

The background of the slide is a photograph of a city skyline at dusk or dawn. The sky is a pale blue-grey. In the foreground, the dark, silhouetted roof of a building is visible on the left. The middle ground is filled with various skyscrapers. A prominent feature is a tall, slender tower with a yellow-lit observation deck, likely the CN Tower. To its right, a large building is under construction, with its steel framework visible and a crane attached. Other buildings with lit windows and various architectural styles fill the rest of the skyline. The water of a harbor is visible at the bottom of the frame.

Berrima Cement Works Community Liaison Group Meeting

29 July 2022

Agenda

1. Welcome and apologies
2. Operations summary
3. Environmental works update
4. Planning and projects
5. Communications update
6. General business and contacts
7. Next meeting

01

Welcome and apologies



Attendees

CLG representatives

- Clive West, Berrima resident and Berrima Resident Association representative
- Andrew Wood, New Berrima resident
- Barry Arthur, Environment Manager, Wingecarribee Shire Council

Boral staff

- Dean Beltrame, Operations Manager Berrima
- Greg Johnson, Environmental Sustainability Manager, Boral Cement
- Ben Williams, Environmental Sustainability Manager, Boral Cement
- Rachel Snape, Senior Planning and Approvals Manager NSW/ACT
- Kate, Woodbridge, Stakeholder Relations Manager NSW/ACT

Guest

- Slavica Zivkovic, New Berrima resident

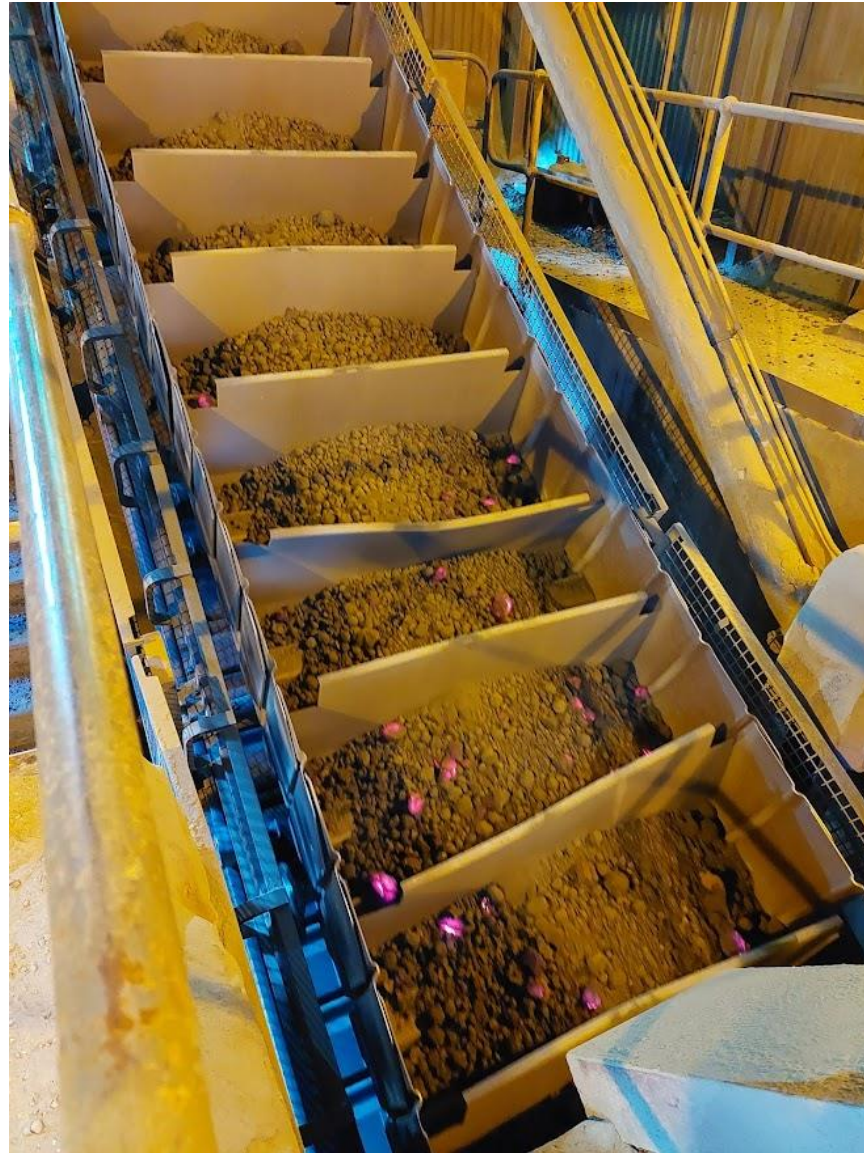
Review of minutes and actions arising from last meeting

