

## Dendrobium submission

I most strongly object to the extension of Dendrobium mine on so many levels. There are numerous people much more qualified than myself to explain why this extension should not go ahead and I am sure that their submissions will clarify this. Experts, in the form of the IPC have already stopped this mine once and the fact that it has been reduced in size does not change that. My submission comes from a place of common sense rather than expertise in any one field. It is still a threat to our water catchment area, the water, the plants, the environment, the animals, swamps and Aboriginal cultural heritage This project is wrong on so many levels

In February 2021 when the IPC rejected the application by South32 to extend its Dendrobium coal mine, I thought that at last the IPC are doing the right thing. They were considering all the reasons why this extension should not go ahead. Now, even though the extension has been reduced, these reasons for rejecting it still exist.

- *February 2021 IPC decision - its environmental damage would outweigh its economic benefits*, this is still the case (more about this later in my submission.) With climate change being seen as one of the major threats of our time and this mine being in our water catchment (for Greater Sydney and Illawarra more than 5 million people) how could coal ever be seen as more important than our water? Bearing in mind the damage in the water catchment due to mining already, there is no guarantee that more damage will not be done.  
**Water can get you through times when there is no coal but coal can't get you through times when there is no water.**
- *February 2021 IPC decision - the level of dependence the Port Kembla based BlueScope Steel had for Dendrobium coal was unclear.* If the extension was to go ahead, the coal from the Dendrobium extension would not be available for nearly two decades ie. 19 years (2040's). With what we are being told by scientists from around the world, it would be hoped by this stage that BlueScope would not be relying on coal considering the amount of research, money and work put in to producing renewable energy for their production of steel.  
BlueScope has already put in infrastructure to ship suitable coal for BlueScope, to Port Kembla from other states.  
Also, the fact that there is sufficient coal in the southern coalfields to supply BlueScope with suitable materials shows that BlueScope does not depend entirely on Dendrobium coal.  
77% of Dendrobium coal was shipped out of the Illawarra in 2019 (scope 1, 2, and 3 emissions)

The fact that one minister can declare Dendrobium SSI (first mine in Australia) is not only wrong but is rendering the IPC unnecessary and irrelevant. That South32 may have been coached by someone from the Department of Planning in how to ensure that they are declared SSI appears to be almost illegal and at best questionable. We don't need the Department of Planning to coach us in why this expansion is not in the best interest of 5 million people.

- *FOI documents show the NSW Planning Dept coaching South32 to say coal from its planned Dendrobium expansion would be suitable for Bluescope's steelworks, despite an earlier hearing by the IPC finding Bluescope was not reliant on this coal.* [abc.net.au/news/2022-06-1...](https://www.abc.net.au/news/2022-06-1...)

### Policy gaps

There are policy gaps on climate impact of fossil fuels, NSW planning authorities concede

**The NSW planning department** has made a candid admission that **significant uncertainty surrounds how to apply the state's high-level climate targets** to individual fossil fuel developments, **while recommending that an expansion of an existing coal mine could proceed.**

*- IPC stated the project would cause "long-term and irreversible" environmental damage.*

While reduction in the size of the mine may reduce the amount of environmental damage, it wouldn't stop all of it. With this reduction in size, the amount of mine subsidence on the surface impacting on uplands swamps, waterways, vegetation and wildlife may be reduced to some extent. Is reducing the impact good enough?

Following are some of the many more reasons why I believe this extension should not go ahead.

### **Offsets** (Swamps & Koalas)

How is it possible to offset a swamp (essential in the water catchment) with another swamp in an area that is kms away? Also, it is important to remember that coastal upland swamps also provide critical carbon capture and storage ecoservices. In our present situation with climate change, every single thing that provides the ability to capture co2 has to be considered as so important.

How is it possible to offset an area where koalas (now an endangered species which South32 are not acknowledging) live to another area far from their home? Koalas are territorial and they or the koala area to where they are being moved to will not be satisfied/happy.

Animals don't move, they simply perish. Koalas do not read 'this way to your new home' signs.

### **Emissions**

Australia is the 6<sup>th</sup> largest coal mine methane emitter in the world. There has been massive underreporting of these emissions and it has been found that the methane leaking from Australia's coal mines is as a result of many companies relying on estimates of emissions rather than actual monitoring.

Methane's short-term climate impact is 82.5 times that of carbon dioxide, making the methane released by coal mines equivalent to 74.3 million tonnes of CO2.

The IEA's figure is likely to be conservative, with state-of-the-art satellite data showing some coal mines are releasing ten times the amount officially recorded.

