

Community Liaison Group Meeting

Meeting Notes



Berrima Cement Works

Meeting date	1 April 2022
Meeting location	Berrima Cement Works
Community attendees	<ul style="list-style-type: none">• Clive West, Berrima resident and Berrima Resident Association representative• Andrew Wood, New Berrima resident• Barry Arthur, Environment Manager, Wingecarribee Shire Council
Boral attendees	<ul style="list-style-type: none">• Greg Johnson, Environmental Sustainability Manager, Boral Cement• Rachel Snape, Senior Planning and Approvals Manager NSW/ACT• Jason Chandler, Head of Innovation Research and Development• Kate, Woodbridge, Stakeholder Relations Manager NSW/ACT
Apologies	<ul style="list-style-type: none">• Dean Beltrame, Operations Manager Berrima
Distribution	Boral Cement Works Berrima website (www.boral.com.au/locations/boral-cement-works-berrima) Email to members
Disclaimer	These notes are taken from presentations and conversations which formed part of this meeting. The content of this document, while reflecting an accurate summary of proceedings, should not be taken to represent exact dialogue unless specifically minuted as such.

Meeting commenced 10am

Welcome Participants were welcomed to the meeting.

Matters arising from previous meeting

- Facilitate access to Boral-owned land in Remembrance Driveway Grove for tree inventory – Awaiting invitation from the Berrima Residents Association or Boral to attend the next meeting.
- Nominate Boral representative to Remembrance Driveway Grove Management Committee – As above

- Arrange meeting to review environmental viability of habitat corridor proposal – will be discussed during the meeting.
- Discuss outcomes of Boral meeting on commitment to habitat corridor proposal – will be discussed during the meeting.

Operations summary

The 26-day annual maintenance overhaul of the kiln was completed in February. This was a big effort for the shutdown team and included over 300 support contractors on site during that time.

The shutdown did have some safety incidents, one event unfortunately resulting in a contractor worker needing to be taken to hospital however, the worker is now at home and thankfully making a good recovery.

The company continues with EBA negotiations. This has included several protected industrial action events.

Two long standing employees (with over 80 years' service between them) retired in January.

Two new employees joined the Berrima team in the new year.

Extensive wet weather has caused several operating challenges in particular frequent plant blockages and safety hazards.

The operation has secured/executed a further new contract with Benedicts for solid waste derived fuels (specifically wood waste).

The operation is currently experiencing impacts of the very high world commodity prices specifically for coal and oil.

Boral has commenced civil works on the chloride bypass system. The project should be completed by around March 2023 and will allow the cement works to take in a wider range of solid waste derived fuels into the kiln.

Environmental works update

Boral has had an Independent Annual Non-Standard Fuels Audit completed in Jan 2022. There were no non-compliances for the site and the report is available online.

The six Monthly Pollutant Tracking Report has been completed which is part of our consent planning and is also available online

Berrima is consented to use tyres as a fuel for the kiln (up to 30,000 tonnes a year). Boral has been considering how to add the fuel into the plant however as it not ideal for tyres to go through the current

process due to magnets in the shed. A trial has been approved by EPA and DPIE and was first run over 27th and 28th January 2022.

Boral has sourced a supplier who is removing the metal from tyres before delivery. Boral is currently working on modifying our consent to permit external storage of the tyre chips as per NSW Fire and Rescue guidelines. We will be storing less than 100 tonnes at any one time, and they will be held in concrete bunker bays and fed onto the conveyor into the kiln.

The trial ran at up to 2 tonne per hour and was fed through the SWDF conveyor into the calciner. There was no evidence of steel deposited in riser ducts.

Stack emission tests were conducted during the trial with results showing Boral is compliant with our license conditions.

The Environmental Management Plan was updated and accepted by the DPIE as part of the Chlorine By-Pass construction works.

Future updates to the OEMP and other management plans will be undertaken as required and when consent modifications are made with a full review due next April 2023.