> Previous meeting of the Community Liaison Group – 1 April 2022

> Matters arising from last 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	Completed
3	Boral to provide an update regarding future site development at future meetings.	Ongoing	Nothing to report
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	Completed
6	Kate to arrange another EOI to try and fill the vacancy on the committee.	Kate Woodbridge	Commenced
7	Kate will also see if we can amend the meeting times so all members are able to attend the meeting.	Kate Woodbridge	Completed

Operations review



Operations

- Safety
 - There are several reportable incident investigations being progressed.
 - Damage to the SWDF feeding system which resulted in a couple of injuries to workers.
- Customer
 - The site has received no quality complaints or non-conformances.
- People
 - There has been some industrial action in the Southern Highlands which has now been withdrawn, we are hopeful an enterprise agreement will be finalised shortly.
- Current recruitments
 - In 2023 the site will be looking for apprentices and will have some vacant positions to be filled.
- Community
 - We have received a lot of pro-active communication from community partners which has been appreciated.

Operations continued

- General
 - Boral is currently undertaking significant restructuring across the business.
 - Work at the cement works is always continuing to improve ventilation and dust collection systems on site.
 - A tyre chips trial was completed recently.
 - There was 1.32Mt of clinker production for the year.

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Environmental Works Update



Environmental Update

EPA Annual Return

- Submitted 20 June 2022
- All monitoring limits complied with
- 5 complaints received during the year, including one directly to EPA resulting in Official Caution as outlined in non-compliances
- Two non-compliances reported
 - Monitoring frequency for PM10 particulates required every 6 days at point 2. Equates to 61 samples every year. Only 59 samples collected due to extreme rain event in Feb restricting access to monitor.
 - Open door/hatch near Cement Mill TS-03 dust collector unable to close due to build up of cement dust. Fugitive dust released through door when the dust collector on DC 102 failed. 21st -23rd Feb. Official Caution received from EPA



Annual Return

BORAL CEMENT LIMITED
Licence 1698

A. Statement of Compliance - Licence Details

ALL Licence holders must check that the Licence details in Section A are correct.

If there are changes to any of these details, you must advise Environment Protection Authority (EPA) and apply as soon as possible for a variation to your Licence or for a Licence transfer.

Licence variation and transfer application forms are available on the EPA website at: <http://www.epa.nsw.gov.au/licensing-and-regulation/licensing> or from regional offices of the EPA, or by contacting by telephone 02 9995 5700.

If you are applying to vary or transfer your Licence, you must still complete and submit this Annual Return.

A1. Licence holder

Licence number : 1698
Licence holder : BORAL CEMENT LIMITED
Trading name (if applicable) :
ABN : 62 008 528 523
ACN : 008 528 523
Reporting period : From: 1-5-2021 To: 30-4-2022

A2. Premises to which Licence Applies (if applicable)

Common name (if any) : BERRIMA CEMENT WORKS
Premises : TAYLOR AVENUE NEW BERRIMA 2577 NSW

A3. Activities to which Licence Applies

Extractive activities
Resource recovery
Cement or lime works
Energy recovery
Waste storage

A4. Other Activities (if applicable)

