

Submission to the NSW planning department on the expansion of the Glendell mine in the Hunter Valley.

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Healthy planet, **healthy people.**

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Introduction

Doctors for the Environment (DEA) is a non-profit national organisation of Australian doctors and medical students with an emphasis on preserving health and wellbeing with respect to the environment. It is our stance that human health is indivisible from environmental health.

DEA considers that the Glendell expansion proposal is not in the national or local community interest and should be rejected on the grounds of local air quality impacts and on global climate grounds, which have severe adverse health impacts at both a local and global scale.

The proposal is for a northward extension of the Glendell mine, which is one of the 3 mines that comprise Mt Owen. The proposal is to increase the rate from 4.5 Mt/yr (till 2024) up to 10 Mt/yr (till 2044) which would result in an extra 135 Mt of coal being removed. This would provide no extra ongoing jobs and a maximum of 350 temporary jobs.

Context

The Hunter Valley has the worst PM10 air pollution in NSW.

In 2018 nine of 43 sites in NSW exceeded the coarse particle annual standard of 25 $\mu\text{g}/\text{m}^3$ and 8 of these were in the Hunter Valley. This was a deterioration in comparison to the previous year when there were only 2 such exceedances. In 2018 every site in the Hunter valley also exceeded the one-day standard of 50 $\mu\text{g}/\text{m}^3$, ranging from 5 exceedances at Wallsend to 44 exceedances at Camberwell.

There were widespread regional dust storms in 2018 due to drought, which account for the 5 exceedance days in Wallsend and across the region. However, the other 39 exceedance days at Camberwell are due to local factors.

Air quality is measured by the NSW office of Environment and Heritage at multiple sites in the Hunter Valley. The communities closest to the mine proposal are the village of Camberwell, 5kms from the site with a population of 83 and the suburb of Singleton Heights 15km from the mine, with a population of 4,693. Both communities are located in a south east direction from Glendell which is frequently the down wind direction.

From January to mid-October when the bushfire season started, the town of Camberwell, recorded 41 days and the suburb of Singleton Heights recorded 21 such days when the PM10 level exceeded the Australian standard. This is due to the cumulative effect of mining in the region. The existing mine is causing a public health nuisance through local air pollution and the proposed extension will be no better.

Coarse particle air pollution is well established to be a cause of human disease. Acutely, exposure causes exacerbations of respiratory disease such as asthma and emphysema, and chronic exposure is associated with lung cancer especially in non-smokers. There is also convincing evidence that particle air pollution damages lung growth in children. This evidence has informed the development of the Australian National Environmental Protection Measures (NEPM)¹ designed to protect human health from damage due to toxic exposures.

That the people of the Hunter Valley have ongoing exposure to air pollution at levels higher than the national standards is an environmental injustice that demands remedy. This injustice has been getting progressively worse over time.

The National Pollution Inventory (NPI) records release of 66,000 tonnes of PM10 in the Hunter Valley in 2018, of which 95.4% was from the coal mining sector.

All sources of PM10 in the Singleton and Muswellbrook local government areas are shown in table 1.

Table 1: NPI data 2018

Source	PM 10, tonnes			%
	Singleton LGA	Muswellbrook LGA	Sum	
Coal Mining	45,000	18,000	63,000	95.4%
Electricity	0	1,500	1,500	2.3%
Wildfires, hazard reduction	340	210	550	0.8%
Windblown dust	370	150	520	0.8%
Domestic wood heating	18	21	39	0.06%
Total as reported by NPI	46,000	20,000	66,000	

Every coal mine proposal EIS includes an assessment of air pollution, showing that the new mining would have no effect on sensitive receivers and the Glendell proposal is no exception. If this modelling were correct there would be no dust problem in the Hunter Valley. Clearly the modelling cannot be believed, or the dust controls modelled have never been implemented.

Current mines in the Hunter Valley, including Glendell, operate under dust controls as outlined in the Dust Stop program devised by industry and the EPA in 2011 and 2012.² That air quality has continued to deteriorate demonstrates the ineffectiveness of these control measures. While the Dust Stop plan includes cessation of work on hot windy days, local residents report that this does not

happen until they lodge a complaint. The current Glendell EIS states that the mine extension would operate under the same failed dust control policies, so approval of the mine would result in continued air pollution at similar levels, or greater levels due to the increased production rate. This would perpetuate the health damage to the people of Camberwell and Singleton Heights.

The air quality modelling presented in the EIS takes 2014 as the baseline year, however this gives a false analysis as 2014 air was much better than current air. The annual average PM10 in Camberwell in 2014 was 24.6µg/m³ but in 2017 it was 27.4µg/m³ and in 2018 31.1µg/m³. At Singleton NW the 2014 annual average of 22.7µg/m³ was the same as 2017 but by 2018 it had risen to 26.9µg/m³.

This progressive deterioration in air quality has been a significant cause of community concern. This concern is heightened by the fact that air quality has deteriorated during a period when each mine has had a "Pollution Reduction Plan", which has clearly been ineffective.

In December 2019 and January 2020 many people in Australian cities are experiencing poor air quality for the first time, due to bushfires. Poor air has been the reality for years for people living close to coal mines, and despite lip service to dust control the trend has been that the problem is getting worse in the Hunter Valley.

Expiry of the current mine approval in 2024 is a great opportunity to reduce coal production and start to clean up the air quality of the Hunter Valley. Cessation of extractive operations could lead to the employment of much of the workforce in mine site rehabilitation.

