

# MINUTES

**Subject:** Berrima Colliery Closure Working Group

**Location:** Mittagong RSL

**Date & Time:** 13 August 2018, 10.00 am

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**Independent Chair:** **Brad Mullard**

**Attendees:**

**Greg Kininmonth** – Manager Environmental Operations Southern, Resources Regulator

**Will Miltry** – Inspector Environment, NSW Planning and Environment – Resources and Geoscience

**William Dove** – Unit Head Regulation Illawarra, NSW Environment Protection Authority

**Ravi Sundaram** – Mining Catchment Specialist – WaterNSW

**Barry Arthur** – Manager Environment and Sustainability Wingecarribee Shire Council

**Clive West** – Local Resident

**Julian Brophy** – Local Resident

**Alan Lindsay** – Local Resident

**Ray Nolan** – Local Resident

**Boral Personnel:**

**Rod Wallace** – Planning & Development Manager (NSW/ACT) Boral Limited

**Greg Johnson** – Environmental Sustainability Manager - Boral Cement

**Fabio Colusso** – General Manager Commercial and Contracts – Boral Cement

**Minutes:** **Robert Byrnes**

**Apologies:**

**Andrew Couldridge** – EPA Wollongong

**Dr Ian Wright** – University of Western Sydney

**Graham Kelly** – Local Resident

*These minutes reflect the presentation and consequent conversations conducted as part of this meeting. The content, while an accurate summation of proceedings, should not be taken to represent exact dialogue unless specifically minuted as such.*

*For the full presentation, visit [www.boral.com.au/berrimacement](http://www.boral.com.au/berrimacement). Minutes do not become 'official' unless endorsed at the following community meeting by the appropriate representatives.*

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## Meeting opened – 10.10 am

### 1. Welcome and introductions

**Brad Mullard (BM)** introduced himself as recently retired from the Resources Regulator where he was the Executive Director Mineral Resources based in Maitland. He is a geologist by training with over 30 years experience in the coal industry including specific experience in the Southern Coalfields. BM welcomed all attendees to the inaugural meeting of the Berrima Colliery Mine Closure Working Group and thanked all for nominating themselves to be a part of the new group. He explained the role of the group is to assist government in the closure process and to seek feedback on issues arising from community engagement.

BM explained that the meetings are to be informal and are a means of disseminating information relevant to the closure of Berrima Colliery with the wider community. This consultative approach is used for operating mines but is new in relation to the mine closure process.

Group introductions:

- ❑ **Ray Nolan (RN)** – is a coal geologist and has lived in the Southern Highlands since 1974. Ray has been previously involved with Berrima Colliery.
- ❑ **Barry Arthur (BA)** – is the Manager Environment and Sustainability for Wingecarribee Shire Council. Barry is representing Council on the working group and has knowledge of the water resources of the region.
- ❑ **Julian Brophy (JB)** – is a resident on the Wingecarribee River and is keen to be involved in matters which may impact on the river.
- ❑ **Greg Kininmonth (GK)** – is the Manager Environmental Operations for the Resources Regulator and has a role in administering the Mining Act in relation to Berrima Colliery. Greg is keen to ensure the best environmental outcomes are achieved in relation to the closure.
- ❑ **Ravi Sundaram (RS)** – is the Mining Catchment Specialist for WaterNSW and has been involved in environmental impact assessment in relation to projects within the catchment. Wingecarribee River is a declared catchment and therefore WaterNSW is heavily involved in minimising pollution within the catchment.
- ❑ **Fabio Colusso (FC)** is the General Manager Commercial and Contracts with Boral Cement and has been involved with Berrima Colliery throughout the closure process.
- ❑ **Greg Johnson (GJ)** is the Environmental and Sustainability Manager for Boral Cement and is intimately involved in the closure of Berrima Colliery.
- ❑ **Rod Wallace (RW)** works for the Land and Property Group of Boral and has been involved with Berrima Colliery for 14 years.
- ❑ **Alan Lindsay (AL)** is a retired engineer and has lived in the Southern Highlands since 2001. Originally living on Richards Lane Joadja close to the underground extraction area of Berrima Colliery but now lives closer to Mittagong. Alan has been involved with Berrima Colliery for a number of years and the residents around the Richards Lane area have asked him to continue to be involved.
- ❑ **Clive West (CW)** is a resident of Berrima and has been actively involved in local environmental issues.
- ❑ **Will Miltry (WM)** works with GK in the Wollongong Office of the Resources Regulator. Will is involved in the approval process for the closure of Berrima Colliery, reviews plans and undertakes the Part 5

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assessments. This process falls under the Environmental Planning and Assessment Act which determines the impact of the project including water quality.

