

Our ref: Berrima Cement Facility (DA401-11-2002-i-Mod-14)

Ms Kate Jackson
Head of Property Planning & Approvals
Boral Cement Limited
Level 18, 15 Blue Street
North Sydney NSW 2006

4 May 2022

Subject: Response to Submissions – Department of Planning and Environment Issues

Dear Ms Jackson

I refer to the Department of Planning and Environment's (Department) request for a response to issues raised in government advice dated 28 April 2022 for the proposed modification to the Boral Cement Facility, Berrima (DA401-11-2002-i-Mod-14).

The Department has now finalised its review of the modification application and government advice received and requires additional information on several aspects of the proposal, which are outlined in **Attachment 1** to this letter.

As previously advised, the Department is yet to receive advice from Wingecarribee Shire Council, the Environment Protection Authority and the Department's Water Group. Once received, the Department will notify you, the advice will be published on the Department's website and you will be required to respond to any additional issues raised in a consolidated response.

Please provide a consolidated response to all issues raised by **15 June 2022**. If you are unable to meet this timeframe, please provide and commit to an alternate timeframe to provide the response.

Please lodge your response by progressing the application on the NSW planning portal <https://majorprojects.planningportal.nsw.gov.au/>.

If you have any enquiries, please contact Sally Munk, Principal Planner, Industry Assessments, on 9274 6431 or via email at sally.munk@planning.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Joanna Bakopanos'.

Joanna Bakopanos
Team Leader
Industry Assessments

ATTACHMENT 1 – Department's Issues

1. Community and Stakeholder Consultation

Covid-19 Restrictions on Consultation

It is noted that the Community Liaison Group (CLG) has been unable to meet due to Covid restrictions since December 2020 and face-to-face communication with the community has been limited for the same reasons.

Recommendation: Now that restrictions have been eased, please advise when the CLG will next meet, confirm this will continue to occur bi-annually as per the requirements of the consent (condition 5.4). Please also provide details of any additional community engagement that has been done since restrictions were lifted, including details of any issues raised during any of this engagement and how Boral is addressing any issues raised.

Please advise when the first of the community drop-in sessions (refer Table 3) is proposed to be held and if these sessions will be in addition to the 'Whole of Community' meetings held annually.

2. Modification Description

Consumption Limits

Section 3.1 of the Statement of Environmental Effects (SEE) outlines the proposed changes to the consumption limits in the consent and also notes the energy (measured in Gigajoules (Gj)) provided by coal versus solid waste derived fuel (SWDF). It is noted that the proposed modification does not include any change to the limit on the use of coal.

Recommendation: Noting the difference in energy provided by one truck load of coal (700Gj) versus one truck load of SWDF (450 Gj), please confirm the net reduction in the volume of coal to be consumed in the kiln given the proposed increase in the use of SWDF from 100,00 to 250,000 tonnes per annum (tpa) and the proposed standalone caps for woodchips (150,000tpa) and chipped tyres (AKF5) (30,000tpa).

Woodchips

The proposed modification seeks to remove woodchips from the combined cap of 100,000tpa for non-standard fuels in the consent and establish a standalone cap of 150,000tpa of woodchips, including sawdust. The impact assessments have not included the additional fugitive dust emissions, truck movements, noise or greenhouse gas emission (GHG) impacts from the standalone cap of 150,000 tpa for woodchips.

The source of the sawdust has not been stated and whether the sawdust would be an eligible waste fuel.

Recommendation: All impact assessments for air quality, noise, traffic and GHG must be revised to include the impact of the proposed standalone cap of 150,000tpa of woodchips.

Details of the source of the sawdust waste is required (i.e. will it be sourced from native forest or forestry operations) and confirmation that this fuel will meet the definition of an eligible waste fuel as per the EPA's 'Eligible Waste Fuel Guidelines'.

New Site Access and Intersection

The supporting impact assessments identify a road and powerline easement and previous railway works that have been undertaken in the vicinity of the proposed new haul road. The biodiversity assessment also notes the alignment has been designed to avoid areas of native vegetation. The plans do not provide sufficient detail to demonstrate the road alignment in relation to the existing easements, previous railway works and area of native vegetation.

Recommendation: Please provide a plan of the proposed haul road that clearly shows all existing constraints along and adjacent to the proposed new site access road alignment, including easements, areas of native vegetation and watercourses etc. The plan should include the location and details of any culverts.