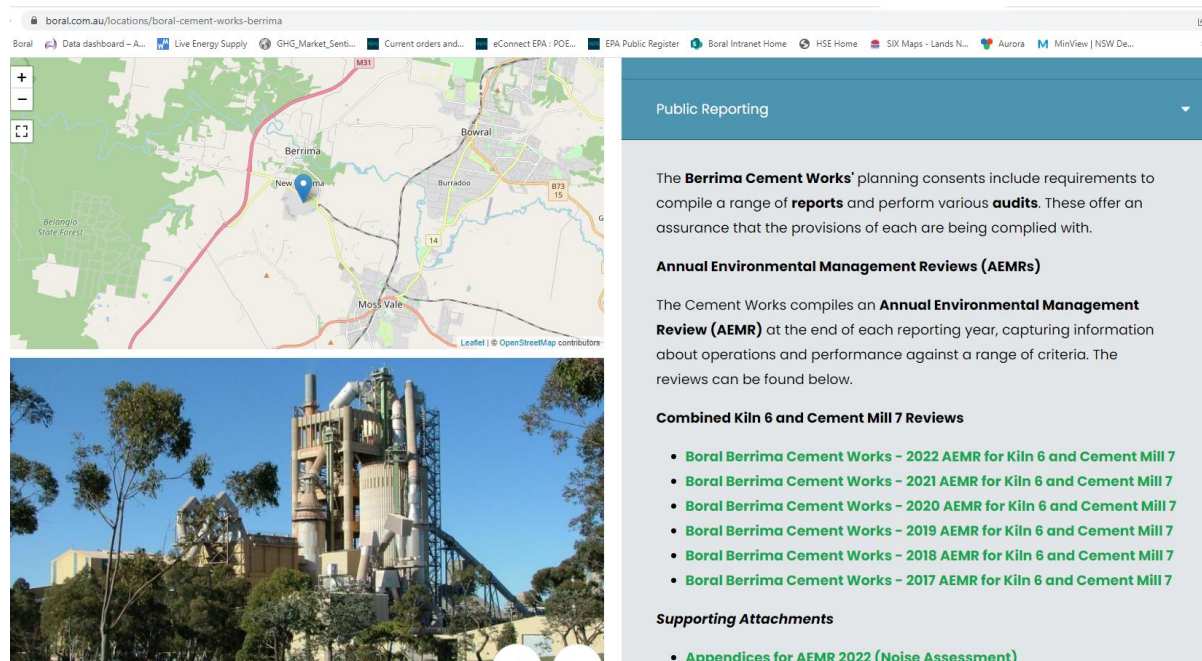
A5. Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Environmental Update

Cement Works Annual Environmental Management Report

- Submitted June 2022
- Accepted by DPE
- Available on Boral Berrima Cement Webpage



Department of Planning and Environment

Mr Greg Johnson
Environment and Sustainability Manager
Boral Limited
Trinti Campus, T2, Level 5
39 Delhi Road
North Ryde, NSW 2113

11/07/2022

Dear Mr Johnson

Boral Cement Berrima (DA 401-11-2002-i and DA 85-4-2005-i) Annual Environmental Management Report 1 May 2021 – 30 April 2022

I refer to the Annual Environmental Management Report (Annual Report) for the reporting period from 1 May 2021 to 30 April 2022 for Boral Cement Berrima (the project), submitted for the Planning Secretary's consideration, as required under Condition 7.3 of development approval DA 401-11-2002-i, as modified and Condition 6.3 of development approval DA 85-4-2005-i for the Kiln 6 Upgrade Project and the Cement Mill 7 Project, respectively (the approvals).

The department considers that the Annual Report generally satisfied Conditions 7.3 and 6.3 of the respective approvals. Please note that approval of this Annual Report is not endorsement of the compliance status of the project.

The department requests that the Annual Report is made available on the company website within one month of the date of this letter.

Should you need to discuss the above, please contact Georgia Dragicevic, Senior Compliance Officer, on (02) 4247 1852 or by email to Georgia.Dragicevic@planning.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Katrina O'Reilly'.

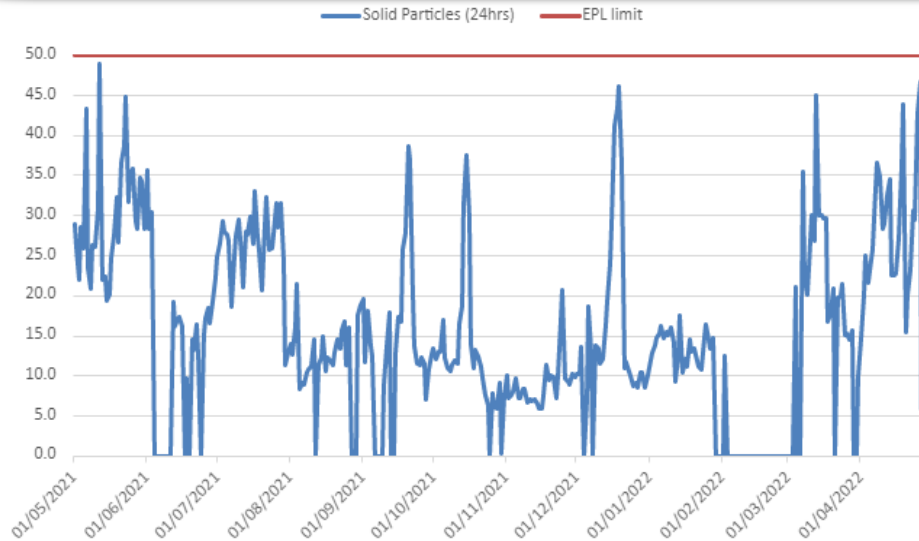
Katrina O'Reilly
Team Leader - Compliance
Compliance
As nominee of the Planning Secretary

