



May 2019

Boral community update

This newsletter is designed to update you on the work being undertaken by Boral on the Berrima (Medway) Colliery.

Since the Berrima (Medway) Colliery ceased coal extraction in 2013, it has continued to stay in 'care and maintenance' mode – where the mine is monitored and managed while Boral works with the NSW Environment Protection Authority (EPA), Department of Planning & Environment (Resources & Geosciences), WaterNSW, DPI-Water and other stakeholders towards a final closure plan for the mine.

Boral continues to work diligently on the final closure plan for the Berrima (Medway) Colliery to find solutions that will be both environmentally sustainable and meet best practice outcomes.

Water Treatment

It was confirmed during the latter half of 2018 that the water quality from the mine discharge had been stabilised to environmentally acceptable levels. This remains a priority for us and significant work has taken place, with a number of external experts brought in, best practice applied and data reviewed to ensure water quality is monitored closely, maintained and improved where possible. This focused effort has included three key areas:

1. Passive Treatment

We have installed and operated a trial passive treatment system which involves the use of limestone and aeration to treat the water. The limestone treatment exposes the water from the mine to more oxygen (via pumping) and limestone (via long filter like beds). This assists with pH levels and helps a number of minerals to be removed before discharging via the adit to the river. This ensures that the level of iron and other metals in the water that is discharged into the river is significantly reduced. The passive treatment process has been very effective to date.

2. Monitoring

Boral has been continually monitoring the discharge water quality as required by the NSW EPA. Results of this monitoring are published monthly on our website. They provide evidence of a significant reduction in mineral concentrations in discharges since the commencement of the trail treatment system. For example, total Iron concentrations are now <0.5 mg/L compared to 13mg/L in November 2017.



3. Future Plans

We are constantly working to ensure that the quality of the water being discharged from the mine is of an acceptable standard that is inline with EPA's requirements levels for the river ecosystem. All treatment has been completed with no negative effect on the environment, and as a safe solution ongoing.

Bulkheads

We are continually committed to exploring all options for ensuring the mine is closed in a safe and sustainable way that has minimal impact on both the environment and community. To do this, we have undertaken the installation of several underground bulkheads in the mine. This decision was based on the detailed review of potential solutions that fit the specific situational requirements of Berrima Colliery. This review has been completed in consultation and collaboration with the regulators.

- **What is a bulkhead?**

The bulkheads act like a large concrete 'plug' that is placed within the mine tunnel and acts as a barrier to the water coming through the mine. Each bulkhead also includes a grout curtain around its circumference that further assists with its ability to prevent water flowing through.

- **Why are they being used?**

Natural ground water flows through the old mine workings and then out into the river via the discharge adit. This has previously caused issues from a water quality perspective. While the trial passive treatment outlined at the top of this newsletter is to rectify the water quality issues, the installation of these bulkheads will lead to a permanent solution for all stakeholders.

- **What impact will it have on the environment?**

The bulkheads will not have an impact on the environment – their location in the mine, and the materials they're made of will have no negative effect.

- **What is the impact of the bulkheads on the surrounding land?**

Installation of these bulkheads will have no impact on the surrounding land apart from a minimal increase in the groundwater levels. This small increase in groundwater levels should be beneficial for local landowners.

- **What happens once the bulkheads are installed?**

The bulkhead installation has now been completed. Following installation of the bulkheads, we have ceased all pump treatment, increased underground monitoring, and anticipate a reduction to the amount of water flowing from the mine to the river. We are working with the regulators to monitor the outcomes of the bulkhead installation and their effectiveness in containing groundwater flows. We expect this duration to be six months upon which work will progress further on finalising our closure plan



Build something great™

Commitment to the community

We are focused on providing more accessible information for the community regarding the efforts being undertaken to secure a successful closure of the Colliery. We are dedicated to working with the local community and providing easy ways for you to ask questions. To do this, the following steps are being taken:

- **Dedicated Berrima Colliery Website**
This website will be where you can find updated information on events and works around the mine, with details on what work Boral is doing.
- **Regular newsletters**
We will send regular newsletters, like this one, which will share updates on the events around the mine.
- **Factsheets and videos**
We are creating a series of factsheets and videos, which will be shared on the website, to better explain and detail what Boral is doing on the mine.
- **Community meeting**
We are planning another community meeting to provide a face-to-face forum for sharing updates and answering any questions you have. Details on the date, time and location of this meeting will be shared in the near future.
- **Working group meeting**
Working Group meetings are continuing with the next meeting taking place in August 2019 – we encourage local residents to discuss any issues with the working group members so that matters can be raised at this appropriate forum.

More Information

If you'd like further information or to get in touch, please visit our current website at: <https://www.boral.com.au/medway-colliery>.

For any further queries or concerns, please call us on 4677 2946, 0401 894 097 or 4860 2222. Alternatively, you can email feedback@boral.com.au