Submission to the NSW Independent Planning Commission Regarding Vickery Extension Project (SSD-7480)

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Doctors for the Environment Australia

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Vickery Extension Project

Doctors for the Environment Australia (DEA) is a non-profit organisation comprised of Australian medical doctors and students with the goal of promoting human health by advocating for preservation and care for the environment.

It is the position of DEA that ongoing coal mining and combustion poses an unacceptable health risk due to greenhouse gas emissions. For this reason, we again oppose the Vickery Extension Project as we did the previous proposed extension in 2019.

DEA is one of many health and medical organisations calling for urgent action to mitigate climate change. In Australia, these include the Royal Australian College of Physicians[1], The Royal Australian College of General Practitioners and the Australian Medical Association.[2] Internationally, they include the American Medical Association, the World Health Organization and the pre-eminent medical journal, The Lancet.[3] Collectively these groups have highlighted the devastating impact a warming climate will have on human health.
The specific effects of rising temperatures on human health are summarised in this submission, leading to our conclusion that approving the Vickery Extension Project is not in the interests of Australia or of human health on the international scale.

Heatwaves

Climate change will increase the number of days of extreme heat. It is estimated that there will be a 2.5 – 20-fold increase in the number of days above 35 degrees Celsius in Australia by 2100.[4] An association has been demonstrated between heatwaves and an increase in emergency department presentations.[5] There is strong evidence for an association between hot weather and an increase in all-cause mortality especially in the elderly.[6]

Extreme weather events

The combustion of coal and other fossil fuels are estimated to make up 72% of greenhouse gas emissions contributing to climate change.[3] Climate change contributes to extreme weather events such as flooding and bushfires, and such natural disasters have increased globally by 46% since 2000.[5] The likelihood of extreme weather events such as cyclones, floods and bushfires is increased with projections of future climate change. Events previously unknown to NSW such as tornados may occur due to shifting climate patterns. These events have direct health risks due to the danger of death and injury from the initial disaster, but also have public health consequences such as respiratory and cardiac disease following a bushfire due to air pollution, infectious disease following floods, and disrupted access for routine health care needs in the wake of a disaster. As we have ample evidence in recent months, bushfires can have a disastrous impact on air quality with corresponding increases in morbidity and mortality, and many of our members have seen this effect in real time as patients attend our practices with increased exacerbations of respiratory disease.

Infectious diseases

Climate change is predicted to change the distribution of infectious diseases such as malaria and dengue. Since 1950 there has been a 9.4% increase in the transmission of dengue fever by the *Aedes aegypti* mosquito.[3] Climate change is expected to expand the southern boundary of the range of vector borne disease by expanding the range of tropical vectors such as *Aedes aegypti* and *Aedes albopictus*, which are competent vectors for dengue, Zika, Chikungunya and Ross River virus which are more prominent in tropical climates.

Children

The health effects of climate change are expected to disproportionately affect vulnerable groups including children. Air pollution has been linked to fetal growth restriction, lower birth weight and delayed attainment of developmental milestones. [5] Children are also more vulnerable to mental health stresses following extreme weather events. [5]

Air pollution

Coal combustion contributes to air pollution, which is a major threat to public health around the world. Population-weighted fine particular matter exposure has been increasing since 1990, and 71% of the 2971 cities where the WHO monitor air pollution demonstrate

exposure to air pollution above WHO recommended standards.[3] The number of deaths worldwide attributable to exposure to ambient air pollution is estimated to have increased from 3.5 million in 1990 to 4.2 million in 2015.[7] Doctors for the Environment Australia takes a global perspective on health, and the opportunity to prevent air pollution deaths in Asia by restricting sale of coal from Australia should not be ignored.

The Carbon Footprint of Vickery

Having described some of the risks that rising global temperatures and changing climate will hold for human health, it follows to describe how the proposed Vickery Extension Project will contribute to those risks.

As described by Justice Preston in the judgement of *Gloucester Resources Limited v Minister for Planning*:

> *[515] The direct and indirect GHG emissions of the Rocky Hill Coal Project will contribute cumulatively to the global total GHG emissions. … It matters not that this aggregate of the Project's GHG emissions may represent a small fraction of the global total of GHG emissions. The global problem of climate change needs to be addressed by multiple local actions to mitigate emissions by sources and remove GHGs by sinks.*[8]

It is worth noting that the Rocky Hill project, of which the greenhouse gas impact was deemed one of the grounds for refusal, was considerably smaller than the project currently being assessed. Over 369.9 million tonnes of CO2-equivalent greenhouse gas would be released into the atmosphere due to the construction, operation and output of the mine over its lifespan, and this is the critical number that needs to be considered in terms of its health impacts.

