



Public Health Association
AUSTRALIA

Submission on the Dendrobium Mine Extension Project State Significant Infrastructure Application

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Contents

Introduction	4
Response to the Environmental Impact Statement	4
Point 15: Social Impact Assessment	4
Point 5: Heritage.....	5
Point 3: Water	5
Point 16: Economic costs	6
Point 11: Bushfire risk	7
Conclusion	7
References	8



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The **Public Health Association of Australia** (PHAA) is Australia's peak body on public health. We advocate for the health and well-being of all individuals in Australia.

We believe that health is a human right, a vital resource for everyday life, and a key factor in sustainability. The health status of all people is impacted by the social, commercial, cultural, political, environmental and economic determinants of health. Specific focus on these determinants is necessary to reduce the root causes of poor health and disease. These determinants underpin the strategic direction of PHAA. Our focus is not just on Australian residents and citizens, but extends to our regional neighbours. We see our well-being as connected to the global community, including those people fleeing violence and poverty, and seeking refuge and asylum in Australia.

Our mission is to promote better health outcomes through increased knowledge, better access and equity, evidence informed policy and effective population-based practice in public health.

Our vision is for a healthy population, a healthy nation and a healthy world, with all people living in an equitable society, underpinned by a well-functioning ecosystem and a healthy environment.

Traditional custodians - we acknowledge the traditional custodians of the lands on which we live and work. We pay respect to Aboriginal and Torres Strait Islander elders past, present and emerging and extend that respect to all other Aboriginal and Torres Strait Islander people.

Introduction

PHAA welcomes the opportunity to provide input to the Department of Planning, Industry and Environment's Dendrobium Mine Extension Project State Significant Infrastructure Application. The mine expansion would allow South32 to mine a new area (Area 5) in the Metropolitan Special Protected Area until 2041. The proposed mining area is adjacent to the Avon, Cordeaux and Nepean reservoirs.

PHAA recognises that the approval process for this mine has been extra-ordinary. The use of the State Significant Infrastructure process to approve a coal mine is unprecedented in NSW. The negative impacts of this decision upon community trust in government process are concerning. Correspondence between the proponent and the Department of Planning, revealed through Freedom of Information request, showed that the Department's officials directed the proponent to emphasise local steelmaking as justification for the proposal¹. This further denigrates the credibility of this unprecedented review process. For the planning system to function effectively, the trust of the public in government is crucial.

PHAA notes that the Planning Secretary's Environmental Assessment Requirements (SEAR) directed South32 to address economic and social costs of this proposal. However, health has not been considered. Population and ecological health are a fundamental baseline to economic and social factors. Conditions specifically related to preventing, mitigating and monitoring health impacts from the mine operations, other than air quality in the immediate vicinity, have not been addressed in the Environmental Impact Statement (EIS).

In this submission, the PHAA evaluates the proponent's response to specific SEAR² components within South32's EIS:

- Point 15 - Social Impact Assessment
- Point 5 – Heritage
- Point 6 - Water
- Points 16 - Economic Impacts
- Point 11 – Hazards and Bushfire

Response to the Environmental Impact Statement

Point 15: Social Impact Assessment

The Social Impact Assessment fails to address and evaluate the health and wellbeing impacts of the Dendrobium Mine Extension Project on the community. NSW Department of Planning's *Social Impact Assessment Guideline for State Significant Mining, Petroleum Production and Extractive Industry Development*³ directs social impact assessment to address the health and wellbeing of the community (p5) and to consider "any relevant social trends or social change processes" (p18). In the EIS, the Social Impact Assessment assumes that status quo will be maintained. However, the past 3 years of bushfire, pandemic and flood crises show that this assumption is erroneous.

In a national survey by Griffith University, 87% of respondents said that climate change should be a priority of government. Almost a quarter of respondents stated that climate change was an 'extremely serious' problem right now⁴. Therefore, the rise in public concern about the impacts of climate change and the increased contribution to greenhouse gas emissions from this mine fail to be justified in the EIS.

