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Submission: Dendrobium Mine Extension Project

Application Number

SSI-33143123

The Greens NSW oppose the proposed expansion of mining within Area 5 of the Dendrobium Mine Extension Project. We also object to this project being granted State Significant Infrastructure status by the NSW Government in what appears to be an attempt to undermine the will of the Independent Planning Commission and the local community.

Outlined below are the reasons for our opposition to the project.

Extension of the Mines Life and Emissions

This project would extend the life of the mine until 2041 and see up to 5.2 million tonnes of Run of Mine (ROM) coal extracted each year until 2035.

Based on the average Scope 1 emissions of 789,551 tonnes CO2-e per annum, the Dendrobium Extension could become the 4th highest emitting coal mine in NSW.

These emissions will consist largely of fugitive methane emissions. The International Energy Agency's Net Zero by 2050 report states that government and industry should move towards the *"elimination of all technically avoidable methane emissions by 2030".*

Demand for Metallurgical and Thermal Coal

Despite the demand in Illawarra for coking coal there is no need for the Dendrobium Mine Extension Project to provide coking coal to the steelworks with adequate high-grade coking coal available through exploiting existing approvals to meet all the Port Kembla mill's needs for the next decade and beyond.

A rapid transition to 'Green Steel' will also reduce demand and is predicted to result in 100% green hydrogen being used for 40% to 55% of steel production by 2050 with steel producers representing 20% of global primary production capacity including half of the world's ten largest producers setting ambitious reduction targets[1].

Bluescope has signed an MoU with Rio Tinto to explore using renewable hydrogen to replace coking coal to directly reduce iron ore.

The recent change in government is likely to accelerate this process with the Albanese Government's 'Powering Australia Plan' which cites Hydrogen Breakthrough Ironmaking

[1] https://www.theassay.com/articles/analysis/paving-the-way-for-the-transition-to-green-steel/

Technology as an opportunity to transition from traditional blast furnaces (like the one currently in use at Port Kembla).[2]

Similarly the sharp increase in renewable energy will drive down any demand for thermal coal.

In December 2021, the International Energy Agency forecasted to rise more than 60% from 2020 levels to over 4 800 GW[3]. Research by Green Energy Markets estimates that rooftop solar will increase from 11 gigawatts in 2021 to 22GW by 2025 with renewables providing 40 to 50% of the national energy market demand.[4]

Impact on Cultural Heritage

The mining extension will also continue a legacy of the destruction of natural and cultural heritage within the area. Merrigong, being the Dharawal name for the escarpment, is considered to be the Uluru of the Illawarra. It would be inconceivable to propose a mining extension within Uluru itself. It should be equally inconceivable under Merrigong.

The views of key Aboriginal stakeholders must be prioritised whenever considering the potential destruction of First Nations country . The cultural history of the area and the connection of the Dharawal and Wodi Wodi people to Country should be maintained as it was for thousands of years before European Colonisation.

If this project is approved, then 31 sacred Aboriginal Heritage sites will be under threat, including 6 sites directly above the Area 5 longwalls. The Environmental Impact Statement has identified 13 axe grinding grooves, 8 shelters with art, 2 shelters with deposits, 1 shelter with art and deposits, 6 shelters with art and potential archaeological deposits and 1 isolated find.

The EIS also contains the following comment from a Registered Aboriginal Party stating:

"From a cultural values perspective, a lot of importance has been placed on the item's locations, but in terms of cultural values everything that is on the land holds relevance to Aboriginal culture. Sites are the story law, and everything that forms part of the land provides context to the story of the culture. It's about whole of country rather than specific sites. Sadly, the mining company's response to the impact of this mine expansion on Aboriginal people and Aboriginal culture and heritage is that further reducing the impact on Aboriginal culture and heritage "may be less economically viable".

There is no requirement for South 32 to preserve or avoid the identified sites nor any legal repercussions for their destruction. The Greens believe this is unacceptable and for this reason alone the extension must be rejected.

Impact on Koalas

The EIS identifies the area as koala habitat with koalas present but does not identify the size of the koala population nor has any apparent work been undertaken to do so. There is no management plan for koalas in the area that may be impacted by clearing for infrastructure related to the mine expansion.

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[2] https://www.alp.org.au/policies/powering-australia

[3] https://www.iea.org/news/renewable-electricity-growth-is-accelerating-faster-than-ever-worldwide-supporting-the-emergence-of-the-new-global-energy-economy

[4] http://greenmarkets.com.au/images/uploads/Coal-Plant-Profitability-Is-Eroding_February-2021.pdf

The Biodiversity Offset Strategy identified in the EIS states that South 32 would meet its requirements by purchasing offset credits or making a payment into the Biodiversity Conservation Fund.

Koalas have now been listed as endangered in NSW at a state and federal level. The NSW Parliamentary Inquiry into koala populations and their habitat identified habitat destruction as a key driver of extinction and that the koala was on course to become extinct in NSW before 2050 if habitat loss wasn't addressed.[5]

During the NSW Parliamentary Inquiry into the Biodiversity Offsets Scheme, it was revealed that between 25 August 2017 to 19 January 2022, 206 major projects had generated 694,632 species credits but only 176,923 credits had been finalised into stewardship agreements.[6] The Department of Planning has acknowledged a gap between the supply and demand for some biodiversity credit types that will make it difficult to meet these offset requirements.

