Dendrobium Mine Extension Project (SSI-33143123)

Following is my response to the Dendrobium Mine Extension Project Application No SSI-33143123 located in Kembla Heights in the Wollongong local government area. A previous application for this site (SSD-8194) was already refused by the Independent Planning Commission on already established valid grounds- millions of litres of water will be lost, heavy metal discharge contamination, Government agencies outside Planning concerned, damage to Water NSW infrastructure, water quality reduced, damage to upland swamps, bushfire risk, damage to Aboriginal Heritage and increased greenhouse gas emissions fuelling more climate change.

This reckless proposal submitted again by Illawarra Coal Holdings is wrong and must be rejected again.

Nothing has changed as the same risks apply above that were outlined in the first proposal which Illawarra Coal Holdings Pty Ltd have not addressed sufficiently to guarantee that there will be no risks and no damage to our health due to poor water quality, damage to the environment, wildlife, ecological communities, and Aboriginal sites.

The NSW Government is giving serious consideration to ticking off more underground coal mining in Sydney's water catchment. If the state government approves this decision the outcome for residents in the local area and Sydney in terms of our water supply and quality will have serious ramifications for years to come.

This disappointing that the NSW government would even consider this proposal.

Nowhere else in the world do governments allow longwall mining like this underneath their publicly owned water catchments. That's because longwall mining damages reservoirs, causing cracks in rock beds that lead to an increased presence of heavy metals such as iron, zinc, and nickel.

This will affect the health of people, especially young children and the wildlife around the Wollongong, Illawarra and Sydney basin areas that need quality water- a necessary vital resource for well-being and health.

The state government is in office to serve and protect its citizens our environment and its wildlife. Approval of this project is not in the best interests of the community/

Even Water NSW has <u>opposed</u> longwall mining under Sydney's water catchment because we lose an <u>estimated 5</u> million litres of water a day from existing mining operations. Water is our most precious resource. The government must consider and look to the future, that as the climate warms further through *their continued investment in fossil fuel*, which is the basis of this project anyway, climate change will worsen, and we will need more uncontaminated water to service a growing population in the Illawarra and Sydney areas.

The Independent Planning Commission initially refused permission for the development because of the damage it would cause to our drinking water.

This controversial Dendrobium longwall mine extension in the Illawarra will risk the quantity and quality of Sydney's drinking water. The impact on our water supply in an increasingly uncertain future is concerning. This mine will also damage local biodiversity and threaten ecological communities and cause irreversible damage to 58 identified Aboriginal cultural artefacts. Our NSW government should and must respect First Nations People's history and legacy to country and approval of this project will not demonstrate respect of their cultural heritage.

In a time when our environment, ecosystems and native wildlife are collapsing around us due to the rate of aggressive destruction in NSW occurring now, the government must consider holistically how another mine extension will negatively affect our environment. NSW Forestry Corporation is set to log more than 2,500 football fields worth of native forests over the next 12 months in NSW and this is appalling. Forests should be protected. The government clearly has no priority to halt environmental destruction in this state especially when they would even consider more destruction through this coal mine expansion.

Currently, we are seeing increased natural disasters in NSW indicating that climate change is real, and it is here now. With these changing climate patterns, the government must consider a mine that would add an extra average of 5.2 million tonnes per annum (72.8 million tonnes over 14 years to 2035) of CO2 emissions to the atmosphere is bewildering. This only relates to run-of-mine (ROM) coal from the new mining Area 5 with conservative figures. With continued use of existing mine infrastructure until 2041 the total emission targets will be much higher delivering and processing all the coal. This is not the time to be increasing our output of CO2 emissions.