- ❑ **William Dove (WD)** works for the EPA in Wollongong, the EPA is the primary regulator for Berrima Colliery. Works with Andrew Couldridge who could not make it today. Sees this group as having the potential to resolve environmental issues and will form a model for similar projects.
- ❑ **Rob Byrnes (RB)** – managed environmental issues at the Colliery between 1994 and 2014. He has been involved in the mining industry for 34 years and is currently assisting Boral with the closure of the colliery.

## 2. Boral Presentation

The presentation by RW and GJ on the closure of Berrima Colliery covered:

- ❑ History of the colliery and background to the decision to close
- ❑ Details of the site and surrounding environment
- ❑ Overview of the mine workings, site infrastructure and water management system
- ❑ Overview of the groundwater system and extent of flooded workings
- ❑ The closure process to date and the status of government approvals
- ❑ Details of the current underground water treatment process
- ❑ Underground sealing options
- ❑ Interim sealing plan to validate flow and porosity assumptions
- ❑ Water quality data and improvements arising from current underground treatment activities
- ❑ Role of the Closure Working Group
- ❑ General discussion

The presentation was followed by a general discussion on the points raised and questions arising from the presentation materials.

## 3. Discussion

**JB** – would like to see clear objectives for the group, its role and function

**RS** – the role of the committee should be advisory only as the final decisions are made by the relevant government authorities

**RW** – the terms of reference for the committee should be followed but can be varied if needed.

**JB** – has there been any impacts on groundwater quality, is there an impact on water supply, questions have also been raised by the community in relation to water quality in the river

**RS** – the Wingecarribee River is highly regulated and there are many influences on water quality, there are water supply dams and sewage treatment plant discharges into the river

**BA** – The Medway Dam is located in Medway Rivulet which is a tributary of Wingecarribee River. The water treatment plant is currently not being used

**RB** – Berrima Colliery has never been attached to a town water system, it used underground water and when operating it supplied Medway Village with water

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**AL** – the investment in groundwater monitoring was not carried through after the court case. His bore was unaffected at the time the mine closed but others were completely drained. The impact area was about 1 km around the underground workings.

**JB** – what are the risks in relation to the sealing process

**RW** – there is no risk of escarpment failure however pressurising the workings could result in failure of the talus slope. This would cause significant pollution of the river. It was also found that groundwater would likely flow over the seals. A further risk was safety of people working in the very old mine workings.

**FC** – Some of the risk assessments identified high risk activities in the sealing process.

**JB** – Boral needs to be absolutely clear on each of the risks and options to deal with each of the issues

**RW** – Only the Stage 1 Closure Plan has been approved, final closure options have been under investigation since 2016

**WM** – The Ian Wright study was very important because it could compare the Berrima Colliery discharge with other mines in the district.

**RN** – What does Boral know of the quality of the groundwater above the seam. The Hawkesbury Sandstone can yield very different water qualities.

**WM** – Boral commissioned a hydrogeological study to determine the source of the minerals.

**AL** – has two bores on his property, one had good water quality while the other was not so good and it needed to be aerated to remove the high iron content

**GJ** – discussed slides on the sealing options, current water treatment process and the proposal to install 7 bulkheads to validate the current assumptions of seepage rates and resultant water quality

**AL** – it is understood that the design of the bulkheads is complex

**WM** – the closure process at Berrima in relation to water is complex and unique

**JB** – There appears no clear evidence that the groundwater will come back to pre closure conditions. How much water is contained in the workings and can this be used by farmers.

**WD** – Need to continue monitoring to determine ongoing impacts. The data is showing a clearer picture but could still vary over time. We are still dealing with a number of unknowns. Variations may occur with increased discharge volume.

