



Major Projects
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Submitted Online

18 September 2019

Submission of Objection: Dendrobium Coal Mine Extension Project, SSD-8194

Dear Sir/Madam,

The Nature Conservation Council of NSW (NCC) is the peak environment organisation for New South Wales, representing over 150 member organisations across the state. Together we are committed to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC objects to the proposed Dendrobium coal mine extension project. There are many reasons why the NSW Government should not support this proposal. NCC will focus on 3 reasons which are of particular concern to our organization:

- 1. Future surface damage to the Sydney Drinking Water Catchment, based on past damage associated with the current mine activities.**
- 2. Loss of drinking water to the catchment contrary to the principles of ESD.**
- 3. The level of greenhouse gas (GHG) emissions associated with the project is unacceptably high and is inconsistent with National and State commitments to GHG reduction.**

Surface Damage to the Drinking Water Catchment

There is a long history of damage to the surface of the Sydney Drinking Water Catchment caused by longwall mining of coal beneath the surface. The extent of this surface damage was documented by the Total Environment Centre (TEC) in a report released in 2007¹.

TEC produced further documentation of damage caused by longwall mining of the Bulli Coal Seam in a report commissioned in 2010².

The report noted on p8 that:

The NSW Scientific Committee lists longwall mining as a key threatening process in Schedule 3 of the Threatened Species Conservation Act 1995...

The impact upon (catchment) swamps is unavoidable within the subject area if mining is to proceed and is at odds with BHP's own objective of zero harm...

There has been no previous mining in the proposed Project underground mining areas³. Based on previous evidence, there are threats of serious or irreversible environmental damage to the catchment, and a lack of full scientific certainty as to where and how the damage will occur. These circumstances trigger the precautionary principle, one of the components of Ecologically Sustainable Development. The principle is explained in the NSW Land and Environment Court judgement *Telstra Corp Ltd v Hornsby Shire Council*⁴. The planning principles in this case have been adopted by the Court and are binding on decision-makers considering applications under the NSW EP&A Act.

Based on prior history, the only way further damage to the catchment can be avoided is to refuse the Dendrobium Extension Project. NCC is of the view that coal mining beneath the Sydney Drinking Water Catchment should not be allowed under any circumstances. It could be argued that the original Dendrobium mine consent in 2001⁵ was made at a time when the full extent of damage caused by longwall coal mining under the Sydney Drinking Water Catchment was not fully understood. Such an argument is no longer valid in 2019 – the damage caused by longwall mining beneath the catchment is well understood and should be avoided.

Loss of Drinking Water to the Sydney Catchment

Sydney is currently Australia's most populous city, and Sydney papers have recently been full of reports about how the rapid population growth in the city is causing major problems in terms of

¹ Impacts of Longwall Coal Mining on the Environment in New South Wales, Total Environment Centre, January 2007, www.tec.org.au

² Draft Review of Bulli Coal Seam Operations, Environmental Assessment, February 2010, www.tec.org.au

³ Dendrobium Mine EIS Executive Summary, p ES-5

⁴ [2006] NSW Land and Environment Court 133

⁵ Dendrobium Mine Extension EIS, p1-7

increasing road and public transport congestion. The infrastructure is not keeping up with the population growth, and a Population Summit is being held in September 2019⁶ bringing together the major decision-makers to attempt to find solutions to the city's unsustainable growth.

One fundamental constraint to population growth is a finite water supply. Under the present drought conditions prevailing in the Sydney Basin, water supplies held in the catchment dams continue to drop while the city population continues to increase. The Sydney desalination plant is providing some relief, but it only provides up to 15% of the Sydney water supply, and this only goes to the eastern suburbs, CBD and inner west and southern Sydney⁷.

In contrast, the Macarthur Region in Sydney's outer south west (including Camden Local Government Area, recently described as having the fastest growing population of any LGA in NSW) gets its water largely from the Avon, Cordeaux and Cataract Dam catchments. Two of these, the Avon and the Cordeaux catchments, are the areas proposed for underground mining under the Dendrobium Coal Mine Extension Project⁸

NCC has been advised that consultants state that up to 9500 Megalitres of surface and groundwater will flow into the proposed mines each year. This is the equivalent of the annual water use of about 120,000 residents of Greater Sydney.