Heat related stress associated with climate change is a significant health impact that is absent from the Social Impact Assessment. Australia is highly vulnerable to heat exposure, and heat-related presentations to hospital will continue to increase. Human heat tolerance and heat-adaptive capacity are not unbounded, and we are rapidly approaching the limits⁵. Adults aged over 65 years, and people with underlying cardiovascular disease, diabetes and chronic respiratory diseases are particularly at risk of heat-related morbidity and mortality.

Point 5: Heritage

No support for proposal documented in consultation with Aboriginal Registered Parties

No Registered Aboriginal Parties consulted indicate support for the Dendrobium Mine Extension in the Aboriginal Cultural Heritage Assessment Report.

Limited consultation

As part of the EIS requirements, Niche consultants have engaged only 30 Registered Aboriginal Parties. From the initial Assessment that the Independent Planning Commission reviewed (2017) to the present Assessment (2022), 13 additional Parties have been consulted. This proportionate increase is evidence that the consultation has likely missed a number of interested Aboriginal Parties who have been prevented from participating due to the short-time frame for consultation. PHAA notes that Aboriginal communities have previously criticized the consultation processes undertaken by South32⁶.

The assessment focuses on the number of cultural sites likely to be destroyed or damaged by the Dendrobium Mine Extension Project. Impacts on these 31 documented sites are alarming. There is no process considered in the EIS to disincentivize South32 from damaging Aboriginal cultural heritage sites. The Aboriginal Heritage Assessment notes that “avoidance” of key stream features, swamps and other cultural sites has been considered, but no guarantees are made. The proposal includes no process to restore or rehabilitate destroyed or damaged cultural sites, and no process to penalize South32 for damages (this relates also to SEARs point 14).

Furthermore, the Aboriginal Heritage Assessment has not adequately considered all of the relevant factors influencing the cultural safety and integrity of the site. The health and wellbeing of Aboriginal communities is deeply connected to the ability to access Country and practice culture and education. In the words of one Registered Aboriginal Party speaking about the significance of the mine site:

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”.

The EIS acknowledges that the project will irrevocably alter the area, dewatering water courses and upland swamps and altering the habitat for endangered species such as the koala. Cubbitch Barta Native Title Claimants quoted in the report state, “There are stories there, but no one has had access to put the stories back together again”. Aboriginal communities have negligible access to the area due to water protection legislation, and yet NSW Government permits South32, a multinational mining corporate access to this area. The ongoing restriction of access to the area until 2041 is likely to further undermine the ability of Aboriginal communities to practice culture and connection to heritage.

Point 3: Water

A significant economic and social cost of the Dendrobium Mine Extension Proposal is its enduring impact on Sydney and Illawarra’s drinking water catchment. The recent experience of drought in NSW made it clear that there is no current infrastructure solution to drought. The best solution we have is to protect existing water capturing ecosystems and to increase rainfall independent collections⁷.

The proposed expansion (Area 5) will impact the Avon Reservoir, Cordeaux Reservoir and Nepean Reservoir with daily water losses of 0.22 megalitres, 0.24 megalitres and 0.01 megalitres respectively. This is a total of 171 megalitres of water lost annually from public reservoirs. Peak water losses are projected for the period 2040 through 2070, at least (Appendix B). DPIE’s report on South 32’s previous unsuccessful application to expand Dendrobium Mine noted that it will take 100 years for groundwater levels to stabilise in Area 5.

The total reservoir, surface water and groundwater losses are much higher than the direct water losses to the mine. These are estimated to be approximately 8 billion litres of water annually. Offsets for this water loss are not proportionate to the long-term impacts on the reliability, accessibility and resilience of Sydney and Illawarra's water supply.

Point 16: Economic costs

Climate impacts have not been considered

The Economic Assessment conducted by Ernst & Young fails to address the growing economic costs of climate change. Not only is the price of coal declining and the prospects for the industry shrinking, but it is increasingly difficult for regulators to ignore the links between climate change, the health of populations and the economy. For example, in 2018 nationally, there were over 1.35 million hours of labour in the agriculture, industry and service sectors lost due to heat⁸.

Related also to SEAR point 8, the EIS shows that expanding the mine into Area 5 will triple current Scope 1 greenhouse gas emissions of the Dendrobium Mine. This is in addition to several sources of emissions that have not been considered in the EIS (including Scope 3 emissions and fugitive emissions). This increase in GHG emissions is not consistent with NSW government climate targets or PHAA recommendations for urgent actions to protect and enhance population health.