Storage and Handling Facilities

The design drawings in Appendix A of the SEE show two areas shaded red and one new building shaded orange, labelled as 'solid waste storage' and/or 'solid waste delivery'. The dimensions of the larger of these buildings is marked as 30x55m, which does not align with the dimensions in Table 8 of the SEE. The dimensions of shed 2 as outlined in Table 8 also do not appear to be correct (0.7m wide x 1.63m long x 0.5m high).

Details of the proposed construction materials and methodology for the sheds has not been provided.

Recommendation: Please provide further details to confirm the use, scale, construction materials, design (e.g. will they be pre-fabricated) and activities to be carried out in all new buildings. A key should also be provided on the design drawings to clarify the use of red and orange shading.

3. Statutory Requirements

Environment Protection Licence (EPL)

Section 4.2.3 of the SEE states that there are no conditions in the EPL that require amendment to accommodate the proposed modification. The Department notes that licence condition O6.3 sets annual volume limits for AKF 5, wood waste and refuse derived fuel (RDF) and licence O6.4 restricts the combined annual usage of AKF5, wood waste and RDF to 100,000tpa, and no greater than 40% total fuel mass.

Recommendation: Please provide further details of the relevant changes that would be required to the EPL to ensure it is consistent with the consent, if the modification were to be approved.

Biodiversity Development Assessment Report (BDAR)

The Department has consulted with the Environment Agency Head of the Biodiversity Conservation Division (BCD) in relation to its consideration of whether a BDAR is required or whether it is satisfied the modification will not increase the impact on biodiversity values (clause 30A of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*).

Recommendation: Please note that the Environment Agency Head has not provided its position at this time. The Department will forward this advice as soon as it is received. The Department will subsequently confirm whether the proposed development requires a BDAR.

Water Management Act 2000

Section 4.2.6 of the SEE states that no works are proposed within 40 metres (m) of a watercourse. However, Figure 2 of the SEE shows that the proposed new access road would cross over a tributary of Oldbury Creek.

Recommendation: Further consideration of any requirements under the *Water Management Act 2000* is required.

4. Air Quality Impact Assessment (AQIA)

Truck Movements

Table 2 of the AQIA provides a summary of the proposed truck movements associated with the modification upon which the assessment of fugitive dust emissions has been carried out. This has not included the additional truck movements associated with the receipt of 150,000tpa of woodchips.

Recommendation: The AQIA should be revised to account for the fugitive emissions generated by the additional truck movements from the delivery of up to 150,000tpa of woodchips to the site.

Receptors

Figure 4 shows the nearest sensitive receptor locations, but it is not clear what type of receptors these represent or the address of each receptor.

Recommendation: Please provide addresses of all receptors and identify the type of each receptor (e.g. residential, commercial).

Cumulative Impacts

Section 3.4 of the AQIA states that there are no operations nearby of any scale that would have the potential to contribute to particulate matter (dust) emissions at a scale of any significance. However, the Department notes that the recently approved Brickworks facility (SSD-10422) to the east of the site has the potential to generate dust emissions once operational. The AQIA carried out for the Brickworks SSD application considered the contribution of dust emissions from the Boral Cement Facility, Austral Bricks Quarry and Austral Masonry Plant as well.

Recommendation: The cumulative impact assessment should be revised to include the potential contribution of fugitive dust emissions from the approved Brickworks facility and any other approved, but not yet constructed developments in the vicinity of the site.

Dust Complaints

Section 3.6 of the AQIA notes that a review of dust complaints made to the cement works since June 2019 showed a total of 90 complaints between June 2019 and May 2021, comprising a significant number of nuisance related complaints in relation to cement dust on cars.

Recommendation: The Department notes this is a significant number of complaints and requests that Boral advise how this issue is being addressed.

Dust Emissions Estimation

Section 5.1 of the AQIA states that the dust emissions estimation was based on modelling truck movement data obtained from monitoring site access truck data for a two-month period of representative operations. It is not clear if this represents a worst-case operational scenario.

Recommendation: Please confirm if the modelling undertaken represents a worst-case operational scenario. If this does not represent a worst-case assessment, a worst-case assessment should be carried out.

Dispersion modelling

Section 7.1 provides the results of the dispersion modelling, which includes contour plots for the predicted incremental dust emissions for the existing and proposed operational scenarios. There is no actual data presented for each receptor location.

The results of the cumulative impact assessment have been provided for receptor R1 only.