The NSW government claims, 'decisive and responsible action on climate change.' The Net Zero Plan Stage 1: 2020–2030 is the foundation for NSW's action to reduce emissions, reach our targets of a 50 per cent emissions reduction

on 2005 levels by 2030 and to achieve net zero emissions by 2050. More ambitious targets are being called for as the last Federal election showed. What is crucial is the framework of net zero and its concentration on emissions, diverts public and policy attention from the <u>fundamental task of ending the use of fossil fuels to ensure effective</u> <u>and lasting climate change mitigation</u>. We focus on the emission targets whilst still approving new mines and mine extension projects rather than decisive action on transitioning away from fossil fuel now. The NSW Government seems intent on pushing through more coal mining and the project has been submitted as 'State Significant Infrastructure' (SSI), despite the Independent Planning Commission having already rejected it on a previous application for the site.

I strongly <u>object</u> to the Dendrobium Mine Extension Project (SSI-33143123) due to the damaging impacts on our environment, our precious resource- water, as well as exacerbating climate change.

1. Millions of litres of water will be lost

The Dendrobium mine has applied to expand coal mining activities in Sydney's water catchment, with new longwall mine shafts to go directly under the Cordeaux and Avon dams. Scientists and academics have been calling for a stop on any more approvals for mining within the water catchment. **This extension will see 22 million litres of water lost each day from the dams.**

As the Dendrobium mine has applied to **expand** coal mining activities in Sydney's water catchment, mining induced leakages that have already occurred in the past would damage further the watercourses and swamps that feed our drinking water reservoirs. There is no guarantee that more leakages will not occur.

The mining and associated subsidence will cause cracking of the land on the surface – including rivers, creeks and swamps that empty into water reservoirs resulting in more subsequent water loss to the catchment. **No level of damage is acceptable.**

The mining will come close to the Avon and Cordeaux Reservoirs. It will result in water losses from Avon, which will affect residents and businesses in the Illawarra region, as well as Cordeaux Reservoir, Cataract Reservoir which is the main water supply for Camden, Campbelltown and Wollondilly council areas, Nepean Reservoir, and towns of Bargo, Thirlmere, Picton, and The Oaks.

All three affected reservoirs, Avon, Cordeaux, and Nepean also supply water to Sydney residents.

This is our water and an irreplaceable resource. These reservoirs supply between 20% and 30% of Greater Sydney's water in normal times, and when the Warragamba catchment has been compromised, supply even more.

We MUST consider we are at a tipping point regarding climate change. We have lived in Sydney for many years, and we have never seen the degree of drought and bushfires that have ravaged NSW in recent years. These extremes of weather changed this year to include huge floods in northern NSW and now very cold weather the worst in decades. With changing unpredictable weather conditions being the norm, we cannot assume that because we have enough water now that will always be the case. Dry years are inevitable and the watercourses in the mined area that flow into Avon Reservoir are expected to totally dry up in these dry years if this project proceeds.

How can the government justify their action here and give approval for this project when it affects a crucial resource that we all need to survive? Just because there is sufficient water now does not mean that will be the case in the future with escalating climate events. The climate crisis is increasing the chances of dry conditions and droughts. We cannot afford to be **literally undermining** our precious water catchments.

The cracking and dewatering of watercourses, swamps and aquifers is expected to add to the loss of many more millions of litres of water each day to Dendrobium's current and past mining of 10 million litres daily water loss.

So, residents in the greater Sydney area stand to lose this valuable resource for mining expansion, all for the greed and money made from the expansion of the mine. So, the government treasury gains more, and we lose our precious high-quality water in the process. Even though on Page 5 Dendrobium Mine Extension Project Scoping Report December 2021, Table 1 indicates that Area 5 has been revised with reductions, there are still areas directly undermined by longwalls in the Avon and Cordeaux Rivers. Any water licenses that compensate Water NSW for the water they take from the catchment areas cannot fix irreversible damage to these areas and for the legacy of water loss that will result.

2. Heavy metal discharge

The existing water discharge into Allans Creek, Unanderra will double.