How does the proponent plan to deal with this problem?

South 32 would pay WaterNSW for the agreed volume of surface water diverted from the catchment⁹.

The obvious problem with this so-called solution is that no amount of payment to WaterNSW will produce more water flowing into the catchment or make it rain more. A commitment to treat the mine water to potable standard and reintroduce it into the catchment might resolve the drinking water shortfall – but we do not see any mention of such a proposal in the EIS.

The drainage of water from the drinking water catchment to benefit the few at the expense of the many is contrary to another ESD principle – the concept of inter-generational equity. This is described in *Telstra Corp v Hornsby Shire* as:

“the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations”

The proposed Dendrobium Mine Extension envisages taking catchment water from the many – the consumers of Sydney drinking water – to produce coal for the financial benefit of the few – South 32, its employees and its coal customers. It cannot be said that this proposed project is consistent with ESD principles and the public interest, as required under the EPA Act.

⁶ www.smhpopulation.com.au

⁷ www.sydneywater.com.au

⁸ EIS Executive Summary, Figure ES-4

⁹ EIS Executive Summary, p ES-7

Unacceptably High Level of GHG Emissions.

The GHG figures for the proposed Dendrobium project are to be found in Appendix I of the EIS. An interesting comparison can be made with the GHG figures from the Rocky Hill mine, a proposed open cut coking coal mine that was rejected by the NSW Land and Environment Court¹⁰ earlier this year, in part because of an unacceptably high level of greenhouse gas emissions.

Life of Mine Scope 1,2 & 3 Emissions

Rocky Hill:

37.8 Million tonnes CO₂ equivalent¹¹

Dendrobium Extension (assuming worst case scenario venting of pre and post gas drainage):
Approx 261 Million tonnes.

The proposal plans to provide 60% of the coal to Bluescope Steel, Port Kembla for steelmaking, with the balance exported to either Whyalla, South Australia for steelmaking or sold for export elsewhere. While the proportions of the non-NSW destination coal are not clear from the EIS Executive Summary, the majority of the GHG emissions from the project will be included in the National GHG emission figures and will make a significant addition to Australia's contribution to climate change.

As far as NSW is concerned, the NSW Government has recently committed to a figure of zero net emissions by 2050 – only 30 years away. This target is clearly in the public interest in minimizing the State's ongoing contribution to climate change.

How Would the Approval of the Dendrobium Extension Project impact on the 2050 zero net emissions target?

- **The life of the project is planned to continue until 31 December 2048¹². That is one year before the zero net emissions target kicks in.**
- **Assuming that 60% of the coal is burnt at Port Kembla as proposed, the Scope 3 emissions figures for NSW from the project would be 60% of the Scope 3 life of mine figures**
- **All the Scope 1 and Scope 2 figures will be emitted in NSW**

¹⁰ Gloucester Resources Ltd v Minister for Planning [2019] NSWLEC 7

¹¹ Gloucester Resources Ltd v Minister for Planning @ 486

¹² EIS Executive Summary, p ES-10

- The life of mine emissions in NSW would therefore be all Scope1 + all Scope 2 + 60% of Scope 3 =

166,178,000 tonnes of CO₂ equivalent emissions.

How will the NSW Government offset this level of emissions over 29 years to reach a target of zero net emissions by 2050?

We also note the decision by the IPC to reject the Bylong coal mine. While we have yet to review the decision in detail, we believe that the considerations of intergenerational equity and the consideration of scope 3 emissions in the rejection of that mine are also relevant to this project.

We recommend that the proposed project be rejected. If you seek any further information on the issues raised in this submission please do not hesitate to contact me on (02) 9516 1488 or ncc@nature.org.au

Yours sincerely,

A handwritten signature in black ink, appearing to read 'B. Smith', is displayed on a light gray rectangular background.

Brad Smith
Campaigns Director
Nature Conservation Council of NSW