

Submission

10-6-22

I object to the Dendrobium Extension Project (SSI-33143123)

My background:

I am a resident of Bulli, ex-resident of North Wollongong & have lived in the Northern Illawarra for over 23 years. I have a Bachelor in Environmental Science with Honours – majoring in water and sediment quality of Wollongong's Northern streams.

The reasons for my objection are as follows:

1) *Don't ignore IPCC advice & Approve 19 years of Greenhouse Gas Emissions (and promote global Warming)*

When I explained this proposal to my children, without prompting, they asked 2 key questions:

- 1) "Why does the government allow more coal mining?"
- 2) "Why can't the government plan for Carbon Neutral jobs?"

So, on behalf of my Children, please reject the proposal impacting their future. They have most to lose from the proposal. Has the approving Minister enquired with their children if they would like having 5.2 million tonnes of Coal being mined per year until 2041 contributing to Global Warming far above safe levels? With the quantity of Greenhouse emissions outlined in the proposal (Appendix R, page 18).

The IPCC 2018 Special Report warned that to limit global warming to 1.5°C then, globally, by 2030, primary energy from coal needs to have reduced by a minimum of 59 %. In this context, this coal mining extension proposal spanning 19 years (to 2041) should not even be considered. In 2019, the IPCC said "Coal use in OECD nations should end completely by 2030. Coal Production should have peaked in 2020". Therefore, it would be globally irresponsible to approve Coal Mine extensions in 2022!

Australia is a major greenhouse gas polluter. In 2016 Australia had higher emissions than 90 % of all countries; had the seventh highest emissions per

capita; and even worse as an exporter of GHG emissions, ranked third after Saudi Arabia & Russia for exports of fossil fuel CO₂e potential. Coal makes up more than 80 % of this export.

The emissions from combustion of coal that Australia sells (i.e. scope-3 emissions) are very significant. Australia's planning authorities need to take responsibility for our exported coal. Please consider these scope 3 emissions & reject the mine extension.

2) Carbon Zero Uncertainty

Chapter 2.3.2 (NSW Net Zero Plan Stage 1: 2020-2030) of the Scoping document acknowledges:

"It is acknowledged that there is no definitive 'best pathway' to net zero and some of the innovations needed are not fully developed."

I argue that the consequence of postponing responsibility of technologies to reach Carbon Zero is again adding catastrophic risks & debt to our future generations. The actual and only method to reach Carbon Zero is to reject coal based industries wherever the opportunity exists. Please reject approving 19 more years of Coal mining expansion.

Even in Mazengarb, 2022, the NSW Planning Department acknowledged that applying its climate targets to individual fossil fuel applications contained "significant uncertainty". Please do not ignore uncertainty & risk the safe climate custodianship we owe to future generations and the living planet we inhabit.

Even the NSW treasury report from 2021 acknowledged "to meet it's net zero commitment, meaningful action on GHG emissions from Coal Mining is required". Please listen. Reject Coal mine extension.

3) Subsidence from Longwall Mining will damage the watercourses and swamps that feed our drinking water reservoirs

The very wide longwall mining and associated subsidence will cause cracking of the land on the surface – including rivers, creeks, smaller watercourses and swamps that feed our drinking water reservoirs – and subsequent water loss to the catchment. No level of damage is acceptable to these Special Areas. All damage is permanent. Attempts to ‘plug’ up surface cracks are unrealistic.

The mining will come to within only several hundred metres of the Avon and Cordeaux Reservoirs. It will result in water losses from Avon, which is the only source of water supply to over 310,000 residents and businesses in the Illawarra region, as well as Cordeaux Reservoir, which along with Cataract Reservoir is the main water supply for Camden, Campbelltown and Wollondilly council areas and even as far afield as Nepean Reservoir, which is the water supply for the nearby towns of Bargo, Thirlmere, Picton and The Oaks. All three affected reservoirs, Avon, Cordeaux and Nepean also supply water to Sydney.

These areas are an important component of the Greater Sydney Water Catchment. They supply between 20 and 30% of Greater Sydney’s water in normal times. In abnormal events when Warragamba is compromised by water quality (eg cryptosporidium and giardia water crisis or the 2019/20 black summer bushfires which burned the Warragamba catchment) they may supply even more proportionally. The Lease Area 5 proposed extension is modelled to account for 428ML of surface water loss per year (Appendix B Groundwater Assessment p183). Please do not approve this damage.

In addition, the mine expansion is expected to almost double the polluted wastewater flow into Allans Creek (from LDP5) which was already identified recently to have exceeded safe levels of heavy metals.

4) Permanent Damage to Upland Swamps

The upland swamps of the Woronora Plateau play a key role in the water catchment by capturing and holding water, filtering it, and in times of drought releasing it slowly into the creeks and rivers that feed into the reservoirs. They are like a retention sponge. These swamps are also classified

as Endangered Ecological Communities (EEC) and are significant in terms of their biodiversity.