This is the same discharge point that was recently identified as exceeding safe levels of heavy metals. How will this contribute to a healthy environment for us and wildlife that need safe water to survive, let alone the bush that needs to constantly regenerate. Water scientist Dr Ian Wright and his team recently published research showing the alarming impacts of longwall mining on the Bargo and Nepean Rivers. Dangerous elements like nitrogen, nickel, zinc, arsenic and even uranium are being leached into the rivers which form part of the Hawkesbury-Nepean catchment. "I'm simply amazed because it's such an important tributary to one of Australia's most important rivers and there's a major pollution problem — with a mine using that as a drain," Professor Wright said. The Dendrobium Mine Extension Project cannot guarantee with absolute certainty that there will be no heavy metal discharge even though they have submitted an SSI application.

The Nepean is part of the Hawkesbury-Nepean catchment, which is one of the largest coastal basins in NSW and this means it must be protected from heavy metal discharge.

These contaminates will kill our rivers and wildlife- look at how our major rivers, swamps and creeks have been affected by the discharge of heavy metals- reduced and/or dead fish, deceasing numbers of frogs and our iconic platypus. Poor water management and contaminates are contributing to the alarming decline of the platypus who requires pristine habitats. The fact is mining close to waterways contaminates those waterways. Accidents occur and mining companies have been allowed to continue practices that are harmful to our environment and people's health. Too many 'accidents' have already occurred in the past which we conveniently forget when approving new mines or extension mines that are located near waterways and swamp areas.

3. Government agencies outside Planning are concerned

On the previous application for this site (SSD-8194) the NSW Government's Independent Advisory Panel for Underground Mining said, "It is not possible, at this stage, to be comfortable that the worst-case losses from the surface water regime have been identified."

Water NSW questioned the reliability of the modelling stating that "previous iterations of the model had predicted surface water take at the existing Dendrobium Mine and that these predictions had increased 5-fold in the 5 years since 2014. So, how can we rely on the future predictions by Dendrobium Mine based on their expansion request now if their previous predictions weren't even close- a 5-fold increase is huge? We don't trust their modelling now as being reliable enough to take such a gamble by proceeding with approval to expand the mine. Predictions are often underestimated by these mining companies to get initial government approval. The first application was refused and now a second application based on SSI for the same site has been re-submitted with alterations to the planning. These predictions need to factor accurately the mine running to 2041. This is almost impossible to achieve that far into the future. These changes have been made to obviously ensure that this application is passed. It is only afterwards when the damage is done that predictions by mining companies are incredibly conservative to say the least to get them passed when assessing their negative impacts.

Water NSW has been clear that mining in the Special Areas causes loss of yield to the reservoirs and the swamps and water courses that charge them.

4. Damage to Water NSW infrastructure

The mining expansion risks damage to critical Water NSW infrastructure, including the dam walls of Avon and Cordeaux Reservoirs, the Lower Cordeaux Dam Project and Water NSW's Deep -Water Access Project. It is even expected to cause ground movement at the dam walls. This could lead to costly repairs, if repairs can even be done, and let us not forget that repairs will cost the taxpayer.

Water NSW's Deep- Water Access Project aims to provide water security for the Illawarra by constructing a deep-water pumping system to access the reservoir's deeper waters.

Avon Dam is the only source of water supply to over 310,000 residents and businesses in the Illawarra region and yet, Water NSW says that the Dendrobium Extension Project could affect its ability to construct and operate this important infrastructure project.

The mining is also too close to the dam walls. Water NSW stated that the 1000m setback from the dam walls is not enough and the setback should be at least 1500m (1.5 Km), adding that, "Should any impacts occur to these dams, there is the potential that the risks and consequences could be extreme." So, now Dendrobium mine not only want approval, of course they want it on their terms with minimum setbacks that are so small, resulting damage to dam

walls could increase. On Page 5 Table 1 Dendrobium Mine Extension Project Scoping Report December 2021 the minimum distance from the longwalls of Avon Dam is still 1 Km (1000m) there is no change and not what Water NSW recommends. The Cordeaux Dam Wall has increased its minimum offset distance to greater than 4 Km though.

