### EIS for South32's revised Dendrobium Mine Extension Plan No. SSI-33143123

#### **SUBMISSION**

I am opposed to this project in its entirety.

At the outset, I am perplexed as to why it is being considered again - albeit on a smaller scale - and especially why it is now classed as "State Significant". How can a coal mine extension be considered "State Significant" when it has already been rejected by the NSW Independent Planning Commission (IPC) in 2021, principally on the grounds that it would cause "long-term and irreversible" environmental damage?

There are many strong reasons to oppose this amended proposal. Mine are:

### 1. Contribution to climate change effects

"There can be no new coal, oil or gas projects if the global energy sector is to reach net zero emissions by 2050 and help avoid catastrophic climate change". International Energy Agency (IEA), report in May 2021.

https://www.climatecouncil.org.au/resources/iea-net-zero-2050

As is well known, extraction and burning of fossil fuels, particularly coal - is contributing markedly to human-induced climate change (more accurately, *global heating*). This includes the extraction process. The impacts in Australia and world-wide are increasingly and extremely dangerous for the continued safe existence of life on earth: for humans, other animals, water, air and soil - our very existence. In this context, no new coal mines should be allowed to proceed. (https://www.joboneforhumanity.org/global\_warming)

In early 2021, the IPC *rejected* an earlier proposal by this proponent. The grounds for rejection included that it was not in the public interest and noted potential long-term and irreversible impacts, particularly relating to potable water supply for a vast area in Illawarrra and metropolitan Sydney catchments. Threats to water supply and quality alone should have been enough to stop any further plans to extract coal from this and any other nearby areas. Although smaller in scope, this current project holds similar threats for global heating.

### **Emissions**

Aside from Scope 1 and 2 emissions which typically relate to carbon dioxide, coal methane has now revealed that Australian coal mine methane emissions are double official estimates. While open pit mining is regarded as more dangerous for methane emissions, underground mining also presents risks of explosions. <a href="https://www.abc.net.au/news/2022-06-08/coal-methane-leaks-double-official-figures-ember-report-finds/101120112">https://www.abc.net.au/news/2022-06-08/coal-methane-leaks-double-official-figures-ember-report-finds/101120112</a>

# 2. Environmental damage

# a) Effects on plant ecology

In March 2021 the ABC reported on research undertaken by the University of NSW led by Dr Tanya Mason, a community plant ecologist with particular interest in long term vegetation dynamics, disturbance and invasion ecology.

After five years of study by Dr Mason and her team, focussed on Dharawal National Park and and in the metropolitan catchment area close to Avon Dam, it was reported that due to the effects of longwall coal mining:

".....coastal upland swamps of the Sydney basin bioregion are endangered. The research shows swamps above longwall mine paths dry more quickly after rainfall than swamps without any mining disturbance.

"The researchers say the results provide further evidence in support of the rejection of South32's Dendrobium mine expansion" (ie, the IPC's rejection of the first proposal of 2021)

The swamps are a repository for much important biodiversity such as the giant dragonfly and threatened plant species. Further, they also function as a giant sponge which contributes to a stable supply of drinking water.

The IPC in its refusal of the original proposal in 2021 found "subsidence will result in the degradation of 25 watercourses and swamps in the Metropolitan Special Area". It also concluded there was "no documented, reliable and practical rehabilitation technique for returning the pre-mining water balance to the impacted swamps".

So, while this current application is smaller in scope than the original, it is worth repeating Dr Mason's findings as reported over a year ago: "Serious damage had already been done. What we are observing is death of the (swampland) species." This finding alone should give great pause on the renewed application. (Refer article of March 2021 Scientists warn of 'irreversible' damage to endangered swamps near Sydney if longwall mining continues - ABC News)

## b) Impacts on endangered koalas, other animals and habitat

I note that as recently as 20 May 2022, koalas have officially been declared an endangered species through the NSW Government's own information (ref: NSW Threatened Species Scientific Committee, <a href="https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Scientific-Committee/Determinations/final-determination-phascolarctos-cinereus-endangered-species">https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Scientific-Committee/Determinations/final-determination-phascolarctos-cinereus-endangered-species</a>). So it is remarkable that for the current proposed coal extension, almost no comprehensive study appears to have been conducted by the proponents for the presence of koalas in the general area under consideration.