Regarding air quality management, Boral has completed four stack tests on Kiln 6 since October 2021. All stack tests have been compliant along with our Continuous Emission Monitoring (CEMs).

Three have been undertaken as part of our high-rate RDF. A few years ago, Boral did a proof of performance trial with our SWDF and we have consent to use 50% by weight of the SWDF fuel. After the trial we were limited to 40% because that is the weight that was used during testing. Boral sought permission to go to 50% with the Department of Planning and the EPA requesting Boral does additional proof of performance trials. Testing was conducted during October and November 2021 at the higher rate.

Dust monitoring deposition trends over the last few years have been more impacted by weather, Boral activities are not generating much dust around the site. Staff are making sure doors are shut at the plant when work is being done. Dust monitoring has trended down over the last few years.

Planning and projects

Project Name - Modification 14 SWDF increase, delivery variation and site access.

The project objective is to:

- Increase the volume of SWDF from 100,000tpa to 250,000tpa;
- Expansion of existing SWDF storage and handling facilities;
- Provide an alternate access to the site via Taylor Avenue;
- Additional 13 truck movements per day; and
- Permit 24 hour delivery of materials.

The Environmental Impact Statement has been completed & submitted to Department of Planning and Environment. Public exhibition is expected to commence in April – May 2022.

Another modification in the pipeline, and not formally lodged with the department is the Berrima Carbon Capture Pilot Plant.

The project has been supported by the Federal Government; it is a 3 year trial to research carbon emissions reduction associated with the production/manufacture of cement.

The project includes:

- Importation of 2,000 tonnes of recycled materials (aggregate & sand);
- Installation of pre-fabricated plant to trial sequestration of carbon into aggregates & sand;
- Research to focus on residence time, temperature, & water demands

A request of Secretary's Environmental Assessment Requirements has been lodged and is under consideration. Meetings have been scheduled with the Environment Protection Authority & Wingecarribee Council to progress the project. This will become a publicly available document and will be shared with the CLG.

As mentioned in the environmental update there is a planned application Kiln 6 Upgrade (DA401-11-2002-i). Which includes relocation of permanent storage of tyre chips (approved under Modification 9) to permit outside storage (approved on a trial basis

under Modification 3). Construct storage bays and the installation of additional plant & kiln feeder systems. Tentative timing of the application is May-June 2022.

There is also a minor modification of the Ball Mill Consent (DA85-4-2005) to align noise management conditions of the ball mill consent with an approved site wide noise management plan. Timing is estimated for late 2022.

Presentation by Jason Chandler - Value-added Waste through Accelerated Carbonation Project

Boral is the recipient of the Carbon Capture Use and Storage Fund from the Federal Government. This is part of a global initiative to reduce CO₂ emissions in industry.

Berrima Cement Works releases CO₂ daily. Over time, there have been many initiatives to reduce CO₂. However, it is known that cement plants must incorporate some form of carbon capture/storage method.

Boral's solution is to directly capture CO₂ from the cement process by reacting carbon with construction waste.

Wastes from construction and steel-making naturally (re) carbonate slowly over time by absorbing CO₂ from the atmosphere. This process can be accelerated, increasing the amount of CO₂ captured and permanently stored.

With this Australian-first technology, Boral could lead in the construction industry to target zero or negative carbon emissions.

When we make cement we also make carbon dioxide at the same time and we are looking at ways to mitigate that and reduce the amount of CO₂ being released. One thing that can be done, and it has been done overseas in pilot form as well, is using calcium rich waste to capture that CO₂. Currently the technology to purify the CO₂ is quite expensive and also in some cases harmful to the environment. So the actual process of separating CO₂ from the rest of the gas stream is not very viable at the moment. But when you have calcium rich waste the CO₂ will react and basically turn back into limestone. Boral runs a construction demolition waste recycling facility and we have a lot of waste concrete, so can we use that waste concrete to capture CO₂?