5. Water quality reduced

As water courses fracture due to mining induced subsidence, metals will be dissolved and leach into the water. This will lead to an increase in metals in the water courses and reservoirs

Water NSW in particular expressed concern about the levels of metal contamination, stating, "Water NSW is concerned that any increase in arsenic (or other heavy metals) may have a negative effect on water quality and aquatic ecology." So, if approval is given more chance of poisoning to ourselves and the environment.

6. <u>Damage to Upland Swamps and Impacts to Threatened Species</u>

The upland swamps of the Woronora Plateau play an important 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.

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

The upland swamps provide a permanently wet peaty soil within a dry sandstone landscape. Each swamp is a unique island community containing rare plants and animals. The specialised flora and fauna of the EEC also carry individual protection at species level. Dewatering the swamps will result in local extinctions in breach of multiple layers of State and Federal legislative protection. The NSW government have said that they are committed to slowing down the extinction rate of wildlife in our state. Reducing the water flow to swamps will damage them and will consequently impact the ability of compromised species to survive like the native platypus.

There are 46 swamps in the mining area and 25 of these are expected to be cracked by the mining. Water will drain away from swamps and flora and fauna will die off. Also, the swamps lose their capacity to hold water in drier times making them more prone to erosion and bushfire. We must stop interfering with our environment to reduce the threat of bushfires which in turn will cause landscape damage and wildlife loss. Research shows that swamps that have been undermined are less able to recover after bushfire compared to swamps that were not undermined.

Greenhouse gas emissions associated with expected swamp destruction, or loss of carbon uptake that the swamps currently perform will be undermined. We destroy the swamps by taking the water away and/or adding contaminates we affect greatly the swamps to support life. This is a very delicate situation where man's encroachment in this case a mine expansion in and near water catchments will affect adversely these fragile ecosystems.

Due to the high risks of damage this application has already been determined as a 'controlled action' under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This proposed risky development has already been decided by the Federal Minister for Environment as a 'controlled action.' The proposed State Significant Infrastructure (SSI) application is being assessed under Part 5 of the *Environmental Planning and Assessment Act 1979 in accord with the EPBC Act under the bilateral agreement with the state*. Environmental Assessment Section 7 (P7-75).

Page 5 Dendrobium Mine Extension Project Scoping Report December 2021 Table 1, despite a 42% reduction in upland swamps in the number directly or partially above longwalls there are still 15 that will be affected. This has impact on fauna and flora species in these areas.

Page 37 Dendrobium Mine Extension Project Scoping Report December 2021 Table 4 regarding Biodiversity
Assessment "Identification of measures that would be implemented to maintain or improve the biodiversity values
of the surrounding region in the medium to long term." Strategy- "Offset and compensatory measures to maintain or
improve the biodiversity values of the surrounding region in the medium to long-term (e.g. provision of like-for-like
offsets for impacts to Upland Swamps). There is no detail as to the compensatory measures and as we know there
has been much criticism directed against biodiversity offsets that projects cannot compensate 'like for like quality.'
More detail is needed as to 'how' biodiversity values will be protected and offset with the same quality is needed.
There is also insufficient information on 'how' aquatic ecology is to be monitored, managed, and minimised
concerning the impacts to aquatic habitats and aquatic life. Offset and compensatory measures are stated to
maintain or improve the aquatic ecology values of the surrounding region in the medium to long-term with stream

remediation- there are no details as to what this involves. Further information must be sought from Illawarra Coal Holdings Pty Ltd. Often phrases and language are used in reports with no questioning or accountability by mining companies to explain the 'how' they are going to protect or mediate damage. Clarification on what stream remediation would involve is needed.

