



Boral Chinderah Concrete Batching Plant

Annual Review

2023-2024

Document Control					
Version	Prepared by	Date	Distribution		
	Carlo Dela Cruz		NSW Department of Planning and		
1	Environment Business Partner - QLD Boral Australia	29/07/2024	Environment		

Table 1. Annual Review

Name of Operations:	Boral Concrete Chinderah Batching Plant			
Name of Operator:	Boral Resources (QLD) Pty Ltd			
Development Number:	DA 76-02-2003-i			
Name of Holder of Development Number:	Boral Resources (QLD) Pty Ltd			
Annual Review start date:	01 July 2023			
Annual Review end date:	30 June 2024			
Concrete Tweed (Chinderah) Batching Plant for the period of 1 st of July 2023 to the 30 th June 2024 and that I am authorised to make this statement on behalf of Boral Resources (QLD) Pty Ltd.				
authorised to make this statement on behalf of Boral Resource	s (QLD) Pty Ltd.			
	-			
authorised to make this statement on behalf of Boral Resource	s (QLD) Pty Ltd.			
authorised to make this statement on behalf of Boral Resource Name of authorised reporting officer Title of authorised reporting officer	Nathan Barell			





Contents

1. Statement of compliance	2
2. Introduction	
3. Approvals	
4. Operations Summary	
5. Actions required from previous Annual Review	
6. Environmental Performance	7
7. Community	10
8. Independent Audit	
9. Incidents, Non-compliances and Reporting	10
10. Activities to be completed in the next reporting period	





1. Statement of compliance

This section of the annual report incorporates a statement of compliance in relation to conditions prescribed in the DA 76-02-2003-i.

Table 2. Statement of Compliance

table 2. Statement of Compilation				
Were all conditions of the relevant approval(s) complied with?				
DA 76-02-2003	Yes			

Compliance status key for table 3.

Risk level	Colour code	Description	
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence.	
Medium	Non-compliant	Non-compliance with: • Potential for serious environmental consequences, but is unlikely to occur; or • Potential for moderate environmental consequences, but is unlikely to occur.	
Low	Non-compliant	Non-compliance with: Potential moderate environmental consequences, but is unlikely to occur; or Potential for low environmental consequences, but is unlikely to occur.	
Administrative non-compliance	Non-compliant	Only to be applied where the non- compliance does not results in any risk of environmental harm.	

2. Introduction

Boral Resources (Qld) Pty Ltd (**Boral**) operate a concrete batching plant at Lot 16 on DP249122 located on Ozone Street, Chinderah, New South Wales (**refer to Figure 1 – Site Location Plan**). The site operates under the Development No. 76-2-2003-I that was lodged with the NSW Department of Planning on 11 March 2003.







Figure 1 – Chinderah Concrete site Location Plan





The concrete batch plant operations are limited to a maximum of 50,000 tonnes of concrete per annum in accordance with condition 1.4 of the Development Consent. Refer to **Figure 2** — **Site Layout Plan** for an overview of the layout of the concrete batch plant.



Figure 2 - Site Layout Plan

The approved operations hours are 6am to 6pm Monday to Friday and 6am to 2pm on Saturdays in accordance with condition 2.9 of the Development Consent.

The plant is described as a front-end loader facility where aggregates (gravel and sand) are transferred from holding bins via a front-end loader and deposited into weigh bins. The weigh bins measure the material and transfer it to the truck mounted agitator via a conveyor system. No crushing or grinding of aggregates occurs on site.





Cement and fly ash components are weighed directly into a three (3) tonne capacity cement weigh bin located directly below the storage silo discharge points.

The loading process begins with approximately 90% of the batch water and the additives being dispensed into the truck mounted agitator via a discharge pipe in the load hopper (at the end of the load conveyor). As the aggregate and sand on the belt feed into the agitator, cement and fly ash are uniformly fed into the load hopper.

The entire discharge process is computer controlled and is set up so that approximately 5% of the aggregate and sand is fed into the agitator before cement discharge begins and cement discharge ends with 5% of the aggregates and sand still to be discharged. This process minimises dust generation and the dust extraction shroud, which surrounds the load hopper and rear of the agitator bowl, captures any dust that does escape. On completion of the discharge of aggregates, sands and cementitious material, the final 10% of batch water is added to achieve the desired consistency and moisture 'slump' which also serves the purpose of washing in any material on the rear fins.

On completion of loading, the agitator truck pulls out from under the loading sock and proceeds to the slump stand.

Delivery trucks containing cement and aggregates will enter the site from Ozone Street. Aggregate deliveries will proceed to the aggregate storage and loading area that accepts reverse delivery of materials directly into the storage bins. Cement and fly ash deliveries will proceed around the site to a position adjacent to the loading area and pneumatically deliver material into the silos.

