



25 August 2019

**Submission on Wollongong Coal Ltd's Russell Vale Underground Expansion Revised Preferred Project 09\_0013.**

Thank you for the opportunity to make a submission.

The Protect Our Water Alliance (POWA) was formed in early 2019 in response to increasing concern about water losses and water quality impacts associated with ongoing mining in Sydney's Water Catchment. Public awareness of the permanent damage caused by mining in the water catchment is growing. Issues of concern are regularly reported in the Sydney Morning Herald, the Illawarra Mercury, ABC radio and through social media. Based in Wollongong, New South Wales, POWA is an alliance of concerned individuals and community groups, and is affiliated with grassroots groups and environmental organisations across the Illawarra, Southern Highlands, and Greater Sydney regions. POWA is not associated with any political party and has not made any political donations.

We **object** to the Russell Vale Underground Expansion Revised Preferred Project (UERPP) put forward by Wollongong Coal Ltd. We ask the Planning Minister to reject this proposal and commence activities to permanently close Russell Vale Colliery and to remediate the area. Further, we call on the NSW government to provide wide-ranging support to assist Russell Vale mine workers transition to new sustainable employment. We object to the proposed UERPP on many grounds, and we outline some of our reasons below.

**Our water catchment and our drinking water are too precious to allow further risky underground mining.**

Our primary concern is protecting our water catchment and access to adequate high-quality water, for our generation and for future generations. Wollongong Coal Ltd's earlier underground expansion projects proposed longwall mining in Special Areas of the Sydney Water Catchment. The most significant change proposed in the current UERPP from earlier proposals is a commitment not to longwall mine (known to cause significant and extensive subsidence) and to instead, only undertake first-workings mining in which pillars are left to support panel ceilings. The proposal repeatedly emphasises the long-term stability of the retained pillars.

However this mining is nonetheless also risky because a third seam of coal would be mined beneath two previously mined seams. Triple seam mining has little precedent and impacts are difficult to predict. And the proponent admits in the proposal:

*There is however a low risk of the proposed mining destabilising remnant pillars in historical Bulli Seam workings above the proposed workings.*<sup>1</sup>

Moreover, the land around the proposed mining is unstable. This instability would surely increase uncertainty of predictions of absence of impacts in the area. The proposal states:

*A number of areas within the UEP Application Area are currently in limiting equilibrium (on the verge of moving) because of previous mining, including Longwalls 4-6 in the Wongawilli Seam. Some ongoing low-level ground movement, mainly horizontal movement associated with previous mining including the Wongawilli Seam longwalls, may not yet have ceased completely. This low-level movement related to previous longwall mining operations has potential to continue to cause lowlevel impacts to Mount Ousley Road and valley closure across Cataract Creek that may be perceptible. This movement is a legacy of previous mining and is not expected to be influenced by the proposed mining. Movement may continue irrespective of any further mining in the Wongawilli Seam.*<sup>2</sup>

In any case, the claims of long-term stability and absence of subsidence of the proposed first-workings bord-and-pillar mining are unclear in terms of timeframe. Is the timeframe consistent with protecting our water catchment and our water for the current and future generations – for the next century at least? These claims appear to be based on research referenced as *Commonwealth of Australia (2014)*:

*Long-term research indicates that vertical subsidence as a result of the extraction method is typically less than 20 millimetres; consistent with variations in surface levels observed in natural or seasonal patterns (Commonwealth of Australia 2014).*<sup>3</sup>

Nothing else in the proposal appears to provide any basis for the claims of *long-term stability*. We note that the referenced Commonwealth of Australia (2014) document<sup>4</sup> focusses on longwall mining rather than bord-and-pillar or first-workings mining. It refers to bord-and-pillar mining as providing stability in the *long term* without explicitly and specifically contextualising the period or the reliability and extent of data evidence. Clearly, compared to longwall coal mining, bord-and-pillar is much more stable and limits subsidence. However this report also notes that:

*While most attention has been paid to subsidence induced by longwall mining, all methods that result in a sufficiently wide area of unsupported roof strata can cause subsidence. The bord and pillar methods that dominated Australian underground coal mining up to the 1980s frequently generated subsidence, but it was generally less extensive than subsidence from longwall mining.*<sup>5</sup>

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<sup>1</sup> Umwelt (2019) *Revised Preferred Project Environmental Assessment* p 53, Table 5.1. Page 67 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>2</sup> Umwelt (2019) *Revised Preferred Project Environmental Assessment* p 62. Page 76 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>3</sup> Biosis (2019) *Russell Vale Colliery – Underground Expansion Project: Updated Ecological Impact Assessment FINAL REPORT* p 10. Page 486 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>4</sup> Commonwealth of Australia (2014) *Background Review: Subsidence from coal mining activities*. Accessed 25/08/2019 from: <https://environment.gov.au/system/files/resources/1ebc143e-e796-453d-b9d6-00cddbabbdee3/files/background-review-subsidence-coal-mining.pdf>

<sup>5</sup> Commonwealth of Australia (2014) *Background Review: Subsidence from coal mining activities* p5-6. Accessed 25/08/2019 from: <https://environment.gov.au/system/files/resources/1ebc143e-e796-453d-b9d6-00cddbabbdee3/files/background-review-subsidence-coal-mining.pdf>

So, clearly it is possible for the proposed bord-and-pillar mining to cause further subsidence. It is important to point out that if the proposed bord-and-pillar mining is compared to POWA's preferred option of no further mining (rather than to the option of longwall mining), then the proposed bord-and-pillar mining is relatively much more risky.

