**Submission on Wollongong Coal’s Russell Vale mine expansion**

**Illawarra Escarpment Alliance**

27 October 2020

The Illawarra Escarpment Alliance (EscA). EscA was established in 2019 as an alliance of local individuals and groups concerned to protect the cultural and environmental heritage of the Illawarra Escarpment. The Alliance’s objectives include to protect and conserve the ecological integrity and unique vegetation communities of the Illawarra Escarpment and prevent activities that negatively affect slope and soil stability.

EscA objects to this project. EscA members are concerned about the potential impact of this Project on the Illawarra Escarpment’s environmental heritage. We are concerned that this Project may negatively impact the escarpment’s environmental heritage, through its general contribution to global climate change and its specific contribution to local fire risk.

**Climate change**

One aspect of this Project, and other projects that it will enable, is its contribution to climate change. Climate change modelling for the Illawarra region will contribute to a hotter climate, longer dry periods and more intense rain events, greater loss of soil moisture, and greater bushfire risk. Climate change poses huge risk to the ecological communities of the Illawarra escarpment, as to ecological communities globally. Every new mine or mine extension adds to the carbon pollution burden, and to the threat to the escarpment. Climate change poses risks to individual species and to ecological communities of the escarpment, and is listed a key threatened process in both the state and federal listings of Illawarra subtropical rainforest as a threatened ecological community.

If approved, Wollongong Coal’s Russell Vale mine would be in the top 100 emitters of Scope 1 greenhouse gas emissions in Australia. Russell Vale is a ‘gassy mine’, meaning a lot of methane would be released into the atmosphere during mining; methane is in the short term a much more potent greenhouse gas than carbon dioxide.

**Bushfire risk**

More specifically, EscA is concerned that the project may increase bushfire risk to the Illawarra escarpment vegetation, particularly but not only that portion of the Illawarra escarpment that is included in the Illawarra Escarpment State Conservation Area (IESCA), which is part of the national parks estate in New South Wales.

Members of the IPC asked about national parks near the project area during a public hearing on the project held on 20 and 21 October 2020, and were told by speakers of the Dharawal National Park. Potential impacts of this project on the IESCA should also be considered. If it were not for mining rights in relation to portions of the IESCA, the IESCA would most likely have been gazetted as a national park.

The project will contribute to bushfire risk through climate change, as mentioned above, raising risk of fire on the Illawarra escarpment and in the IESCA. We also have concerns that drying impacts on the vegetation of the Special Areas west of the escarpment cliff line may also increase local bushfire risk. For example, research finds that when upland swamps dry out, they don’t recover from fire and may become more fire-prone.[[1]](#footnote-2) An open letter to the Premier of NSW by scientists and published on 18 May 2020 made this point, and called for a suspension of approval processes for any further planning applications or post-approval plans (for mining in the Schedule 1 Special Areas of the Sydney Drinking Water Catchment. They wrote: ‘We further encourage the Government to undertake planning for the phase-out of mining in the Metropolitan and Woronora Special Areas. We note that while these areas have been degraded by mining, they still contain some of the few areas of pristine bushland left in NSW. With just two mines currently active, phase out with no further approvals would seem timely.’*[[2]](#footnote-3)*

EscA is concerned that the project contribute to the drying out of the vegetation of the Cataract Reservoir catchment area. This will increase the bushfire risk, both in the Cataract Reservoir catchment area itself, but also to the wooded eastern slopes of the escarpment behind Wollongong.

In terms of fire history, there is a history of fires approaching the Illawarra region from the west. In 1968 fire burned down the escarpment from the west, from where it was able to spread rapidly northwards.[[3]](#footnote-4) The Hall Road fire of October 2013 and the Morton fire of January 2020 at times both moved westward towards the Illawarra region, although neither reached the eastern slopes of the escarpment itself.[[4]](#footnote-5)

EscA acknowledges that the project uses bord and pillar methods and will likely be less damaging to surface ecosystems than longwall mining, but it will nevertheless lead to loss of both surface and ground water in the Reservoir catchment. EscA also notes that approval of this project would reactivate a currently lapsed approval for longwall mining that would enable 25 metres of additional longwall mining close to upland swamp CCUS4. Previous longwall mining in this area (Longwall 4) had significantly higher than predicted subsidence impacts, at 1.4m nearly five times the predicted subsidence.[[5]](#footnote-6)

The rainforest and wet sclerophyll vegetation of the Illawarra escarpment are considered to function as a fire barrier. However, on extremely hot and dry days, such as were experienced last summer, even this kind of vegetation can burn if fire reaches it. Hence it it is critical to protect the vegetation to its west as much as possible, both for the sake of those areas, and for the sake of the Illawarra escarpment and its critically endangered subtropical rainforest[[6]](#footnote-7) and other ecological communities. It is worth remembering also that the vegetation of the Woronora plateau and Illawarra escarpment is one of the last large unburnt natural areas in NSW, and is therefore critical for local biodiversity conservation and also potentially to support revegetation efforts in bushfire-affected areas elsewhere in the state.

1. Research findings are summarised in Water NSW’s submission to the Independent Expert Panel on Mining in the Sydney Water Catchment – Task 1 Matters; see e.g. p.79. <https://www.waternsw.com.au/__data/assets/pdf_file/0020/132167/WaterNSW-submission-to-the-IEP-Task-1-of-Terms-of-Reference-vB.pdf>. May 2018. Accessed 27 October 2020. [↑](#footnote-ref-2)
2. Open letter to the Premier of NSW. <https://sites.google.com/site/specialareasconcerns/>. 18 May 2020. Accessed 27 October 2020. [↑](#footnote-ref-3)
3. Drought, wind and heat: when bushfire seasons start earlier and last longer. Owen Price. <https://theconversation.com/drought-wind-and-heat-when-fire-seasons-start-earlier-and-last-longer-101663>. August 17 2018. Accessed 27 October 2020. Illawarra could burn: academic. Michelle Hoctor. <https://www.illawarramercury.com.au/story/613226/illawarra-could-burn-academic/>February 15 2009. Accessed 27 October 2020. [↑](#footnote-ref-4)
4. Wildfire conditions in Australia the worst in 40 years. Wildfire Today. <https://wildfiretoday.com/2013/10/21/wildfire-conditions-in-australia-the-worst-in-40-years/>. 21 October 2013. Accessed 27 October 2020. Morton fire upgraded to watch and act. <https://www.illawarramercury.com.au/story/6575462/morton-fire-upgraded-to-watch-and-act/>. 10 January 2020. Accessed 27 October 2020. [↑](#footnote-ref-5)
5. Gujarat NRE Coking Coal Ltd NRE No. 1 Colliery Longwall 4 End of Panel Report p15. <http://wollongongcoal.com.au/monitoring-r/>. Accessed 27 October 2020. [↑](#footnote-ref-6)
6. Amendment to the list of threatened ecological communities under the *Environment Protection and Biodiversity Conservation Act 1999* (EC148 and EC61). <https://www.legislation.gov.au/Details/F2019L01143>. Accessed 27 October 2020. [↑](#footnote-ref-7)