Supply of koala habitat biodiversity credits cannot reportedly keep up with the demand in credits needed for the continued extraction of their habitat across the state. Therefore, it is highly unlikely that biodiversity offsets will be able to be found to offset the loss of koala habitatunder the state's Biodiversity Offsets Scheme if this project were to go ahead.

Impact on the Water Catchment

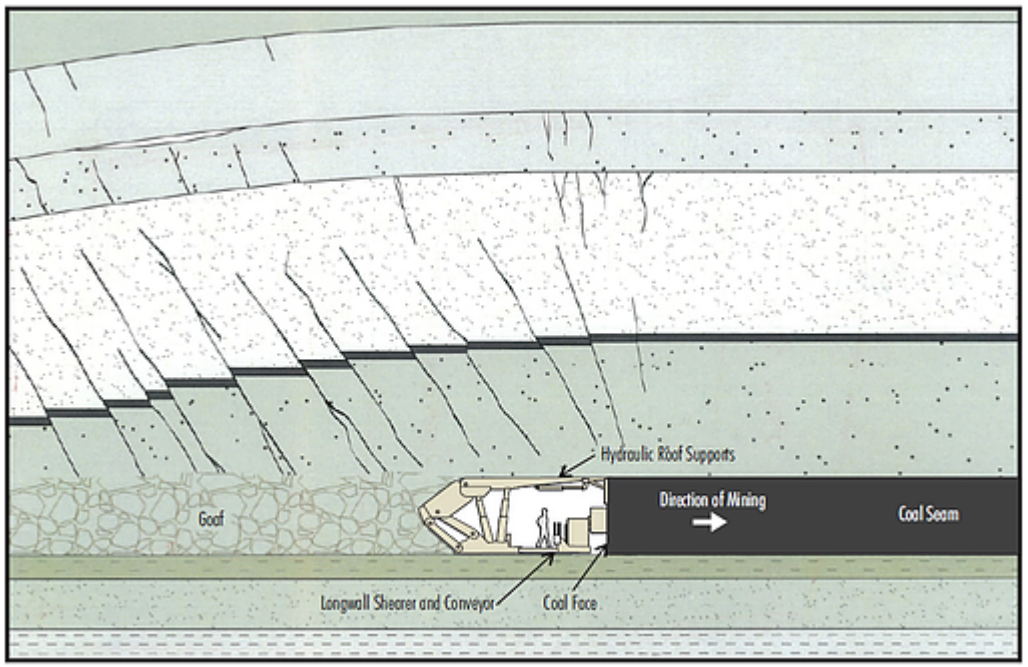
The Illawarra provides 30% of Sydney's water. . It is therefore inconceivable that the water security of over one million people will be compromised as a result of mining.

There are 22 swamps in the mining area, with 15 swamps directly above proposed longwalls.

The threat of longwall mining to the water catchment was stated by the Independent Planning Commission as central to its decision to reject the previous proposal to expand the mine into Areas 5 and 6.

Longwall mining is the most destructive and aggressive form of mining, with "shearers" used to drill a passage through the coal seam between 250 to 400 metres wide. As the shearer moves forward the roof of the passage collapses creating significant subsidence.

[5] https://www.parliament.nsw.gov.au/committees/inquiries/Pages/inquiry-details.aspx?pk=2536
[6]https://www.parliament.nsw.gov.au/lcdocs/other/17238/Department%20of%20Planning%20and%20Environment%20-%20Answers%20to%20Questions%20on%20Notice%20-%208%20April%202022.pdf



The creation of subsidence as a result of longwall mining

Subsidence produces fissures on the surface as is visibly the case at Redbank Creek where subsidence produced by the Tahmoor mine has seen sections of the creek run dry "for the first time in living memory".

Subsidence from the mine has also lead to the presence of heavy metals including nickel, zinc, barium, strontium and lithium in the creek. This has virtually destroyed the local ecosystem.

Subsidence at Redbank Creek

Similarly, the Metropolitan Longwall Mine in the Woronora catchment has also caused significant damage, with two swamps and a large proportion of pools drying out. The Sydney

Morning Herald has also published drone footage showing highly discoloured water and subsidence in the dam reservoirs' eastern tributary, with stagnant pools flowing below the surface.

A report by the Independent Expert Panel into Mining in the Catchment estimates that subsidence within the Greater Sydney Water Catchment from existing mines is leading to the loss of 8 million litres of water each day, with the Dendrobium mine responsible for nearly 5 million litres per day. This is equivalent to 2,920 million litres per year lost from Sydney's water supply system.

Conclusion

The Greens NSW oppose this project due to the disastrous impacts it would have on greenhouse gas emissions including methane, biodiversity and threatened species including koalas, Aboriginal cultural heritage and our water security.

Yours sincerely

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Greens NSW spokesperson for water and planning