Environmental monitoring – Stack Emissions

Stack Emission Monitoring

- Four tests during reporting period
- Aligned with High Rate SWDF PoPT and Tyre Chip Trial
- All tests were compliant
- Continuous particulate data compliant

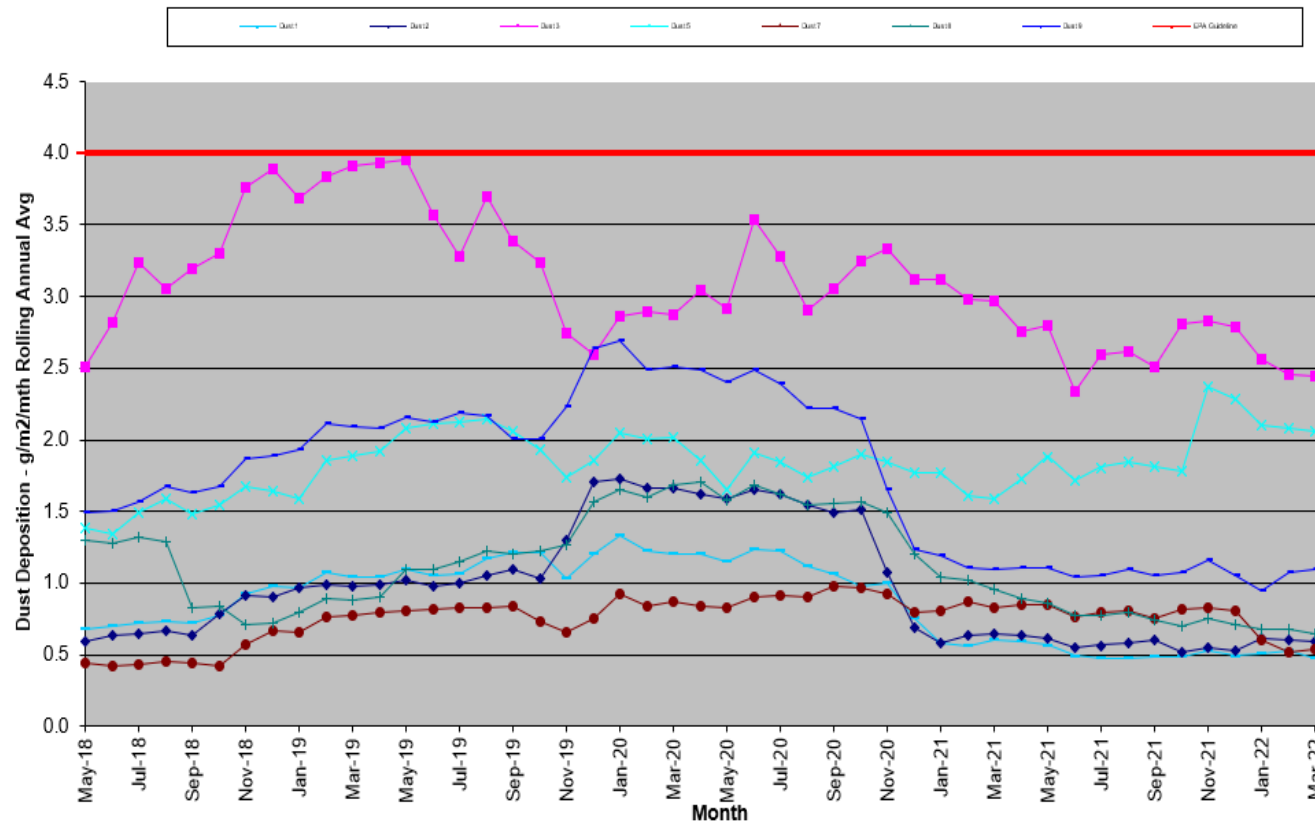
Kiln 6 Stack Particulate emissions - continuous data May 21-April 22



