

## ***I object to the Illawarra Coal's Proposed Mine Extension for Dendrobium. Project SSD-8194.***

***It is absolutely crazy to be entertaining even a remote risk to the water supply of the Sydney area, quite apart from the recklessness of continuing to mine coal in the face of global warming. Our country is already experiencing extreme weather events, droughts, floods, storms. We will always need water but we will not always need coal. Why think short term profit now when the risk is clearly there?***

***Helen Esmond***

The Dendrobium Mine Extension Project proposes 30 years of longwall mining in the water catchment for Wollongong, Macarthur and Sydney. It will result in damage and loss of water to swamps, water courses and the Avon, Cordeaux and Nepean Reservoirs[i]. Sydney is the only city in the world that allows longwall mining in a publicly owned water catchment. The proposed mining is in the protected "Special Areas" of the water catchment upon which 5 million people rely for drinking water. We are in drought, paying for desalinated water and our dam levels are below 50% and yet the Dendrobium proposal has the highest water loss of any mine operating in the Greater Sydney Water Catchment area.

This project is not in the public interest; it is in the wrong place at the wrong time. It would be reckless and immoral for the Department of Planning to support this expansion.

The proposal will result in significant quantities of greenhouse gas emissions

- The proposal is estimated to create up to 23.7 million tonnes of CO<sub>2</sub>e in the production stage and 237 million tonnes in the transport and consumption of the coal produced. This brings the total emissions to between 256 million and 260.7 million tonnes of CO<sub>2</sub>e for the life of the project[ii].
- The current climate emergency means it is no longer morally acceptable for the NSW government to support projects that will severely negatively impact its capacity to meet greenhouse gas reduction targets. The Rocky Hill case supported climate responsibility in its judgement against the Rocky Hill mine, citing the mining SEPP Clause 14 (2): "... the consent authority must consider an assessment of the greenhouse gas emissions (including downstream emissions) of the development." [iii]
- To put the volume of emissions in context, the federal government estimates Australia's greenhouse gas emissions for the year to December 2018 as 538.2 million tonnes[iv]. Thus approval of this mine would lock in emissions over the life of the project the equivalent of 48% of the 2018 annual emissions for all of Australia.
- Annually it would add an average of 8.69 million tonnes per annum (260.7 million tonnes over 30 years) of CO<sub>2</sub>e to the atmosphere[v]. This is comparable to 1.6% of Australia's current annual emissions.

South 32's brinkmanship should not compromise public interest

- South 32 has said that if this proposal is not approved, it will spell the end for the Port Kembla Steelworks and the Port Kembla Coal Terminal. This is misleading and unhelpful to understanding the public interest in relation to this coal mine.
- There are still 11 years of mining at Dendrobium under current approvals (for area 3A and 3B) and South 32 operates other coal mines in the region. South 32 is only selling one third of Dendrobium's coal to BHP for use in Port Kembla Steelworks. It is exporting the other two thirds.
- Bluescope Steel's Port Kembla steelworks declined to confirm that the steelworks would collapse if the proposed Dendrobium expansion does not go ahead<sup>[vi]</sup>, so we have to question the truth and motivation for this brinkmanship.

### 30 year's of mining is too long

- South 32 is seeking approval for 30 years of mining at Dendrobium. This is far too long. Increasing population pressure on water resources and impacts of climate change mean that it would be reckless and irresponsible for the New South Wales Department of Planning to support a 30 year approval.

### South 32 has not provided alternatives to this aggressive and destructive mining proposal

- The proposal comprises an aggressive plan for twenty one 305 meter wide longwall panels over 30 years. It provides no alternatives to this destructive proposal, a proposal which poses unacceptable risks to the Greater Sydney Water Catchment Special Areas.

### Offsets do not compensate for mining-induced destruction of catchment land and ecosystems

- South 32's proposal to offset catchment land and ecological communities that have been irreparably damaged by mining is not in the public interest; truly like-for-like offsets are rare. Furthermore, there is no "equivalent" land that could compensate for damaged and compromised water catchment.

### Mining induced subsidence will damage the watercourses and swamps that feed our drinking water reservoirs

- South 32 predicts that its 305 meter wide long wall panels may result in subsidence of 2m to 2.45m<sup>[vii]</sup>. Previous mines of similar width have caused 2.5m to 3 m of subsidence, so South 32's prediction may be conservative<sup>[viii]</sup>.
- The mining and associated subsidence will also 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 the Special Areas. It would be immoral for the NSW Department of planning to support this level of destruction in Greater Sydney's water catchment.

## Billions of litres of water will be lost from Greater Sydney's Water Catchment

- The proposed mining is just 300m from Avon Reservoir and 630m from Cordeaux Reservoir[ix]. The mining will cause loss of water from water courses and swamps that feed the reservoirs.
- Water loss from the catchment due to Dendrobium's mining will increase over the coming years, with surface water loss expected to peak at 27.6 ML per day in the year 2035[x].
- Consultants estimate that up to 9,500 Megalitres[xi] (ML – million litres) of surface and ground water will flow into the mines each year, which is the equivalent to the annual water usage of 123,940 residents of Greater Sydney[xii].

***I ask that you reject this application from Illawarra Coal and commence a process to close the mine at Dendrobium permanently.***

***Thank you for considering this submission.***

***Helen Esmond***

### References

[i] Dendrobium Mine – Plan for the Future: Coal for Steelmaking, Groundwater Assessment for South32 – Illawarra Coal, NPM Technical Pty Ltd trading as HydroSimulations, 2019, p 101 accessed at: <https://www.planningportal.nsw.gov.au/major-projects/project/9696>

[ii] Environmental Assessment Part 2, Section 6, pp 150 – 151 accessed at:

<https://www.planningportal.nsw.gov.au/major-projects/project/9696>

[iii] Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7, Item 491, accessed at: [https://www.caselaw.nsw.gov.au/decision/5c59012ce4b02a5a800be47f#\\_Toc431203](https://www.caselaw.nsw.gov.au/decision/5c59012ce4b02a5a800be47f#_Toc431203)

[iv]

[v] Environmental Assessment Part 2, Section 6, pp 150 – 151, op cit

[vi]

[vii] Subsidence Report for Dendrobium Mine, MSEC, 2019, pp 35 – 37, accessed at: <https://www.planningportal.nsw.gov.au/major-projects/project/9696>

[viii] Ibid

[ix] Dendrobium Mine – Plan for the Future: Coal for Steelmaking, Groundwater Assessment for South32 – Illawarra Coal, NPM Technical Pty Ltd trading as HydroSimulations, 2019, p 101 accessed at: <https://www.planningportal.nsw.gov.au/major-projects/project/9696>

[x] Surface Water Assessment, HEC, 2019, p ix, accessed at: <https://www.planningportal.nsw.gov.au/major-projects/project/9696>

[xi] ibid, p 111

[xii] Based on an average daily water usage for Sydney residents of 210 litres. Source: <https://theconversation.com/why-sydney-residents-use-30-more-water-per-day-than-melburnians-117656>