Mining intrinsically damages the environment and so unsurprisingly, the UERPP will not be neutral in terms of water lost from the catchment. The UERPP will increase the losses of groundwater and surface water from Cataract Reservoir and its catchment, on what is already occurring due to mining. The total estimated water losses will then be 288 ML/year of groundwater and 10 ML/year of surface water stream base-flow, in total, 298 ML/year.<sup>6</sup> This is the equivalent annual water usage of more than 2,500 people.<sup>7</sup> In addition, 146 ML/year of *upgradient inflow* from surrounding mines – the now inactive Cordeaux mine and Corrimal mine (not mined by Wollongong Coal) – are draining water into Russell Vale Colliery workings, bringing the total water losses to 444 ML/year<sup>8</sup> (the equivalent annual water usage of 3,754 Greater Sydney residents).

Following completion of mining, the void left behind will fill up with water. The water will keep rising until it reaches the adit (mine portal) in the Illawarra Escarpment, estimated to occur about 2057. The water will then overflow through the adit and modelling estimates that the outflow will slowly increase, reaching 0.3 ML/day in 2179. Water outflow at the adit above Russell Vale is expected to continue even beyond 160 years from now. The outflow will need to be managed and treated but Wollongong Coal Ltd is proposing a commitment to manage and treat the water for only 10 years.<sup>9</sup>

We believe this whole proposal does not adequately value or protect the Sydney Water Catchment or the water and other ecosystem services it provides, and fundamentally lacks a long-term sustainability perspective. It is contrary to the public interest for the NSW government to allow such damaging mining in the Sydney Water Catchment which provides drinking water to 5 million people.<sup>10</sup>

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<sup>6</sup> Umwelt (2019) *Revised Preferred Project Environmental Assessment* p 71-72. Pages 85-86 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>7</sup> Based on a water consumption rate of 324 litres per person per day, cited in Sydney Water (2018) *Sydney Water Conservation Report 2017/2018* p 3. Accessed 25/08/2019 from: [https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mdq3/~edisp/dd\\_047419.pdf](https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mdq3/~edisp/dd_047419.pdf)

<sup>8</sup> Umwelt (2019) *Revised Preferred Project Environmental Assessment* p 71-72. Pages 85-86 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>9</sup> Umwelt (2019) *Revised Preferred Project Environmental Assessment* p 172. Page 186 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>10</sup> Estimated population from Sydney Water (2018) *Sydney Water Conservation Report 2017/2018* p 5, Figure 2-1. Accessed 25/08/2019 from: [https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mdq3/~edisp/dd\\_047419.pdf](https://www.sydneywater.com.au/web/groups/publicwebcontent/documents/document/zgrf/mdq3/~edisp/dd_047419.pdf)

**It is time we took responsibility for our exported greenhouse gas emissions and their contributions to global climate change.**

Although only a small project, the UERPP has a large carbon footprint. Based on the project extracting 3,700,000 tonnes ROM coal over 5 years, the total estimated GHGEA emissions for the project, from mining up to and including usage will be about 11,147,000 tonnes CO<sub>2</sub>e. And the estimated GHGEA Scope-1, Scope-2 and Scope-3 average annual GHG emissions are 284,000, 21,000 and 1,925,000 tonnes CO<sub>2</sub>e/year, respectively.<sup>11</sup> In context, these annual emissions are equivalent to the annual emissions for more than 100,000 Australians.<sup>12</sup>

Unsurprisingly, the Scope-3 emissions are the largest proportion of estimated GHG emissions, as they include emissions associated with the transport and then use of the mined coal, mostly overseas. We note that, shockingly, despite our small national population:

*Australia is the world's third biggest exporter and fifth biggest miner of fossil fuels by CO<sub>2</sub> potential. Its exports are behind only Russia and Saudi Arabia, and far larger than Iraq, Venezuela and any country in the EU. Yet Australia's economy is more diverse and less fossil fuel intensive than many other exporters. Australia has an opportunity and obligation to decarbonise its exports in line with the Paris Agreement.*<sup>13</sup>

As a nation, it is time we took responsibility for our exported GHG emissions, rather than merely categorise them as Scope-3 and allocate responsibility to others. As a community, we can decide whether to allow coal mine expansions like the proposed UERPP to proceed or not. As a community and as the NSW state, we should not seek to exploit international demand for coal and at the same time wash our hands of any responsibility as we supply it. We should recognise the climate crisis and act now to reduce coal exports.