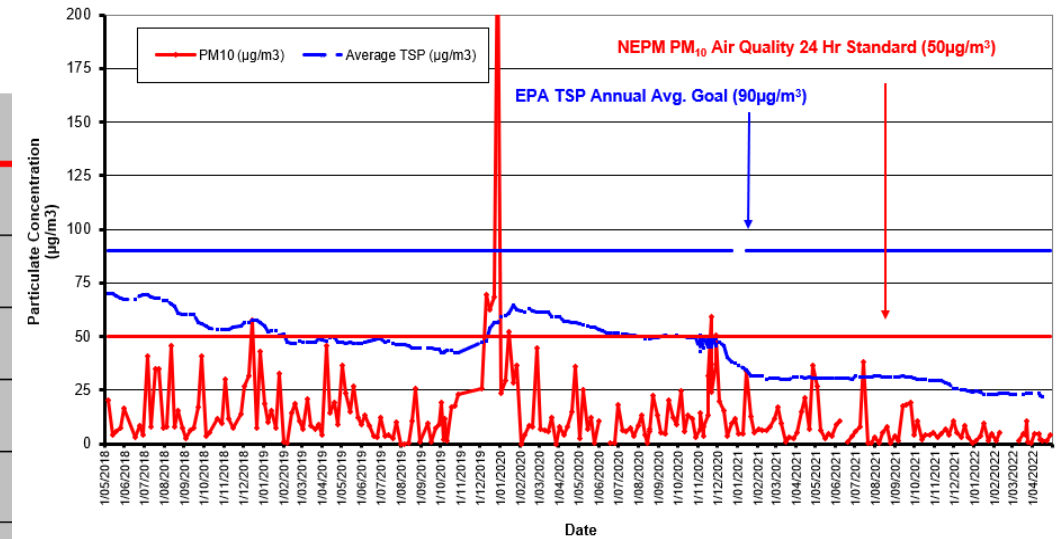
2021-2022 EPL 1698 Stack Testing Annual Return Summary			RDF High	RDF High	RDF High	Tyre Trial
Report ID			R011682-1	R011836	R011867	R012341
Pollutant	Unit of Measure	Licence Limit	Oct-2021	Oct-2021	Nov-2021	Jan-2022
Vol flowrate	M3/sec		210	210	200	210
Velocity	m/s		29	30	29	29
Temp	C		111	111	110	121
Nox	mg/m3	1250	730	770	890	1100
Solid Particles	mg/m3	50	20	15	12	18
Moisture	%		13	13	14	13
Molecular wgt stackgases	g per g mole		30	30	30.4	30.1
Dry das density	kg/m3		1.42	1.42	1.44	1.42
Carbon dioxide	%		20.7	21.4	24.5	19.6
Oxygen (O2)	%		9	8.7	7.9	10.2
Type 1 & 2 aggregate	mg/m3	0.5	<0.031	<0.02	<0.023	<0.047
Cadmium	mg/m3	0.05	<0.0002	<0.0011	<0.00078	<0.00057
Mercury	mg/m3	0.05	0.0083	0.0075	0.0085	0.0093
Chlorine	mg/m3	50	<0.009	<0.007	<0.008	<0.01
Carbon monoxide	Mg/m3		490	400	510	300
Dioxins & Furans	nanograms/m3	0.1	0.0029	0.00079	0.00036	0.00072
Chromium (hexavalent)	mg/m3		0.001	<0.0004	<0.0005	0.001
Hydrogen Chloride	mg/m3	10	0.17	0.23	0.14	0.42
Hydrogen fluoride	mg/m3	1	<0.02	<0.022	<0.02	0.063
Sulphur dioxide	mg/m3	50	<0.021	<0.01	<0.021	<0.02
Sulfuric mist(SO3)	mg/m3	50	0.5	0.038	3.1	1.9
VOC	ppm	40	2.3	2.1	3.1	1.2
Thallium	mg/m3	0.05	<0.0009	<0.001	<0.0009	<0.001

Environmental monitoring – Deposited Dust

Total Deposited Dust (12-Month Rolling Average)
Berrima Cement Works - May 2018 - April 2022



Ambient Air Quality Monitoring
High Volume Air Sampler Data, May 2018 - April 2022



Deposited dust and HiVol dust results trending down

Environmental monitoring – Surface Water Discharge

Licence limits: Not specified.

