

14 June 2022

Via online submission portal.

To whom it may concern

DENDROBIUM MINE EXTENSION PROJECT (SSI-33143123)

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 160 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

In December 2020, NCC made a submission to the NSW Independent Planning Commission opposing the coal mine expansion plans at Dendrobium (attached). Our opposition was informed by the proposed project's unacceptable impacts on the environment and ecology of the Metropolitan Special Area, the threat posed to cultural heritage and Sydney's drinking water supply, and its greenhouse gas emissions.

The NSW Independent Planning Commission (IPC) stopped the proposed expansion, finding indeed that the design risked long-term and irreversible damage to Greater Sydney and the Illawarra's drinking water catchment.

The revised plan submitted by the South32 has not ameliorated these threats or impacts. It would still result in losses to the drinking water catchment, a tripling of direct GHG emissions and potentially irreversible damage to 16 endangered swamps.

NCC opposes the proposed project for the reasons outlined in this submission, and in our 2021 submission to the original proposal.

Thank you for the opportunity to participate in the consultation.



Nature Conservation Council

The voice for nature in NSW

Your key contact point for further questions and correspondence is Wilson Harris, available via wharris@nature.org.au and 02 9516 1488. We welcome further conversation on this matter.

Yours sincerely,

Chris Gambian
Chief Executive
Nature Conservation Council

NCC Submission on the Dendrobium Mine Extension Project

1. Impacts on Illawarra and Sydney's drinking water

Sydney is the only city in the world that allows longwall mining in a publicly owned water catchment. The proposed mining is in the protected Special Areas of the water catchment upon which 5 million people rely for drinking water.

Longwall mining inside the Special Areas of Sydney and the Illawarra's drinking water catchment should cease. This is the position of WaterNSW and the legislated purpose of Special Area protection.

While the new Dendrobium proposal is reduced in size, the longwalls are still 305m wide and may result in significant subsidence.ⁱ

The NSW IPC found when South32 previously proposed longwall mining in the same area, that there was a risk of *"potentially irreversible impact upon the quantity and quality of surface water in perpetuity"*. There is no reason to believe that the result would be different under the new proposal.

2. Undermining of endangered and nationally-significant swamps

If the proposed mine expansion proceeds, water loss and contamination resulting from outflows and leaching of minerals into waterways will damage aquatic habitat and lifeforms.

16 swamps listed as 'threatened' will be undermined by longwall mining, threatening irreversible damage.ⁱⁱ Swamps are a repository for biodiversity, and they function as giant sponges and contribute to a stable supply of drinking water.

Undermining swamps dries, or 'dewater' them and is irreversible. The proposed expansion is a real and devastating threat to plants and wildlife in the catchment. Recent direct experience in NSW has shown that swamps that have been undermined are also less able to recover after bushfire compared to swamps that were not undermined.ⁱⁱⁱ



The proposed project poses the same, significant threats to Greater Sydney's essential biodiversity.

3. Impact on endangered koalas and their habitat via clearing

Koalas are endangered.

The proposed project's Environmental Impact Statement notes that there are koalas living in the area that will be undermined. There is no current survey of koala numbers or locations. There is no management plan for koalas who may be living in areas that will be cleared for infrastructure.

The proposal contains some promise of future action in an offset that includes a bio-banking scheme that has not yet been negotiated, and payment to a government trust. However, the proposed expansion of Dendrobium poses devastating impacts on today's koalas, regardless of any yet-to-be-determined future offset.

4. Unacceptable emissions and climate impacts

The proposed project would more than triple current direct (Scope 1) GHG emissions.

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

These emissions will primarily be fugitive methane emissions. Fugitive methane emissions have been identified specifically as requiring urgent reduction.^{iv}

Cumulative to the emissions produced by the project, coastal upland swamps and their carbon capture and storage ecoservices will be destroyed.^v Neither South32 or DPIE have considered or estimated greenhouse gas emissions associated with expected swamp destruction, or loss of carbon uptake that the swamps currently perform.

It is now internationally acknowledged that no new coal mine or extensions should be approved if the global energy sector is to reach zero emissions by 2050 and help avoid catastrophic climate change.^{vi}

Recommendation

Based on the known impacts of the proposed project, this application should be rejected.

Our biodiversity and climate are close to dangerous tipping points. Our natural environment has become so fragile that biodiversity, climate, water, air, soil and food are all at risk. Averting a looming environmental catastrophe should be front and centre of all development decisions, whether that decision is made by a Minister or an independent body.

References

ⁱ Subsidence Report for Dendrobium Mine, MSEC, 2019, pp 35 – 37, accessed at: <https://pp.planningportal.nsw.gov.au/major-projects/projects/dendrobium-mine-extension-project>

ⁱⁱ ABC Illawarra, Kelly Fuller, 22 Mar 2021, 'Scientists warn of 'irreversible' damage to endangered swamps near Sydney if longwall mining continues', <https://www.abc.net.au/news/2021-03-22/coal-mining-causing-irreversible-damage-to-endangered-swamps/13262840>

ⁱⁱⁱ Final Report of the NSW Bushfire Enquiry, p. 241, accessed at: <https://www.dpc.nsw.gov.au/publications/categories/nsw-bushfire-inquiry/>

^{iv} International Energy Agency, 2021, Net Zero by 2050, A roadmap for the sector, (accessed <https://www.iea.org/reports/net-zero-by-2050>) called for the "elimination of all technically avoidable methane emissions by 2030".

^v Cowley, K.L. & K.A.Fryirs (2020) Forgotten peatlands of eastern Australia: An unaccounted carbon capture and storage system. Science of the Total Environment. 730 (2020) 139067. <https://doi.org/10.1016/j.scitotenv.2020.139067>

^{vi} International Energy Agency, 2021, Net Zero by 2050, A roadmap for the sector, accessed <https://www.iea.org/reports/net-zero-by-2050>