Globally we share the impacts of increased concentrations of carbon dioxide and other greenhouse gases in our atmosphere. Locally, as a result of climate change, we will likely experience further overall warming, more and longer droughts, more extreme weather events and more bushfires. Consequently, more water will be lost to evapotranspiration; ecosystems and humans will be under greater heat and water stress; and there will likely be increased demand for water from our Sydney Water Catchment. That is, water will become only more precious with time, while at the same time we need to move away from fossil fuels. It makes no sense to approve this coal mining expansion.

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<sup>11</sup> <sup>11</sup> Umwelt (2019) *Revised Preferred Project Environmental Assessment* p 133-136. Pages 147-150 in Umwelt (2019) *Russell Vale Revised Underground Expansion Project 3687\_R05 RtPAC Second Review FINAL*. July 2019. Accessed 25/08/2019 from: <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf>

<sup>12</sup> Based on a GHG emissions rate of 21.5 tonnes CO<sub>2</sub>-e per person per year as described in Commonwealth of Australia (2018) *Quarterly Update of Australia's National Greenhouse Gas Inventory: December 2018* p 21. Accessed 25/08/2019 from: <http://www.environment.gov.au/system/files/resources/408fcc37-dcfd-4ab8-a4f9-facc6bd98ea6/files/nggi-quarterly-update-dec-2018.pdf>

<sup>13</sup> Tom Swann (2019) *High carbon from a land down under: Quantifying CO<sub>2</sub> from Australia's fossil fuel mining and exports* The Australia Institute, July 2019 p 1. Accessed 25/08/2019 from: [https://www.tai.org.au/sites/default/files/P667%20High%20Carbon%20from%20a%20Land%20Down%20Under%20%5BWEB%5D\\_0.pdf](https://www.tai.org.au/sites/default/files/P667%20High%20Carbon%20from%20a%20Land%20Down%20Under%20%5BWEB%5D_0.pdf)

## **The proponent is not fit and proper to hold a mining licence.**

In India, corruption charges are being framed against Naveen Jindal, Chairman of Jindal Steel and Power Ltd (JSPL). JSPL, via a holding company, JSPL Mauritius, is the majority shareholder in Wollongong Coal Ltd.<sup>14</sup>

Moreover, here in Australia, the company has a history of failing to comply with conditions of approval. Previous applications and approvals promised numerous items to protect the community and environment, and these have not been delivered on by the proponent. These include but are not limited to: truck loading facilities; sound walls; covered conveyors; limited stockpiles; sealed roadways and realignment of Bellambi Creek. Now in this UERPP, Wollongong Coal Ltd is promising the same or similar things. In fact right now, Wollongong Coal Ltd is operating under at least two major non-compliances: the realignment of Bellambi Creek to protect it from pollution and flooding (due Oct 2012); and, the dedication of land to Council in a 1989 approval from Wollongong City Council (due 1990). It is of real concern in the current UERPP that the proponent is proposing to put in place pit top infrastructure *after* they have started mining. History shows that operators of this mine are unwilling or unable to meet the conditions of mining approvals and that the Department of Planning is unwilling or unable to enforce compliance. The local community suffers the consequences.

Even Wollongong Coal Ltd's auditors have questioned its capacity to continue as a going concern: its current liabilities exceed its current assets by nearly A\$1 billion.<sup>15</sup> Operating a coal mine in the water catchment of Australia's largest city is risky business. Wollongong Coal Ltd and its parent company Jindal Steel and Power Ltd, are currently the subject of an investigation by the NSW Resources Regulator into whether they are a *fit and proper person*<sup>16</sup> to hold a mining license. The investigation by the NSW Resources Regulator began in July 2016 and is still ongoing more than three years later. We urge the NSW Planning Minister at the very least not to make a final decision regarding the proposed UERPP until that investigation has concluded.

## **Conclusion**

We **object** to the Russell Vale Underground Expansion Revised Preferred Project (UERPP) put forward by Wollongong Coal Ltd. We ask the Planning Minister to reject this proposal. Now is not the time for a further damaging coal mine in our Sydney Water Catchment.

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<sup>14</sup> <http://www.newindianexpress.com/nation/2019/jul/01/delhi-court-orders-framing-of-charges-against-naveen-jindal-and-four-others-in-coal-scam-case-1997865.htm>

<sup>15</sup> <https://www.illawarramercury.com.au/story/6294659/wollongong-coal-has-a-1-billion-debt-problem-auditor/>

<sup>16</sup> As defined in NSW Resources Regulator (2018) *Fit and proper persons policy*. Accessed 25/08/2019 from: [https://resourcesandgeoscience.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0003/819237/Fit-and-Proper-Policy-under-the-Mining-Act-and-Petroleum-Onshore-Act.pdf](https://resourcesandgeoscience.nsw.gov.au/__data/assets/pdf_file/0003/819237/Fit-and-Proper-Policy-under-the-Mining-Act-and-Petroleum-Onshore-Act.pdf)