The NSW State guidelines: Typical discharge limits are as follows:

Biological Oxygen Demand: 20 milligrams per litre

pH: 6.5-8.5

Oil and Grease: 10 milligrams per litre

Total Suspended Solids: 30-50 milligrams per litre



Sampling Date	Report received	Date published	Biological Oxygen Demand (milligrams per litre)	pH	Oil and Grease (milligrams per litre)	Total Suspended Solids (milligrams per litre)
27/02/18	06/03/18	08/03/18	<2	8.6	<5	26
15/12/18	31/12/18	08/01/19	<2	8.8	<5	24
19/03/19	27/03/19	08/04/19	<2	7.4	<5	30
10/02/20	18/02/20	08/03/20	<2	9.0	<5	26
14/02/20	26/02/20	08/03/20	2	8.9	<5	21
27/07/20	04/08/20	08/09/20	2	9.3	<5	72
11/08/20	18/08/20	08/09/20	2	8.0	<5	19
02/11/20	09/11/20	08/12/20	3	8.4	<5	13
23/03/21	30/03/21	08/04/21	2	8.1	<5	10
06/04/21	13/04/21	08/05/21	3	8.5	<5	8
05/05/21	12/05/21	08/06/21	<2	8.4	<5	15
26/08/21	03/09/21	08/09/21	<2	8.7	<5	44
14/10/21	22/10/21	08/11/21	3	8.1	<5	6
12/11/21	19/11/21	08/12/21	<2	8.5	<5	32
22/11/21	29/11/21	08/12/21	2	8.2	<5	13
10/12/21	17/12/21	08/01/22	4	8.3	<5	23
23/02/22	04/03/22	08/03/22	<2	7.9	<5	11
08/03/22	15/03/22	08/03/22	4	7.9	<5	18

Alternative Fuel Trials

SWDF (RDF & WW) High Rate PoPT

- SWDF are permitted by consent to 50% by volume of fuel.
- Ongoing use currently limited to 40% as original Proof of Performance Trials only covered SWDF at that rate.
- Proof of Performance Trials of high rate RDF and WW at 50% have been undertaken
- Final PoPT Report due soon. All emissions compliant during trial.



AKF5 – Tyre Chips (shredded) Trail

- AKF5 already approved for use at upto 4.5t/hr
- One tonne of tyre chips can replace 1.2t of coal
- Consent permits a single trial to test feeding infrastructure
- 6 months trial approved commencing in late January 2022 for upto 200t.
- A total of 103t of tyre chips received and four trial runs(2 in January and 2 in July) undertaken at feed rates of 1t/hr, 2t/hr and 4.5t/hr.
- Final Report pending, however positive results which will support our MOD to permit external storage and new feeding infrastructure.

Hopper and feeder used for AKF5 3rd and 4th run

Shale Quarry Rehabilitation Management Plan

As of 1 August 2022, Rehabilitation Management Plans replace Mine Operations Plans

A RMP has been prepared and is available on the Boral Cement website.