In the Environmental Assessment Section 7 (P7-51) some threatened Aquatic Species are listed as endangered or vulnerable under the EPBC Act and have been recorded but in Illawarra Coal Holdings Pty Ltd's opinion suitable habitat exists within 600 m of the proposed longwalls for the Project for the Australian Grayling, Macquarie Perch, Adam's Emerald Dragonfly and Sydney Hawk Dragonfly. Further investigation under controlled action of the EPBC Act is required as they note on P 7-54 'The Project would not require biodiversity offsets for threatened aquatic species as it would not result in significant impact to any aquatic ecology listed under both the FM Act and the EPBC Act.' We would disagree on this point that the Macquarie Perch in particular is listed as Endangered under the FM Act and the EPBC Act and this needs further scrutiny by the Federal Minister for Environment particularly as this aquatic species has been struggling to survive in the recent deterioration of the Murray-Darling River systems in NSW. It continues to decline in distribution and abundance. So, we need measures in place to protect this aquatic species. A statement from Illawarra Coal Holdings Pty Ltd that suitable habitat exists needs to be independently checked. They have an agenda to have this project passed- why shouldn't their statements be questioned and verified considering the endangered listing of the Macquarie Perch?

P 7-68 "A total of eight threatened fauna species listed under the EPBC Act were identified that are associated with habitat that may be directly impacted or be sensitive to potential impacts from subsidence effects...." These include species listed by the Federal Threatened Species Scientific Committee under the EPBC Act -the Giant Burrowing Frog (Vulnerable), Littlejohn's Tree Frog (Vulnerable), Broad-headed Snake (Vulnerable), Greater Glider (vulnerable), Grey-headed Flying Fox -threatened and is protected by law because numbers have rapidly declined over a relatively short period of time with experts concerned about the vulnerability of this species, Large-eared Pied Bat (Vulnerable), Koala (Endangered) and Swift Parrot (Endangered).

Many of these threatened listings are already failing these species. Some above that had recovery plans have been removed recently and all species now sit with only a conservation advice at a federal level, that are not as proactive as recovery plans. Additionally, prior to the Federal election the Environmental Assessment Section 7 has not properly catered for these fauna species that will be negatively impacted by this project. P 7-72 refers to direct impacts after applying measures to avoid and/or minimise impacts on biodiversity values, the project would result in the disturbance of approximately 20 ha of native vegetation within the Biodiversity Assessment Development Footprint (Figure 7-14) (Appendix D). Further independent analysis is required to properly assess 20 ha of disturbed vegetation which is the habitat of many species. Habitat fragmentation is an issue along with vehicle strike that also needs further consideration as to all the negative impacts for wildlife if this project was approved. The Eastern Pygmy- possum was listed as **vulnerable to extinction** in 2001 by the NSW Government with the biggest threat to the species being loss of habitat. An incredible cause of concern when they along with the Gang-gang Cockatoo (Vulnerable) and koala (Endangered) have a potential habitat footprint in the Biodiversity Assessment Development-Table 7-11, P7-76 in the Environmental Assessment for this project. This project could potentially destroy their habitat, thereby causing the demise of these species in this area.

7. Bushfire risk

Dewatering of the forest, bushland and swamps above the mining will make the area drier and more prone to bushfire. The water catchment was one of the few unburnt areas of bushland in the 2020 fires and it needs to be protected from mining induced degradation. It is also close to the highly populated residential areas of Wollongong that are located along the Illawarra Escarpment; making the catchment more fire prone which also will make the escarpment more fire prone, affecting more people and a significant loss of homes, bushland, and wildlife. The expansion of the Dendrobium mine on this basis alone must not be approved. The government's focus should and must not always be about financial gain and economic benefits resulting from mining and mine extension projects. In this case any financial gain will come at a huge cost to the damage to the environment (forest, bush, swamps) and to people's homes. Has the government forgotten the legacy left by the recent catastrophic bushfires that ravaged our state for months and months? The worst in living memory.

8. A legacy of water loss and contamination for future generations

It will take 100 years for groundwater levels to stabilise in Area 5 and 200 years for Area 6. Thus, the drawdown/dewatering impacts of the mining will remain long after we are gone. 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 decisions our government make today will be felt for years to come! Our wrong decisions now and actions will affect the climate in ways we can't even imagine.