The upland swamps provide a diverse web of permanently wet peaty soils within a dry sandstone landscape. Each swamp is a unique community containing rare plants and animals. The specialised flora and fauna of the EEC also carry individual protection at species level. Inevitable dewatering the swamps would result in local extinctions in breach of multiple layers of State and Federal legislative protection.

There are 46 swamps in the mining area with many at risk of cracking by the longwall mining. 16 swamps listed as 'threatened' will be undermined by the longwall mining. Water drains away from swamps into the mining void, the swamps drain, the flora and fauna die off, and dryland species take over. The swamps lose their capacity to hold water in drier times. They are more prone to erosion and bushfire. Research shows that swamps that have been undermined are less able to recover after bushfire compared to swamps that were not undermined. Please do not exacerbate the Bushfire risks of our communities by approving Longwall mining underneath.

Coastal upland swamps also provide carbon capture and storage ecoservices. The applicant has not accounted for, or estimated greenhouse gas emissions associated with expected swamp destruction with consequential loss of carbon uptake that the existing swamps do. This has been overlooked and may have a bigger ecological impact than anticipated. I work in an industry that must report our Greenhouse Gas emissions (NGERS) – but this coal mine proposal would fail to account for these undefined emissions – making other industries have to account for likely far smaller emission sources. Please do not approve Coal mining with special exemptions.

5) Impacts to Biodiversity

The proposed Dendrobium Lease area 5 mining zone is home to much biodiversity. There are 19 threatened species in the area. A key example is the Koala population. They are endangered & have seen significant general population demise across NSW from bushfires in recent years. Effects on such endangered species from damage or changes to the surface environment has not been satisfactorily

accounted for in the proposal. Draining of surface waters from cracking and subsidence will shift the surface environment that has evolved to its current state over many thousands of years. Increased bushfire risk will directly increase risks to endangered fauna. To date, the mining company are the one's controlling the Species studies. Even the public are not allowed to enter the Special Area's for independent verification of these studies. It is noted that sightings of Koala's in the area follow the service roads & not the bushland between service roads. This implies the Koala sightings are not done via proper scientific method within their true habitat, and instead by ad hoc roadside sightings. I am concerned this has led to significant under estimation of the Koala population at risk. Please do not approve Dendrobium Coal mine extension without independent scientific survey of the Koala population and other threatened species.

6) Legitimacy of the Proposals reasoning

The argument to approve the SSI for keeping BSS steel making into the future is not dependable or assured. It is unclear how much of the mined Coking Coal will actually be used for Port Kembla Steel works. Other Coking coal options are available from Queensland – that are not under Sydney's Drinking Water catchment. Some of the reasoning behind Port Kembla's upgrades to the bulk handling import berth were for this exact reason (*"provide flexibility and efficiency to import raw material commodities to support the future of steelmaking at Port Kembla"*).

In addition, the forecast for using Green Steel at Bluescope in the future & therefore becoming less reliant on Coking Coal – this seems understated. It would be appalling to approve 19 years of Coal mining if Bluescope can shift away from Coal dependence far earlier.

Port Kembla has been identified as having good prospects for moving from existing fossil fuel-based steel-making to making low-emissions steel. This transition would not only retain jobs in the Illawarra, it would position Australia well in the emerging low-carbon future.

Therefore, the justification to meet BSS needs for the proposal should be removed from the application.

7) A legacy of water loss and contamination for future generations

Have groundwater levels & metals contamination for the coming centuries been accounted for? This is a problem that we will hand down to future generations, descendants that will be more challenged by climate change, subject to more extreme weather events, longer and more severe droughts and more serious bushfire risk.

The discharge water from the mining will also need to be managed and treated, perhaps in perpetuity, and this is another burden that we leave for future generations. Previous mining at Dendrobium has already burdened future generations with a legacy of water loss and contamination and this expansion will make it much worse with the modelled 171ML/year of loss (Appendix B – Groundwater assessment – p162-163)

Can the approving Minister outline the agreements to “offset water quantity & quality impacts during AND POST-MINING”. (Chapter 2.3.5 of Scoping document – pasted below). Does Post-Mining mean for eternity? How does the Coal Mining impacts illustrated in this submission become a “Net Beneficial” to Sydney’s Drinking Water supplies with undefined financial methods?

Chapter 2.3.5 Water Offset Agreements

“This planning agreement was developed consistent with the recommendations of the IEPMC to provide a “net beneficial” effect to Sydney’s drinking water supplies.

IMC would seek to enter a similar agreement with the NSW Government to offset water quantity and quality impacts during and post-mining for the Project.”

Conclusion:

In conclusion, this expansion project is not in the public interest and it should be rejected. Please instead, show diligence and foresight by recommending a planned process to close the mine permanently for the benefit of humanity & the global ecosystems we depend on for a living future.

Regards,
(name undisclosed in this attachment)
10-6-22