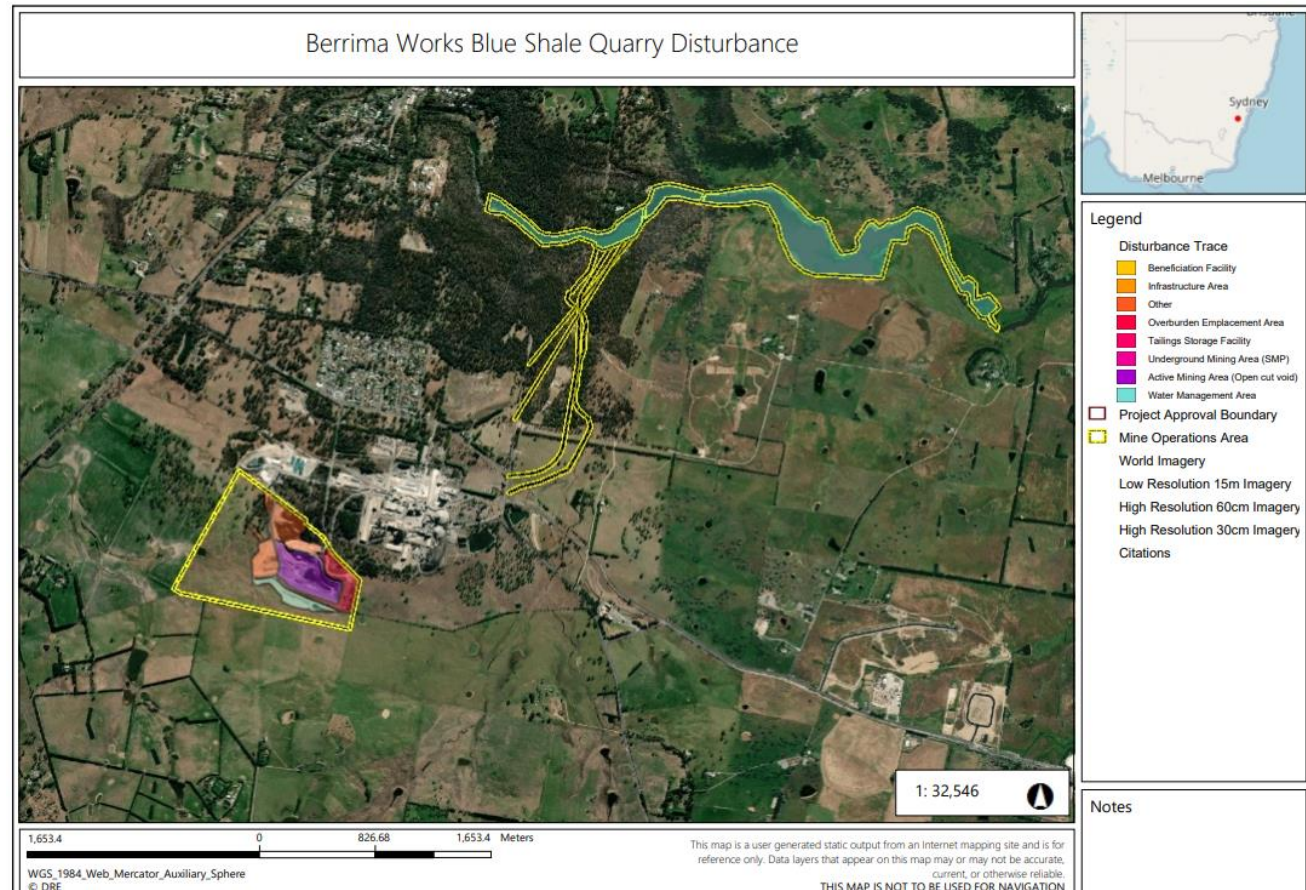
The Environmental Rehabilitation Objectives have been lodged with the Resources Regulator for approval.



Boral Cement – Berrima Works Blue Shale Quarry Rehabilitation Management Plan ML 1723



July 2022



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Property planning & approvals updates



Modification 14 – Solid Waste Derived Fuels (SWDF)

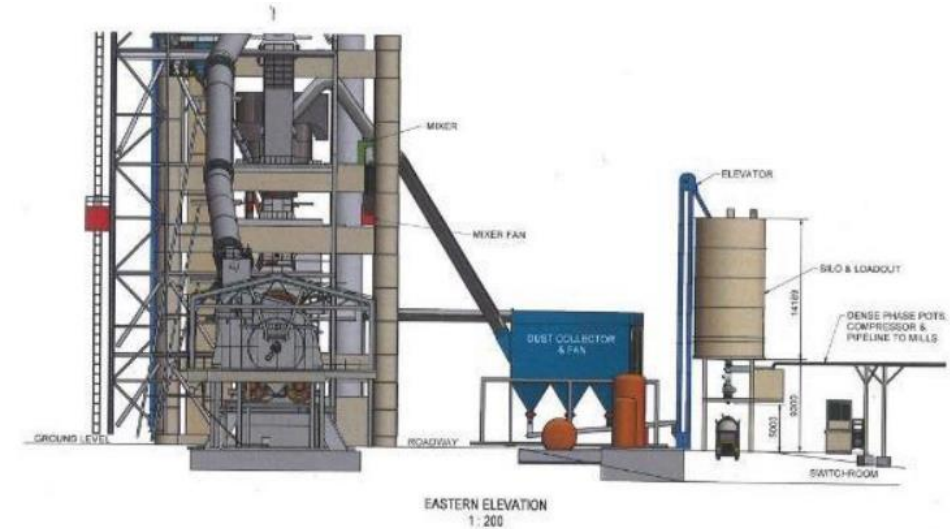
Project Objective

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

Project status & progress

- Modification including Environmental Impact Statement exhibited from 14 to 27 April 2022
- No community submissions
- Eight (8) agency comments seeking further information to address water, & fire management and intersection design
- Consultants preparing response to submissions. Anticipated lodgement September – October 2022.