The NSW Independent Advisory Panel for Underground Mining says that "At this stage, because there is a lack of clarity as to if and how Dendrobium Mine can be sealed, it should be assumed that surface losses from the catchment will occur over the long term and potentially in perpetuity."

The discharge of water from the extended mining project will also need to be managed and treated, perhaps in perpetuity, and this is another burden that we leave for future generations. We make the wrong decision now future generations pay the price for our mismanagement of the environment. Previous mining at Dendrobium has already burdened future generations with a legacy of water loss and contamination and this expansion will make it even worse. This mine extension project with an attached SSI application maybe deemed significant now but the damage from it if approved will be felt for decades. This project must be rejected again.

9. Damage to valuable Aboriginal Cultural Heritage

A legacy of mining induced damage to Aboriginal Heritage sites at Dendrobium was recently revealed in the media. The Aboriginal Cultural Heritage Assessment records and physical survey of only 6.91 % of the affected area, identified 58 Aboriginal heritage sites, including six new sites, in the area likely to be affected by longwall mining in Area 5 and Area 6. These were mostly rock shelters with/without art and deposits, and axe grinding groove sites located in creeks.

There will still be impacts to five Aboriginal heritage sites, with protection for only one site. In a statement that was justifiably and understandably described as offensive by the Illawarra Local Aboriginal Land Council, the Department said: "The five remaining sites are all located centrally above longwall panels. Given the limited risks of impacts, the Department does not consider that the scientific or cultural benefit of avoiding the risk of impacts is warranted." A justification and arrogance by the Department to approve this work by saying a 'limited risk of impacts'- still a risk though and they also do not appreciate or value the cultural benefits held by the Indigenous community.

Page 5 Dendrobium Mine Extension Project Scoping Report December 2021 Table 1 Aboriginal Heritage Sites (Low and Medium Archaeological Significance) has reduced from 15 to 6. Illawarra Coal Holdings Pty Ltd's assessment of these indigenous sites as low to medium significance is subjective. To Aboriginal People they may still have a 'High Archaeological Significance.' What right do they have to determine what is or what is not significant to First Nations people's heritage?

Monitoring of Indigenous cultural sites is required but there is no requirement to preserve or avoid these sites, and no penalties to the company when it destroys them. It is reprehensible for mining interests to desecrate Aboriginal Cultural Heritage whilst the area remains out-of-bounds for the Aboriginal community. Take the recent case of Rio Tinto and their destruction of Aboriginal sites which went to court.

10. Locking in 20+ years of Greenhouse Gas Emissions is wrong as we must be decarbonising

The IPCC 2018 Special Report warned that to limit global warming to 1.5° C by 2030, primary energy from coal needs to have reduced by a minimum of 59 %. In this context, this coal mining extension proposal spanning 20 years (to 2041) should **not** even be considered. How can we say we are reducing coal if we open more mines and extend mines as with this project? NSW has more than 15 billion tonnes of recoverable coal reserves contained within **40 operating mines**, and over 20 new major development proposals. We should not be approving another mine extension project. Increasing fossil fuel investment is exacerbating climate change and causing more natural disasters in NSW that are affecting our environment, wildlife and people.

Environmental Assessment P7-150 "The Commonwealth Government has committed to reducing greenhouse gas emissions by 26 to 28% below 2005 levels by 2030, as part of the Paris Agreement." This statement refers to the outgoing Liberal coalition government and is no longer relevant information. The targets since then have improved with the Labor government winning the federal election, a very different political landscape- who are committed to cutting greenhouse gas emissions by 43% by 2030. On P7-153 unpacking the total emissions for this revised application is not clear. Quantification of Scope 1, 2 and 3 Emissions is detailed but difficult to understand. As

members of the community there should be clearer transparency for the public on this most important issue. Unfortunately, one of the most important pieces of information is left to the end of the Environmental Assessment and should be stated clearly and honestly at the beginning.