Recommendation: For transparency, the predicted incremental and cumulative ground level concentrations should be provided (as a table) for all receptors assessed for both the existing and proposed operational scenarios.

Further commentary should also be provided to explain why background levels exceed the criteria in some instances for the representative modelled year (2017). Further commentary around the contemporaneous assessment of cumulative impacts should be provided to confirm the proposed modification will not result in any additional days exceeding the relevant criteria.

Surface Silt Loading Estimations

Section 7.1 of the AQIA states that there is some uncertainty about the surface silt loading assumed in the emissions estimation. The AQIA recommends samples are taken of silt loading across the plant sealed roads to verify silt loading across plant sealed roads.

Recommendation: Any uncertainty in the assessment should be addressed prior to determination. Boral is requested to carry out sampling of the surface silt loadings on sealed roads to provide a more robust assessment of air quality impacts.

5. Traffic Impact Assessment (TIA)

Transport for NSW (TfNSW)

The Department notes that TfNSW has raised several queries regarding the TIA and has requested additional information on these matters.

Recommendation: The Department concurs with the issues raised by TfNSW and requests that Boral respond to all issues raised by TfNSW.

Vehicular Impacts

Table 6 of the TIA outlines the total existing and proposed truck movements per day and refers to the energy densities of coal and SWDF as the basis by which the total truck movements have been calculated.

Recommendation: Base calculations for the estimated truck movements presented in Table 6 are required. This should clearly state the predicted reduction in the volume of coal and the corresponding increase in the volume of SWDF and other non-standard fuels delivered to the site with respect to total truck movements.

The calculations should include all fuel deliveries, including coal, AKF5, SWDF and woodchips, which are proposed to change as a result of the modification.

Trip Assignments

Section 4.4 of the TIA states the following: *“the existing heavy vehicle volumes using Taylor Avenue at the intersection of Old Hume Highway / Taylor Avenue / Medway Road” ... “are less than Boral’s currently approved limit of an average of 26 heavy vehicles during the peak hour.” ... “As such, it is assumed that all existing heavy vehicle trips using Taylor Avenue at the subject intersection will be replaced by post-development generated trips.”*

It is not clear what is meant by this statement.

Recommendation: Please clarify what it meant by the above-stated assumption made on post-development generated trips and trip assignments.

Sight Distance Assessment

Section 5.1 of the TIA provides an analysis of safe intersection sight distances (SISD) for the proposed new site access road off the Old Hume Highway. Table 13 provides the SISD calculations and notes a review of images has been carried out. However, a plan of this analysis has not been provided to demonstrate the SISD requirements can be met.

Recommendation: A plan of the proposed new intersection is required that shows the SISD can be achieved for both northbound and southbound traffic. Confirmation and justification of the relevant mitigation measures should be provided, i.e. confirm if a STOP sign or GIVE WAY sign is required. If signage is required, evidence of support from Wingecarribee Shire Council, as the relevant roads authority, should be provided.

Construction Traffic Assessment

Section 6.2 of the TIA provides an assessment of construction traffic impacts. It is noted in this intersection that the modification involves the construction of only one shed. However, the proposed modification description in the SEE includes two storage sheds.

Recommendation: The construction traffic assessment should be revised to include the impacts of the proposed construction of two storage sheds.

Civil Drawings

Appendix F of the TIA provides concept civil drawings of the proposed new site access road intersection with the Old Hume Highway. The drawing package does not include any design drawings of the proposed new haul road between the intersection and site fuel storage facilities.

Recommendation: Concept design details of the full length of the access road should be provided, noting in particular how the watercourse crossing (tributary of Oldbury Creek) will be designed.

6. Noise Impact Assessment (NIA)

On-Site Traffic Noise

Table 9 of the NIA provides the predicted existing and proposed on-site intrusive noise impacts from on-site traffic movements at the nearest residences on Taylor Avenue. Table 9 states that compliance is achieved at all locations, despite the predicted noise levels exceeding the established noise targets at these locations.

Recommendation: Further commentary is required to explain how compliance is achieved at these locations when the predicted impacts exceed the noise target by up to 1dB during the day (4 Melbourne Street) and between 2dB to up to 7dB at night.

