry Mix Plant Dryer** | | | |
| Solid Particles | 30 | 24 | 10.55 |

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

**REPORT ENDS**