The approval of this mine would lock in emissions over the 20-year life of the project. Annually just referring to ROM coal from the new mining area 5 is 5.2 million tonnes per annum. The continued use of the existing mine infrastructure to 2041 will produce emissions but this has not been fully disclosed.

Australia is a major greenhouse polluter. In 2016 Australia had higher emissions than 90 % of all countries. Coal makes up more than 80 % of this export.

The emissions from combustion of coal that Australia sells are very significant. Australia must rapidly transition to zero carbon steelmaking.

The NSW Government locking in more than 20 years of destructive coal mining is irresponsible economic planning. We need to rapidly reduce greenhouse gas emissions to address global warming. Given the climate emergency - ways to decarbonise industry is to start with steel.

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

11. No alternative is provided to this shockingly destructive expansion which will cause permanent damage to our water catchment

There should be no mining in the Special Areas of Greater Sydney Water Catchment; this is the stated position of Water NSW and the legislated purpose of Special Area protection.

The mine design options for this second application still has negative impacts should an expansion proceed.

Having failed to explore any alternatives, The Department of Planning, Industry and Environment (DPIE) has acknowledged the damage that the expansion will cause, and yet still supports the mine expansion. DPIE in its assessment report says: "Anticipated subsidence impacts include fracturing of streambeds and diversion of surface water underground; losses from the reservoirs due to increased permeability in the solid rock mass separating them from longwall voids; and impacts on surface water quality, including an increase mobilisation of metals such as iron. Stream function would be impacted due to cracking of creek beds, loss of pool holding capacity and loss of baseflow reporting to streams from upland swamps and near-surface aquifers."

Alternatives should have been fully explored in the second application including mining in domains for which the company have existing approvals and modifying their design to **avoid completely** key sensitive surface features, including swamps and water storage infrastructure.

Unacceptable hazards and risks to our environment, our waterways, catchment areas, native wildlife and the people that need clean water to survive themselves still exist. Water NSW has said that the mine extension impacts on both water and ecology are 'unacceptable' because this effects their ability to deliver on its core function to 'protect and enhance the quality and quantity of water'.

The whole justification of this project proceeding from Illawarra Coal Holdings Pty Ltd's perspective is referenced on page 16 Dendrobium Mine Extension Project Scoping Report December 2021- "the *continued supply* of ROM coal from the Dendrobium Mine to the Dendrobium CPP located at BlueScope's Port Kembla Steelworks.... The purpose of BlueScope's submission is to firstly emphasise to the Independent Planning Commission, and the state of NSW, the critical importance of a continuation of mining in the Southern Coalfield of NSW for the ongoing production of iron and steel at the Port Kembla Steelworks." Their agenda is to continue and increase more coal and steel production into the future for positive socio-economic benefits. The project's focus is the economic one. Other values should and must not be diminished in favour of the economic values of extending the coal mine project for almost the next 2 decades and locking in more CO2 emissions when climate change needs to be addressed now. The other values of maintaining water quality and quantity, protecting the environment and its wildlife, protecting Aboriginal sites, and addressing climate change and transitioning to cleaner energy should not be undermined.

What is critical is the state government not recognising that the community want a transition to investment in green steel and renewable energy jobs.

Australia just had a federal election, and the results speak for themselves- the Australian community want and must have governments ready to step up and address this issue NOW not later.

Let's not forget that this application is for existing mine infrastructure with upgrades and extensions to continue until 2041. Extraction of (ROM) coal is until 2035.

Extending the coal mine into a new underground mining area- Area 5. Continued transportation of coal to Port Kembla and transport of coal wash by road and the further development of ancillary mine infrastructure.

This expansion is a disaster for NSW, yet once again it's a mining company's profits that takes priority over everything else, our health, the environment, its wildlife, our water supply, and a safe climate for future generations. This proposal is not an example of responsible planning and must be rejected.

Your sincerely Martin Derby