The Dendrobium Mine Extension project contravenes the recommendations from leading international agencies. The Intergovernmental Panel of Climate Change states that coal production in OECD nations should have peaked by 2020⁹. The International Energy Agency states that "beyond projects already committed as of 2021, no new coal mines or mine extensions are required"¹⁰.

Impacts on employment and related industries appear exaggerated

Secure, sustainable employment is an important economic and social impact that the EIS fails to justify. The proposal includes no long-term plan for job security, promising only 50 new jobs. Mining employs only 1.5% of working age people in Wollongong. Mining is not a growth sector in the region and is not included in Wollongong's Economic Development Strategy¹¹. The PHAA also notes that the Economic Assessment included in the EIS acknowledges that "it is unclear whether there is any significant disutility incurred from working in the mining sector relative to other industries" (Appendix L, p20). Optimistic prospects for the economic security of the local community are likely to come from investing in renewable technology industries and transitioning fossil fuel workforce to these kinds of jobs.

A concerning argument that the Department of Planning has encouraged is in regard to the use of metallurgical coal by the nearby Bluescope Steelworks. The EIS acknowledges that only a maximum of 25% of the coal extracted from Dendrobium will be used at Bluescope Steelworks. Bluescope, therefore, does not depend on this mine expansion. Internationally, the need for steel manufacturing to decarbonise has been recognised¹². While technologies to achieve this are relatively new¹³ and scale remains a constraint, continued investment in fossil-fuel based techniques will delay development of an industry in low emission options.

Persistent errors in economic analysis and costings

Furthermore, the PHAA notes that several errors identified by expert analysis conducted by Dr Neil Perry (WSU) in the proponent's previous application to the Independent Planning Commission have not been rectified in the Economic Assessment. These relate to incorrect and underestimated calculations of greenhouse gas emissions and costs to the NSW economy.

Point 11: Bushfire risk

The SEAR for this project specifically require that the mining company address climate impacts and hydrological changes in relation to bushfire management in its EIS. The EIS does not address these impacts. Furthermore, the plan does not include methods that will be used (if any) for fuel reduction or ignition risks resulting from the mine's operations.

The Dendrobium Mine is a significant contributor to the dewatering of ecosystems in the water catchment that supplies the Illawarra and Sydney with drinking water. This area was one of the few unburnt areas of bushland in the 2019/2020 Black Summer bushfires. The proximity of this bushland to densely populated areas on the coast makes it an especially important component of the region's bushfire resilience.

The 2019-20 Black Summer bushfires burnt across five states for seven months. The resultant smoke directly affected more than half of Australia's population and led to an air quality index exceeding 5,000 (more than 25 times the hazardous level), claimed 33 lives directly, with an estimated additional 417 deaths from the smoke, and nearly 4,500 hospitalizations¹⁴. The Royal Commission into the bushfire disasters made explicit links between the fires and climate change, with record breaking drought for area, intensity and duration, coupled with nationwide record temperatures leading to extreme Forest Fire Danger Index ratings¹⁵. This is entirely consistent with the predictions of Intergovernmental Panel on Climate Change reports¹⁶. The Dendrobium Mine Extension poses an unacceptable contribution to bushfire risk.

Conclusion

PHAA acknowledges the responsibility of the Department of Planning, Industry and Environment to carefully review the Dendrobium Mine Extension Project. However, we are keen to ensure that the social and economic impacts this project are evaluated in line with the legislative requirements and guidelines for social impact assessments, economic and heritage assessments. We are particularly keen that the following points are highlighted:

- Insufficient consideration of human health, especially the risks to the Sydney and Illawarra water catchment
- Inadequate consideration of social and economic impacts on human health, including connections of mining projects to the known health impacts of climate change
- Inadequate consideration of Aboriginal cultural values and requirements for consultation

Overall, until the EIS sufficiently addresses human health, PHAA recommends that the Minister does not approve the mine.

PHAA appreciates the opportunity to make this submission and the opportunity for further consultation. Please do not hesitate to contact us should you require additional information or have any queries in relation to this submission.



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