Off-Site Traffic Noise

Table 10 of the NIA provides the existing and proposed base traffic flows on the arterial road network for the daytime and night-time traffic noise assessment periods. The Department notes that Table 10 indicates the following:

- for Taylor Avenue:
 - an increase in light vehicle operating flows from 1858 to 2264 in the daytime period
 - a reduction of 391 heavy vehicles during the daytime period
 - a reduction of 35 heavy vehicles during the night-time period
- for Old Hume Highway
 - no light or heavy vehicle flows on Old Hume Highway during the daytime or night-time periods.

This data appears to be inconsistent with the traffic data presented in the TIA. The trip assignments in the TIA indicate that there would be a reduction of heavy vehicle movements from 317 to 128 (a total of 189 movements) on Taylor Avenue each day with a corresponding increase of 202 heavy vehicle movements on the Old Hume Highway as a result of the modification.

Recommendation: The Department requires further clarification on how these numbers relate to the anticipated operational traffic impacts and trip assignments identified in the TIA, which states there will be no change in light vehicle traffic movements, an increase of only 13 heavy vehicles per day from 317 to 330 movements and an increase in the number of heavy vehicles using the Old Hume Highway as a result of the proposed modification. The TIA and NIA should be based on a consistent set of data.

Noise Receivers

The NIA notes that the receivers of interest for the noise assessment are those in New Berrima on Taylor Street, two receivers on the Old Hume Highway and one receiver on Medway Street. The exact locations of these receivers have not been provided.

Recommendation: Details of the identified receivers should be provided, including address and exact location on a plan.

7. Aboriginal Cultural Heritage Due Diligence Assessment

Site Photographs

Section 2.5 of the Due Diligence Assessment provides a series of photographs of the site and surrounds taken during the visual inspection (Figures 2.5 – 2.8). The exact location and aspect of these photographs is not clearly described.

Recommendation: Please provide a plan that clearly shows where these photos have been taken and the direction in which each photo was taken.

Exempt Activity

The Due Diligence Assessment concludes that the SSD modification is exempt from the provisions of the *National Parks and Wildlife Act 1974* (NPW Act). However, Table 2.1 of the assessment states that the activity is not an exempt activity listed in the NPW Act or other legislation.

Recommendation: Further commentary is required to justify the conclusion made in the Due Diligence Assessment.

8. Greenhouse Gas (GHG) Assessment

Key Operational Changes

Table 2 of the GHG Assessment outlines the key operational changes proposed as part of the modification. The table presents some data as ‘trucks per annum’ and others as ‘trucks per day’. Consistency in the data is required to enable a clear comparison between the existing and proposed operational changes.

It is also noted that the proposed use of up to 150,000tpa of woodchips has been excluded from the analysis, as such GHG impacts may be underestimated.

Table 10 and Table 13 of the GHG Assessment indicate that there would be no change in the volume of AKF5 combusted at the site as a result of the modification. This should be clarified, as the consent currently limits AKF5 to a total of 30,000tpa as part of the overall cap of 100,000tpa for non-standard fuels. Therefore, the proposal to remove this fuel from the consolidated cap

would result in an increase of GHG emissions from the additional AKF5 combusted under the standalone cap of 30,000tpa proposed in the modification.

Section 4 provides a brief discussion of the outcomes of the assessment for Scope 1, 2 and 3 GHG emissions. Insufficient detail has been provided to demonstrate how the final emission estimates have been derived.

Recommendation: The GHG Assessment should be revised to include comparable data for the existing and proposed key operational changes (Table 2), including the proposed 150,000tpa of woodchips proposed to be used as a fuel in Kiln 6 and the removal of this fuel type and AKF5 from the overall non-standard fuel cap of 100,000.

A detailed discussion and analysis of the overall Scope 1, 2 and 3 GHG emissions should be provided, which includes an overall summary of existing GHG emissions compared to proposed GHG emissions and how the net benefit of 224,000 tonnes CO₂-e has been calculated.

9. Water Quality Assessment

Drinking Water Catchment Assessment Requirements

The Department notes that WaterNSW have raised a number of concerns regarding the assessment of water quality impacts associated with the modification.

Recommendation: The Department concurs with the issues raised by WaterNSW and requests these matters be addressed.

10. Summary of Mitigation Measures

Commitment to Mitigation Measures

The Department notes that some of the mitigation measures in Table 26 are written as recommendations, and not as commitments by Boral.

Recommendation: The terminology used to describe the mitigation measures identified in Table 26 should clearly demonstrate that Boral is committed to carrying out these mitigation measures.

11. Other Issues

1. The third column of Table 7 provides data on total truck movements per day. Please confirm if this is an error and this column should be trucks per hour.