**JB** – Will there need to be a change in EPA discharge conditions

**WD** – The EPL conditions are fluid and can be changed very quickly. We can respond to any changes necessary with Special Conditions placed on the licence

**BA** – has pH changed during the underground treatment

**GJ** – there is still some fluctuations but overall there has been a slight reduction in pH

**BA** – has bulkheads been used elsewhere?

**WM** – there is some experience in the use of bulkheads in the region

**RW** – the next steps in the process include installation of the internal bulkheads to verify the groundwater model and porosity assumptions, continue to monitor and treat the water, further consultation with agencies and the Closure Working Group and then lodgement of the Stage 2 Closure Plan

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**JB** – Boral's commitment to community consultation needs to improve, only Dr Wright has provided high quality information to the community. Need clear roles within the group and that participating with this group does not relieve Boral of its obligation to consult with the community. Boral needs to provide more information and to work out better ways of conveying that information. Only the EPA showed up last time to provide information to the community.

**WD** – We all need to work together to determine the best ways of communicating with the public

**BM** – This committee is an adjunct to the community consultation process. Boral still needs to communicate in other ways to the community

**JB** – agreed, this group is an adjunct only not the main consultation program. Boral needs to build trust in the community

**WD** – there needs to be a constant agenda item in relation to consultation activities so the group can discuss and understand what consultation activities have been undertaken

**RN** – I haven't heard much about the mine since 2011

**JB** – Dr Wright revealed what was happening not Boral

**CW** – represents 70 people from Berrima which has a town population of 650 people. There needs to be a mechanism for broader community consultation and dissemination of information

**BM** – How is Boral going to achieve the necessary consultation

**FC** – Boral is still addressing the best forms of consultation but has a long standing commitment to community engagement. Currently use the web and information newsletters. The web page could be improved.

**JB** – Boral needs to provide detailed information to the community, use social media, letter box drops and community meetings

**WD** – Did the previous community information session work OK?

**JB** – yes it did

**AL** – Boral has done some consultation but not enough

**CW** – Need regular release of information, 2 pages which can be widely published

**JB** – Council will have an ongoing role and also needs to be kept informed

**RS** – Need to include the closure timetable included in the consultation. The current arrangements are temporary we need to the final option to be documented and a timetable for completion

**BM** – Can we agree on the consultation activities

**JB** – Boral to produce a clear F&Q document. What are the key steps, what is Boral doing now with temporary treatment and what is the longterm solution. What will be the benchmark against which the final solution can be assessed

**WD** – need to be clear what will be provided to the community and what may be confidential.

**JB** – need to be careful that the group is not assumed to give de facto approval of any documents provided

**AL** – we have to minimise the amount of commercial in confidence documents provided to the group as this undermines the integrity of the group

**WM** – there is also the potential to workshop different strategies.

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**BM** – Questions and information can be put to the chair for dissemination to the group at any time. Call for wrap up comments and questions

**JB** – The Special Inquiry into catchments is underway and this work would be a valuable contribution to the inquiry

**RS** – The inquiry is focused on the Inner Catchment but the Independent Expert Panel will be seeking public input.

**AL** – Although Berrima is outside the area the panel should be interested in the Berrima mine closure

**GK** – What work is Boral doing on the Stage 2 Closure Plan?

**RW** – The final closure option will depend on the results from the installation of the Stage 1 seals

**WM** – Boral needs to lodge a new Mining Operations Plan for the underground seals. Boral should also provide an update on the Loch Catherine mine seals at next meeting

**BM** – to wrap up, Fact Sheets are OK, Boral should improve its web page, need to work on data presentation, no commercial in confidence documents are to be provided to the group, need more details of the bulkhead seal designs, provide greater analysis of data on water quality, EPA to provide ecotox reports, preparation of Q and A document, provide more information on Loch Catherine sealing activities.

Meeting close 12.30

#### **4. Items for next meeting**

- Determine the volume of water currently stored in the underground workings
- Detail the proposed consultation program and mechanisms including Fact Sheets and Q&A document
- Update on environmental monitoring data and provide more analysis
- Provide the group with any necessary documents, none of which are to be commercial in confidence
- Update on the Loch Catherine Mine Closure activities

#### **5. Next meeting**

Next meeting date set for 10 am Monday 8<sup>th</sup> October at a venue to be determined