Boral will be bringing around 2000 tonnes of material to Berrima spread over a few years. Which will be run through a batch process. Material will be put into one or two different calcination chambers, and we will see how much CO₂ is captured.

Boral may also be able to upcycle the finished limestone material so part of the research will test if that product can be used in construction builds. But the main purpose of the program is to see whether we can actually capture the CO₂.

Communications update The Berrima Cement Works website has been updated with the last presentation of the Community Liaison Group meeting in December 2021.

I will be meeting with Council in coming months to discuss any upcoming opportunities for community engagement and we have agreed to have regular catch-up meetings.

Barry requested if Jan Campbell the economic development coordinator at Council could also attend the CLG meetings as an observer.

Kate will arrange another EOI to try and fill the vacancy on the committee.

Kate will also see if we can amend the meeting times so all members are able to attend the meeting.

General business Habitat corridors along the riparian zones on Boral land – (Clive West)

This issue goes back a few years with a meeting held between Boral executives in Sydney who agreed to tentatively consider the proposal but asked that scientific evidence of the value of habitat corridors which was provided after the meeting.

Clive received a cost estimate from Wariapindi for a planting plan for Stony Creek which was \$2500 and the Boral was considering allocating funds for this work to be undertaken.

The issue has not progressed, and Clive has asked that Boral reconsider paying for the planting plan that has been previously considered.

Boral head office has advised that they are currently looking at an overall future plan for the Berrima site and an ecological assessment will be undertaken as part of that process. Boral will keep the CLG updated at future meetings regarding the progress of the planning work. It is expected to take about 12 months for Boral to undertake the future planning work for the cement works site.

Clive is also on the committee for the Southern Highlands Landcare Network, and they can provide volunteers to do the planting and ongoing weed management for the corridor (three or four times a year). If Boral is willing to provide a water truck the Landcare network will also look after watering as well.

Wariapindi can also provide the plants and tube stock, the protection and surrounds for approximately \$4 for one tube stock.

Greg advised the CLG that it is important that this proposal fits into the future plan for the larger landholding, other existing native vegetation at the site and how it ties into that area. The review will consider all of these elements during the planning process.

Clive advised that the Landcare network has been doing industrial planting along the Wingecarribee river as part of a Greening Australia project which is due to wind down over the next few months. Greg advised that Boral has a lease at the weir which is on the river which is covered by an axillary mining lease and goes over the reservoir, and the water body behind it which has a pipeline that goes down to Boral's site. Clive asked for a copy of the lease boundary.

There is a very important habitat corridor that runs through Austral and Boral land, up through the old railway line and into the state forest. The good thing about that particular pathway is there is an underpass under the highway and with appropriate planting this would provide really good connectivity with the state park.

Clive advised that ideally a habitat corridor should be 30 metres wide. Greg suggested that Clive should discuss the project with other landholders along the corridor about rehabilitating a potential water course where old creeks used to run down to the river.

Next meeting 15 July 2022

Meeting close 10:45am

Action items arising from meeting

Action Number	Details	Responsibility	Due
1	Facilitate access to Boral-owned land in Remembrance Driveway Grove for tree inventory.	Clive will speak to the chair of the Berrima Residents Association and ask for an invitation for Boral to attend the next meeting.	
2	Boral to provide Clive with a copy of the lease boundary that shows Borals river footprint and weir.	Greg Johnson	
3	Boral to provide an update regarding future site development at future meetings.	Ongoing	
4	Discuss with Council including Benedicts in the Council's Sustainable Us video series on the SWDF replacement video being developed with Boral cement works.	Kate Woodbridge	
5	Barry requested if Jan Campbell the economic development coordinator at Council could also attend the CLG meetings as an observer.	Kate will extend an invitation for the next meeting	
6	Kate to arrange another EOI to try and fill the vacancy on the committee.	Kate Woodbridge	
7	Kate will also see if we can amend the meeting times so all members are able to attend the meeting.	Kate Woodbridge	completed