Project link [Modification 14 SWDF Increase, Delivery Variation & Site Access | Planning Portal - Department of Planning and Environment \(nsw.gov.au\)](#)



Modification 15 – Tyre chip storage & feed system

Project Objective

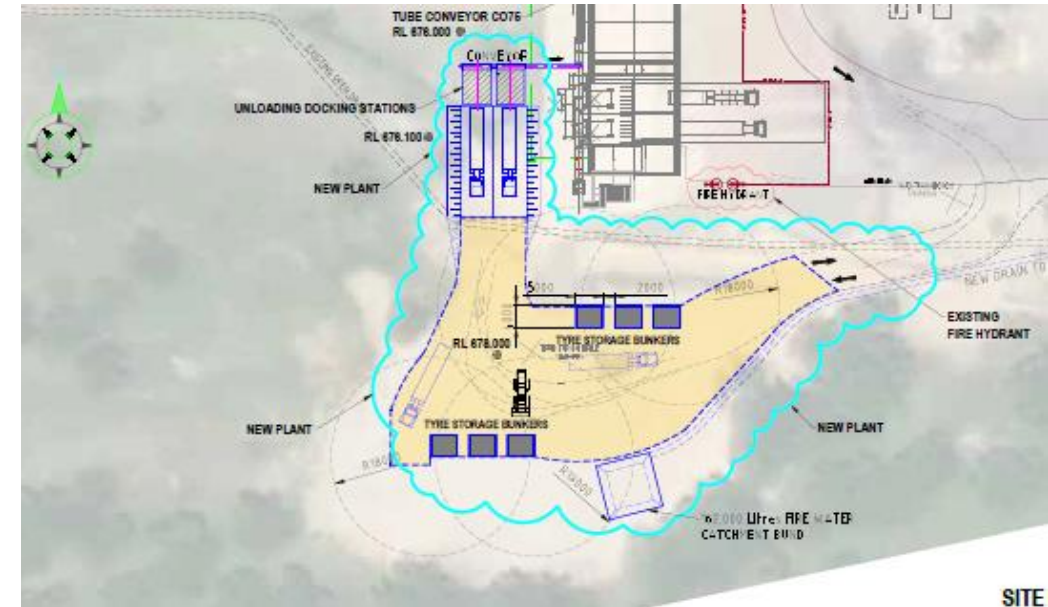
- Permit new permanent outdoor storage and feed system to support use of tyre chips;
- Modification of relevant conditions of consent; and
- Tyre chip use already permitted under Kiln 6 development consent, no change in volume stored or used, no increase in trucks or hours.



Project status & progress

- Scoping report submitted and Secretary's Environmental Assessment Requirements (SEARs) provided June 2022;
- Planning report and technical assessment currently being prepared
- Lodgement anticipated August 2022
- No exhibition due to “minimal impact” assessment level.

Project link: [Berrima Cement Mod-15 - Tyre Chip Storage & Feed Infrastructure | Planning Portal - Department of Planning and Environment \(nsw.gov.au\)](https://www.nsw.gov.au/planning/development-consent/modification-15-tyre-chip-storage-feed-infrastructure)



Carbon Capture Pilot Plant

Project Objective

- 3 year trial to research carbon emissions reduction associated with the production/manufacture of cement;
- 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

Project status & progress

- Application to be made to Council;
- Meetings held with the Environment Protection Authority & Wingecarribee Council planned; and
- Planning & technical reports being prepared. Lodgement anticipated August 2022



Planned applications

Consent to be modified		Timing
Ball Mill Consent (DA85-4-2005)	Modification to align noise management conditions of the ball mill consent with approved site wide noise management plan	Late 2022

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Communications update



- **Media relations** – ongoing communication and announcements will be managed by Kate Woodbridge.
- **Local community website** – Meeting minutes will be posted for 1 April 2022 meeting once accepted today.
- **Community support or upcoming events** – none currently identified.
- **Community engagement** – Kate recently met with a resident of New Berrima to discuss weed management, removal of broken signage and general care and maintenance of gardens. Kate will keep the resident updated on progress on the items identified as they occur.
- A letterbox drop was done for residents in New Berrima and next week Berrima regarding the pit top treatment and pipeline in case people want more information about the project.

05

General business and contacts



General business and contacts

Items of general business:

Boral Berrima Cement contacts:

- > **Reception**
02 4860 2222
- > **Kate Woodbridge** Stakeholder Relations Manager
0401 893 815/ kate.woodbridge@boral.com.au
- > www.boral.com.au/berrimacement
- > feedback@boral.com.au
- > Like us on Facebook: @ Boral Australia

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Next meeting

Next **CLG meeting** – 21 October 2022





Thanks for your participation