A recent survey conducted by a citizen scientist within the survey area found that while the proponent acknowledges the presence of koalas within the lease area, as well as prime koala habitat, it would appear a comprehensive survey of numbers and distribution has not been conducted and/or documented.( <a href="https://www.abc.net.au/news/2022-06-02/dendrobium-mine-impact-koala-population-nsw/101119502">https://www.abc.net.au/news/2022-06-02/dendrobium-mine-impact-koala-population-nsw/101119502</a>)

Koalas are the photogenic, publicly appealing edge of our increasingly endangered wildlife, and symptomatic of our diminishing species - both flora and fauna.

Notice must be taken that access to water and "feed trees" are imperative for koala population survival. As Sydney University Zoologist Dr Velentina Mella pointed out in June 2022:

"Koalas exist only if trees are healthy and the health of the trees relates to the soil. If you dig under, or open up an open cut mine, for example, the soil is the first thing that is disturbed and for sure there is a relationship there" (Fears Dendrobium coal mine extension near Wollongong could impact endangered koalas - ABC News).

Though typically not considered important by mining proponents, threats to koala populations and their habitat MUST be taken seriously and into account for this current project. A more comprehensive, well-documented survey should be conducted and the results made available to the public.

#### c) Impacts on water

South32 wants to mine the water catchment Special Area using the longwall mining method which results in the greatest subsidence. However, due to the refusal by the IPC to allow longwall mining at Russell Vale, Wollongong Coal made a commitment that all future mine planning at Russell Vale "would be based on non-caving bord and pillar mining methods". As Russell Vale is very close to the proposed Dendrobium Extension and in the same water catchment Special Area, when the Department of Planning and Environment assessed the Russell Vale mine's plan to mine using bord and pillar, they found that "the proposed bord and pillar mining method significantly reduces potential impacts on groundwater resources and stream baseflow, when compared to the previously proposed longwall mining method."

And yet South32 has ruled out the bord and pillar method for this current Project, claiming "it is uneconomic ... at depths from the surface that are greater than about 200 m." This is perplexing given that the Department and the IPC found otherwise, approving a bord and pillar plan at Russell Vale that mines only at depths greater than 200m. They found that this plan would be economic.

#### 4. Lack of clarity regarding Bluescope Steel's energy source at Port Kembla Steelworks

The dependence of the Port Kembla steelworks on future coal supply from Dendrobium is unclear. This is especially so when taking into account that in March 2022, Bluescope described measures under development likely to reduce coal consumption. They are currently investigating the use of sustainably sourced biochar as a replacement for pulverised coal, investigating a pilot-scale 10-megawatt renewable hydrogen electrolyser and have signed an MoU with Rio Tinto to explore using renewable hydrogen to replace coking coal to directly reduce iron ore. (GHD, Blast Furnace No. 6 Reline Project, Greenhouse Gas Report, BlueScope Steel (AIS) Pty Ltd, 07 March 2022, https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSI-22545215%21202203 07T040033.538%20GMT).

Furthermore, it now appears the ostensible reason for the Planning Minister supporting this renewed application to power the Bluescope Steelworks in Wollongong could be speculation, given the recently publicised exchange of emails between Planning Department staff and South32 senior executives, revealed on ABC News on 10 June 2022. That exchange suggests Departmental staff *encouraged* South32 to promote the use of its coal for Bluescope's steelworks.

This revelation (and apparent contradiction) MUST be explained in full to the general public.

#### Conclusion

It beggars belief that the NSW Government can claim to be leading the way in the renewables sector while at the same time promoting yet another new coal mine extension with its associated and worsening environmental risks. This is particularly so when the IPC clearly rejected the first Dendrobium project in 2021.

Far greater transparency must be shown to the wider public about the rationale for the Department of Planning's renewed consideration of this project.

Any new coal mining proposal supported and/or approved by this Government makes a mockery of the acknowledgement of country "We pay respect to the Traditional Custodians and First Peoples of NSW and acknowledge their continued connection to their country and culture" displayed on the Department's website. The traditional owners never desecrated their country in the egregious and devastating manner wrought by non-indigenous intrusive extractive industries.

## **Recommendation:**

In light of the above, this amended application should be rejected once and for all.

In the meantime, the Department of Planning can commission the IPC to provide an *independent* review of this new Dendrobium Mine Extension proposal. This review should include a new submission period of at least one month that would enable experts in their associated fields, and members of the public, to further scrutinise the proposal and provide feedback.

It is my understanding that the Planning Minister has the power to commission the IPC to undertake such a review under the Environmental Planning and Assessment Act 1979 (S. 2.9 (1) (c). I urge him to do so forthwith.

## **Adrienne Shilling**

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12 June 2022

Declaration: I have not made a reportable political donation in the last two years.

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