Agitators on return from a delivery will proceed to the active drying bay (one (1) of three (3)) for cleaning of residual material in the drum. If a truck is already in the drying bay agitators will park and wait in the truck parking spaces provided. Once cleaned, the agitators proceed to the loading area where concrete is loaded and the product is dispatched off-site.

This report has been provided in accordance with Schedule 2, Condition 3.3 of DA 76-02-2003-i issued by the NSW Department of Planning on 18 June 2003, for the period 1 July 2023 to 30 June 2024. Condition 3.3 states:

Within 12 months of operation of the development, and after each subsequent year, the applicant shall submit an **Annual Environmental Management Report** which:

- a) Includes a detailed summary of all complaints received during the past year;
- b) Includes a detailed summary of monitoring results for the past year and an assessment of these monitoring results against the relevant impact assessment criteria;
- c) Identify any non-compliances during the previous year; and
- d) Describe what actions are being taken to ensure compliance.





3. Approvals

Currently the Chinderah Concrete plant operates under the following approvals.

Table 5. Chinderah Approvals.

Approval	Date
DA 76-2-2003-i	2003
Environmental Management Plan	March 2020

No changes to approvals or management plans have occurred during this annual period.

4. Operations Summary

Concrete Operations

Table 6 below provides the production volumes for the period between July 2023 and June 2024. In total, the batching plant produced 3,154 tonnes of concrete which is below the anticipated production volume of 20,592 tonnes.

Table 6 Annual Production totals

Material	Approved Limit (DA 76-02-2003-i)	Previous reporting period (1/07/22–30/06/23)	This reporting period (01/07/22–30/06/23)	Next reporting period (01/07/24-30/06/25)
Concrete	50,000 Tonnes	9,286.6 tonnes	3,154 tonnes	31,200 tonnes

The next 12 months (July 2024 – June 2025) forecasted volume is expected to be around 31,200 tonnes. However, this would be subject to change based on market and customer demand.

Next Reporting Period

No significant changes are expected in the next reporting period. No infrastructure upgrades are currently planned.





5. Actions required from previous Annual Review

Previous AEMR has been made publicly available through Boral's website. A copy of the 2022-2023 AEMR can be accessed at https://www.boral.com.au/locations/boral-concrete-chinderah.

6. Environmental Performance

The site continues to complete its Environmental Permit Planner (an environmental checklist) monthly to ensure all environmental controls are being implemented effectively and to identify any issues that were not previously picked up. Any environmental hazards, incidents or community complaints are tracked via Boral's incident management system, which includes investigation, corrective actions and an escalation process to ensure timely close out of actions.

Water Management

The site continues to operate its water management infrastructure as designed. Upgrades to the water management systems in previous years has allowed the site to capture a higher design capacity resulting in fewer releases from site. A revised management plan implemented in the 2019-2020 period has allowed the site to manage water effectively, resulting in no non-compliances with water discharge during the period. Water results for the period have been provided in table 7.

Air Management

No changes to air management controls have been made during the reporting period. Directional sprayers are currently installed and adjusted as required.

Noise Management

During the annual period, there was limited operation. However, the site continues to utilise the sites EPP to achieve compliance with all environmental aspects including noise.

Waste Management

No changes to waste management have occurred during the reporting period.

Environmental Monitoring

Environmental monitoring required by the approved Environmental Management Plan includes:





- Water, Section 4.1
- Air (dust and odour), Section 4.2 and;
- Noise, Section 4.3

No air (dust and odour) or noise monitoring was undertaken during the period as there were no community complaints or requests from the Department to undertake monitoring.

Water monitoring was required during the reporting period and is summarised below, as per section 4.1 *Table 2 – Surface Water Release Limits*.

Table 2 – Surface Water Release Limits							
Release Location	Quality Characteristic	Limit	Limit Type	Minimum Monitoring Frequency			
Release point R1 and R2	pН	6.5 – 9.0	Range	Monthly upon discharge			
	Suspended solids	50mg/L	Maximum	Once every three (3) months during discharge			
	Oil, grease and hydrocarbons	No visible sheen in the discharge (<10mg/L)	Maximum	Monthly upon discharge			
	Solid litter	No observable litter discharged	Maximum	Monthly Upon discharge			

Release points locations are inspected by Boral staff following significant rainfall across the region and sampled if discharge occurs. During this period, water discharge was reported to have occurred through the approved release locations with results presented in table 7 below. This monitoring is discussed in section 9.

There were no non-compliant results for water discharge in the reporting period.