Social Licence

Concern about accelerating global heating has led to clarification of the social and ethical basis of decisions about environmental impacts. While the benefits of coal mining accrue to shareholders, executives and governments that mostly reside in wealthy cities the harms of coal mining fall on children living under a cloud of particle air pollution or farmers around the world, including New South Wales, who cannot rely on a predictable climate or suffer salt intrusion to their low lying fields as sea levels rise. The population as a whole is experiencing significant mental health distress as we bear witness to the changing climate and its impact on the liveability of our home environment.

Pope Francis in 2016 addressed this in *Laudato Si, On Care for Our Common Home*: "We lack leadership capable of striking out on new paths and meeting the needs of the present with concern for all and without prejudice towards coming generations. The establishment of a legal framework which can set clear boundaries and ensure the protection of ecosystems has become indispensable, otherwise the new power structures based on the techno-economic paradigm may overwhelm not only our politics but also freedom and justice."³

Francis continued: "The natural environment is a collective good, the patrimony of all humanity and the responsibility of everyone. If we make something our own, it is only to administer it for the good of all. If we do not, we burden our consciences with the weight of having denied the existence of others. That is why the New Zealand bishops asked what the commandment *thou shalt not kill* means when "20% of the world's population consumes resources at a rate that robs the poor nations and future generations of what they need to survive".⁴

These concerns have also been highlighted in the *Gloucester Resources Limited v Minister for Planning* (Rocky Hill) decision.⁵

"These negative environmental, social and economic impacts (burdens) will be distributed to these people and groups in the community. The economic and social benefits of the Project will, however, be distributed to other people and groups. Economic benefits from the Project will flow to GRL and its shareholders, investors and financiers, its employees and contractors, its suppliers, others who will benefit financially from the Project, and federal, state and local governments that will benefit from taxation and rating revenues. Such people and bodies believe in economic growth and development and the distribution of the economic benefits to them aligns with their moral framework and worldview. The people who benefit are likely to live sufficiently geographically distant from the Project so as not to be affected, or to be less affected, by the physical impacts of the Project."

The proposed extension and subsequent increase in production of coal is justification for refusal of the Glendell expansion. The social licence for further coal mine developments has been lost. Especially now, after having the worst bushfires and drought ever known in Australia, bushfires and drought that are a direct result of anthropogenic climate change, there is no longer a social licence to expand coal mining. Just the opposite, there needs to be a concerted effort to transition away from coal to industries with a future.

Global effects

The carbon released by the combustion of coal from this mine will exacerbate global heating, worsening the crisis that has led to the current bushfire emergency. Global heating has negative health impacts on populations around the world, including New South Wales. These include the direct effects of heat stress, loss of arable land to grow healthful food, water loss and contamination, natural disaster, and mental health impacts.

The current international context for this mine is that Australia has signed the Paris accord, agreeing with the international consensus that we should take action to limit global temperature increases to well below 2 degrees Celsius above the pre-industrial mean. The concept of the "Carbon Budget" was developed to express the amount of carbon reserves that, if combusted, humanity must be limited to in order to keep the goal of a 1.5-2 degree temperature rise. The global modern era carbon budget which must not be breached is 790Gt, of which 575Gt have already been released leaving 215 Gt.

The proposed 135 million tonnes of coal from Glendell would release 210 million tonnes of CO² when burned. While this may be a small component of the total global emissions in that time frame, it must be recognised that the global total comprises a large number of small contributions around the world, and they all must be individually addressed.

In the judgement *Gloucester Resources Ltd vs Minister for Planning 2019* Chief Justice Preston determined that there is a “causal link between the project’s GHG emissions and climate change and its consequences” and that it was not relevant that the proposal contributed only a small fraction of the total global GHG emissions.⁶

The public health message of an earlier decade was: “Every cigarette is doing you damage”.

The public health message of this decade is: “Every fossil fuel project is doing us damage”.

Chief Justice Preston made this very clear in his judgement on the Rocky Hill project in 2019. Considering the impacts of the project and the public interest, the Chief Justice held that downstream indirect GHG emissions should be considered in determining the DA as both direct and indirect GHG emissions, i.e. Scope 1, 2 & 3 emissions contribute to the cumulative impacts of climate change.

While the Paris Agreement and the associated greenhouse gas accounting framework of Scope 1, 2 and 3 emissions is often used to obscure the effect that exported coal will have on the climate in NSW, the fact that these Scope 3 emissions are the Scope 1 emissions of an overseas power station does not change the laws of physics. It does not reduce their contribution to the problem of global heating, nor their effect on warming the air in Goulburn or the ocean at Jarvis Bay.

In addition to these direct effects, mining and exporting coal in Australia greatly weakens our voice in international forums when we ask the countries with large carbon emissions, China, the US, Russia and Japan, to do their part in cutting their carbon emissions to protect the world’s climate.



CONCLUSION

DEA opposes the application for the expansion of the Glendell coal mine and welcomes mine closure in 2024 as a step towards environmental remediation for the Hunter Valley.

The expansion would have negative health implications for the local population and New South Wales at large. The social licence for expanding coalmining has been lost. The immediate effects on the local population via a worsening in air quality is unjustified and detrimental to health. The impacts of burning of fossil fuels result in worsening climate change with subsequent health impacts, no matter where the coal is burned.

The economic burden of the health impacts as well as climate change outweighs any potential economic benefit from this project.



References

¹ <http://www.nepc.gov.au/nepms>

² <https://www.epa.nsw.gov.au/your-environment/air/regional-air-quality/minimising-particulate-pollution-coal-mines#programs>

³ http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.pdf#page=6 paragraph 53

⁴ http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.pdf#page=6 page 28, paragraph 95

⁵ <https://www.caselaw.nsw.gov.au/decision/5c59012ce4b02a5a800be47f>

⁶ <https://www.caselaw.nsw.gov.au/decision/5c59012ce4b02a5a800be47f>