

Submission to the NSW Department of Planning in relation to the Modification 11 application by Centennial Coal, DA 504-00

I write in relation to the application by Centennial Coal for an extension of time that would enable it to continue mining operations at Clarence Colliery till 31 December 2031.

I wish to lodge an **objection** to this application.

Until recently I lived for 27 years in Mount Victoria. I would hear coal trains from my house multiple times a day - they were distinctive. I have been following mine developments by Centennial Coal and its impact on the nearby communities for some years. I visited the area a few weeks ago when I stayed again in the region.

My concerns are multiple and I offer the following points.

1. **Pollution of waterways and effect on the water table**

Close to Clarence Colliery are creeks that lead to the Wollangambe River. Rainfall running over coal waste dissolve **metal ions** that flow into the creeks and underground through fissures leading to pollution of groundwater and water systems. Open pits increasingly contain **saline leachate** (Hancock et al. 2005).

Extensive measurements have revealed that the upper reaches of the Wollangambe River had been contaminated by mine effluent over the decades from the Clarence Colliery. (I have walked along streams near this mine and seen the sediments of heavy metals.) A study in 2020 (Fleming et al. 2022) reported that:

“water and sediment in the Wollangambe River immediately downstream of the effluent discharge (<2 km) remains contaminated and contributes to impairment of macroinvertebrate communities. Decades of disposal of metal enriched colliery wastes have accumulated a reservoir of nickel and zinc [**heavy metals**] within Wollangambe River sediments, which are now a pollution legacy that will continue to mobilise contaminants and impair river water quality and ecological health for an unknown period.”

Mobilisation of nickel and zinc is **highly sensitive to the pH** of the solution, zinc, for example, being twenty-five times higher at pH 6 (more acidic) than at pH 8 (Lorenzelli et al. 2018).

Imrie (2008) reported that the **salt load** contained in direct mine water discharge and diffuse groundwater seepage accumulates and concentrates in the river alluvium, sandy stream beds and connected groundwater systems through evaporation until a significant rainfall event flushes it downstream. “Localised storms may intermittently mobilise salt deposits as a pulse or salt slug that moves partially down the river system”. Such spikes in salt content would undoubtedly **affect the health and viability of invertebrate species** in neighbouring creeks and ultimately the Wollangambe River.

Coal mines also use water and can thus impact the **water table**. The mine is close to a **major geological fault line** (LEG 2022) and this proximity introduces a significant chance of **leakage of water** as well as pollutants, with **unpredictable** consequences, likely adverse, for surface water **yield and quality**, groundwater drawdown (a change in the hydraulic head or water level relative to the initial spatial or temporal conditions of the system) and existing groundwater and surface water regimes over the entire area and for long periods (LEG 2022).

A little further to the west notable drops in the level of the water table have been noted in the Wilpinjong and Moolarben mine areas with estimates by the companies' own modelling that the water table would take anything from 270 to 576 years to recover (Imrie 2018, Peabody Energy 2015), a not insignificant timespan.

Continued operations at Clarence Colliery would further impact the the health of waterways and the level of the water table.

2. Rehabilitation

Much is said by mining companies about **rehabilitation**. The mountains of coal waste at the existing site are already extensive and present a huge challenge for rehabilitation. Rehabilitation should aim to establish a habitat closely resembling the original and this takes **a long time and significant investment**. It is not achieved in a short timeframe. Efforts at mine sites are often limited despite plans being documented, especially when a company transfers its assets and declares bankruptcy. A company's priority is profit not rehabilitation. Payment of funds up front is needed if rehabilitation is to be assured.

3. Economics

We do **not need to extend coal operations** further in NSW. We have **ever-increasing renewable supplies** coming online as well as **battery storage** to reliably support stability of the grid. It is being appreciated by companies that have traditionally centred their operations on fossil fuels that coal is no longer an economical proposition.

Continued supply of coal is not a benefit - it is weakening through delay the impetus to bring on renewable energy supply across the state. It is also **hindering any just transition of employees to other roles** in the workforce. Centennial Coal is postponing its responsibilities to the population as a whole and to the local workforce in particular while they endeavour to profit from our cheap coal in a highly uncertain international economic environment.

It should also be realised that Australia and the NSW Governments make very little from taxes and royalties from a company like Centennial Coal digging up coal and shipping it overseas, where the real profits are made.

4. Climate crisis

Climate change is real and is already wreaking havoc in Australia and around the world. With increasing temperature, the likelihood of extreme and dramatic climatic events becomes more common (IPCC 2021) – the occurrence of which we witnessed in the form of extensive years of drought followed by the very hot and extensive fires in the Greater Blue Mountains World Heritage Area and beyond both north and south in late 2019 and early 2020. **Extraction and the ultimate burning of yet more coal** from the Clarence Colliery site will only **contribute further to global temperature rise** and the occurrence of **extreme events**.

The proposed project is predicted to generate over 44 kt carbon dioxide equivalent emissions (CO₂-e) per year, the bulk of which would be Scope 3. Huge damage is done once the coal is burnt. Large amounts of carbon dioxide, methane and sulphur and nitrogen oxides are released into the atmosphere. These gases do not respect national borders - they will flow well beyond South Korea, China, Taiwan, Japan, Thailand and other recipients of Centennial Coal's exports.

It is a nonsensical argument to suggest that this amount of emissions would represent a tiny percentage of global emissions and thereby contribute very little in the scheme of things. **Contributions to greenhouse gas output by all coal projects is cumulative** and thereby significant to the causes of the climate crisis before us that we must address.

Whether the estimate of 44 kt CO₂-e per year includes emissions from continued transport by road allowing for up to 300,000 tonnes of coal to markets is unclear. Ongoing **transportation by road** is problematic. Blue Mountains residents are becoming increasingly anxious, angry and vocal about the growing number of trucks through the mountains and the concomitant noise.

I would like to think that the Department of Planning will look to the **long-term implications and consequences** of ventures such as Centennial Coal's Clarence Colliery and note the advisory opinion of the International Court of Justice issued in July 2025:

“States have a duty to prevent significant harm to the environment by acting with due diligence and to use all means at their disposal to prevent activities carried out within their jurisdiction or control from causing significant harm to the climate system and other parts of

the environment, in accordance with their common but differentiated responsibilities and respective capabilities” (my italics).

I see the Department as part of the broader “state” and one which can do **all means at its disposal “to prevent activities carried out within their jurisdiction or control from causing significant harm to the climate system and other parts of the environment”**.

Recommendations

I am therefore calling for the Department to **reject the application by Centennial Coal** for the extension of time to operate the Clarence Colliery in light of the following:

- unacceptable impact on the peace, health and general wellbeing of residents of residents in the Clarence, Bell and Blue Mountains areas.
- pollution from mine operations affecting fauna and flora in delicate ecological systems and water catchment areas.
- further compromise of groundwater and river levels in the region.
- contribution to climate change on the only planet we have and which we all share.

and to **ensure proper rehabilitation of the extensive mess** already created by Centennial Coal at the Clarence Colliery.

Let us look to the greater good and preserve the beauty that remains. The adjoining Blue Mountains World Heritage Area is beautiful, an artwork of nature, a special place for everyone.

Sincerely,

Carole Stanford

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(and former resident of Mount Victoria NSW 2786)

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