Table 7. Discharge water monitoring results.

Discharge Location	Date	рН	TSS (<50mg/L)	Visible oil or grease	Visible Litter
RP1	05/12/2023	7.55	<5	Nil	Nil

On comparing previous year results, site water infrastructure upgrades, improved environmental monitoring, and changes to water management processes has significantly improve water discharge quality. Changes to infrastructure have increased the overall water





holding capacity of site resulting in reduced discharge events. The large storage capacity enables the site to conduct controlled releases of excess what to ensure water quality limits are met prior to any discharge offsite.

Figure 3 and 4 compares the monitoring results undertaken over a 5-year period at site.

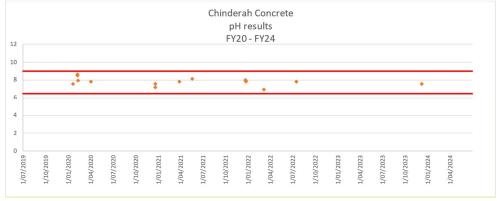


Figure 3. Chinderah Concrete pH monitoring results July 2019 - June 2024

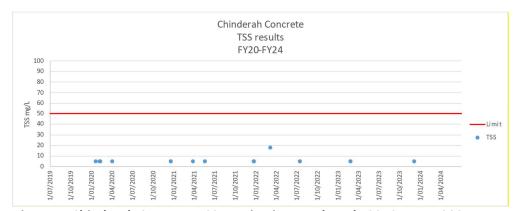


Figure 4. Chinderah Concrete TSS monitoring results July 2019 - June 2024

Assessing results from previous years, suspended solid results have dramatically decreased to less than the limit of reporting which is <5mg/L. This is attributed to changes in infrastructure and process which has allowed the site to store more water within pits and water tanks.

pH results over the previous years have also decreased and are more consistent. The pH results are averaging 7.8 and the reduction of pH over the previous years can be attributed to reducing the contaminated area through site reconfiguration and infrastructure upgrades, resulting in most of the water being captured within the site storages as fresh surface water runoff and less contaminated water.





7. Community

Environmental incidents and associated complaints for Boral's Chinderah Concrete Plant are reported and tracked in Boral's incident management system. All complaints received, and/or any employee becoming aware of an incident with actual or potential environmental implications, are reported to the Production Manager immediately in accordance with Boral's HSEQ incident management procedures. Throughout the period no community complaints have been received.

8. Independent Audit

During the period no independent party audit was undertaken nor was one requested by the Director-General as per condition 3.4 of DA 76-2-2003-i.

9. Incidents, Non-compliances and Reporting

Water monitoring exceedances:

There were no non-complaint discharges during this reporting period.

Incidents and Reporting

There were no incidents recorded during this reporting period.

10. Activities to be completed in the next reporting period

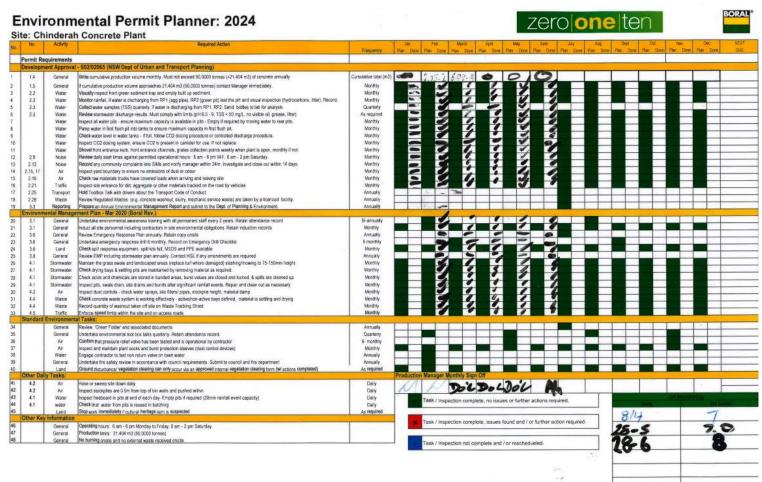
Boral will continue to inspect and monitor the environmental performance. Environmental monitoring of water discharge will continue to measure the effectiveness of the controls that have been implemented.

The site will continue to complete its Environmental Permit Planner (an environmental checklist) monthly to ensure all environmental controls are being implemented effectively and to identify any issues that were not previously picked up. Any environmental hazards, incidents or community complaints are tracked via Boral's incident management system, which includes investigation, corrective actions, and an escalation process to ensure timely close out of actions.





Appendix 1.
Environmental Permit Planner 2024







Environmental Permit Planner 2023