**Ember's methane analyst Dr Sabina Assan** said, "Australia has a moral responsibility to reduce its greenhouse gas emissions, but increasingly, it also needs to reduce emissions to remain globally competitive as a trading nation. This is something that BlueScope are aware of as well as in the future there will be countries only wanting to buy 'green steel'.

"Australia has a methane problem - it is already the world's sixth largest coal mine methane emitter, but those emissions are set to rise even further, as NSW and Qld continue to approve new and expanded coal mines.

We need to act urgently on climate change and allowing more mining in our water catchment is not doing that.

It has been noted by Dr Cullis that mining in the southern coalfields underneath the Greater Sydney Water Catchment Special Areas, that the upland swamps holding water during dry periods release water slowly into drinking water catchments.

When there is cracking, draining and 'death' of these swamps which has happened in the past, as can be imagined the whole ecology of the area is greatly affected.

### **Bushfires**

When Swamps dry up or 'die' then there is so much greater opportunity or possibility for bushfires. It is known that dewatering of the ecosystems of the catchment increases bushfire risk. I live on the escarpment and this does not make me and others who live here very concerned for the future.

The problem of dewatering and drawdown that will be caused by this expansion means that we will hand down to future generations, more challenged by climate change, subject to more extreme weather events, longer and more severe droughts and more serious bushfire risk.

The offset scheme proposed by Dendrobium to replace like for like leaves the question of 'how is this possible?'

### **Aboriginal cultural heritage sites**

Of the 31 Aboriginal Heritage sites in and close to Area 5, six of these are directly over longwalls. These include axe grinding groves, shelters with art and potential archaeological deposits.

NSW Planning Industry & Environment – their understanding is that the Maddens Plains Strategic Biodiversity Offset Site, set aside as an offset for the Dendrobium Underground Coal Mine is not legally available for use as an offset site by the proponent for the current project.

The proposed extraction is likely to harm multiple Aboriginal cultural heritage sites. They are particularly concerned that the longwall design will harm sites that have high Aboriginal cultural and scientific significance. Mr Calvin Houlison Planning (Illawarra).

With there being no requirement to preserve or avoid these sites when damage has occurred in the past or to penalise South32 in the future, how arrogant are the powers that be when it comes to our First Nation Peoples and their cultural heritage.

This is shameful and unacceptable. This area still remains out of bounds for the Aboriginal community, but mining companies can go in there and do unlimited damage.

Have we learnt nothing from past damage or ruin to Aboriginal cultural heritage sites by mining?

### **Koalas**

Mr Tom Kristensen, a citizen scientist and a zoologist says that studies undertaken by South32 failed to identify how many koalas occupied the area and that it was not clear what the potential impact would be on the critically endangered species. Mr Kristensen says they have basically assumed there are no impacts. He estimates that approximately 740 koalas could be impacted.

South32 concedes there are koalas there and that it is prime koala habitat in the lease area, but they haven't really set out to survey numbers and the distribution of the koalas.

Sydney University Zoologist, Dr Velentina Mella, has closely studied koala behaviour in relation to access to water and feed trees and said the link between koalas and mining needed more research.

It is a myth that koalas get all the water that they need from gum trees. They need water to survive.

### **Water**

There should be no mining in the Special Areas of Greater Sydney Water Catchment; this is the stated position of WaterNSW and the legislated purpose of Special Area protection. Why would we mine in the water catchment area? WaterNSW has been clear that mining in the Special Areas causes loss of water to the reservoirs, the swamps and water courses that charge them.

Mining induced Subsidence that is induced by mining has in the past and will likely in the future, damage the watercourses and swamps that feed our drinking water reservoirs.

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

Because of the proximity of the mine (within 1000m of Avon Reservoir) water losses from the Avon will result. When there is drought (and it will happen again) the watercourses in the area that flow into the Avon Reservoir more than likely will dry up totally. It can take hundreds of years for groundwater levels to stabilise so what will we be leaving for our children and grandchildren. The drawdown and dewatering impacts of the mining will remain long after we are gone.

As I said at the beginning of this submission, there will be many others who have far greater expertise than me when it comes to explaining the negative impacts of this mine. I, with my limited knowledge, can see that this is such a poor, money grabbing scheme and should never have gotten to this stage. When the IPC

knocked it back initially it should not have gone any further. I can only assume that the minister that made this mine an SSI must not be fully aware of the facts or has been radically misinformed.

**I totally reject this project because apart from all the other reasons we have to realise that water can get you through times when there is no coal, but coal can't get you through times when there is no water. We must never put at risk our most precious resource, water.**

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