This calculation obscures the essential truth that it is all emissions produced by this project, including Scope 3 emissions, which present the ongoing health threat. The atmosphere does not take into account geography of origin when absorbing greenhouse gas emissions. A more complete indication of the climate impact of this project is to state that on average, 14.18 million tonnes of CO2-e will enter the atmosphere annually.

> *[699] On this basis, the Department does not consider the Project is inconsistent with Australia's commitments to the Paris Agreement. (**DPIE Final Assessment Report**)*

It is true this does not entirely impact on Australia's commitment under the Paris Agreement, but **assessment and containment of greenhouse gas impacts should be inspired by the Paris framework rather than limited by it.**

The Department of Planning has noted the absence of NSW or Commonwealth policy to guide planning decisions in NSW that result in enormous carbon costs abroad. This is a limitation of policy, and an inadequacy in our current planning framework. It is an abrogation of the Department's responsibility to protect the public health and the public interest to state that there is no policy. Their responsibility is clearly outlined in Section 5.5 of the *Environmental Planning and Assessment Act 1979*, which states:

> *a determining authority in its consideration of an activity shall... examine and take into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.*

In 2018, the Intergovernmental Panel on Climate Change (IPCC) was commissioned by the United Nations Framework Convention on Climate Change (UNFCCC) to report on the impact that 1.5°C of warming would have on the globe. The Report particularly emphasised the difference that limiting warming 1.5C rather than a higher temperature increase of 2C would have, with the authors reporting:

> *"Lower risks are projected at 1.5°C than at 2°C for heat-related morbidity and mortality (very high confidence) and for ozone-related mortality if emissions needed for ozone formation remain high (high confidence). Urban heat islands often amplify the impacts of heatwaves in cities (high confidence). Risks from some vector-borne diseases, such as malaria and dengue fever, are projected to increase with warming from 1.5°C to 2°C, including potential shifts in their geographic range (high confidence)."*[9]

The Special Report advises that

> *"Pathways that limit global warming to 1.5°C with no or limited overshoot show clear emission reductions by 2030".*[9]

This was also noted by Justice Preston in reviewing the proposed coal project at Rocky Hill, Gloucester NSW in 2019 (*Gloucester Resources Limited v Minister for Planning*):

[422] The effects of carbon in the atmosphere arising from activities in the Project site, and the burning of the coal extracted from the mine, are inconsistent with existing carbon budget and policy intentions to keep global temperature increases to below 1.5º to 2º Celsius (C) above pre-industrial levels and would have a cumulative effect on climate change effects in the long term.[8]

With reference to the projected outputs reported in the applicant's Environmental Impact Statement (Appendix E), around the year 2030 over 18-20 million tonnes of CO2-equivalent greenhouse gases are projected to result from the activities and output of the Vickery mine. This is the equivalent of over 3 million passenger cars being driven for a year.[10]
The year 2030 has been explicitly highlighted by the Intergovernmental Panel on Climate Change as a deadline for the reduction of carbon emissions in order to preserve a future climate that gives people the best chance at a healthy life. Extending coal projects to increase their capacity beyond this date is contrary to the best evidence we have available to preserve a healthy climate future. This approval would extend Vickery operations for over a decade beyond that date.

There is no other regulatory body on the planet that currently has the power to assess the impact that the Scope 3 emissions from Vickery Extension Project will have on climate change over the coming decades. This is a responsibility that lies wholly with the consent authorities of New South Wales.

The applicant has made comment regarding multiple aspects of international carbon accounting law in their *Submission to the Independent Planning Commission on the consideration of greenhouse gas emissions and climate change* "Part B". Regardless of current international accounting law, this project will cause further greenhouse gas emissions. This project will cause further global heating through the produced greenhouse gas emissions.

The assumptions and methodology underpinning the CRU report regarding an increase in greenhouse gas emissions from coal mined and exported from non-Vickery or non-Australian sources have not been made publicly available. It is difficult to assess the validity of any output without knowing the input. The source of the data is not clear. The veracity of this hypothetical global capacity for coal output must be established, both in terms of coal reserves and the readiness of capital and physical resources to make its

extraction a reality in the current market. It is not clear that this has been addressed in the report.

The economic benefit of any mining project needs to be balanced with the future costs of climate change mitigation and adaptation. The EIS is deficient in not addressing the financial costs that climate change will have for the NSW Health budget, as we care for people affected by the increased temperatures, infectious disease and mental health impacts as described above. The financial impacts of climate change on future state budgets and the impact of Vickery Extension Project specifically are difficult to quantify, but there has been no attempt to quantify these despite the obvious relevance to our future.

Due to the negative public health impact of climate change on New South Wales residents, it is essential that that the entire carbon impacts of the project, the product coal, and the total greenhouse gas produced are taken into account in assessing the proposed Vickery Extension Project. DEA holds the position that this project should not proceed due to the contribution this project will make to global climate change and the local impact that increasing global temperatures will have on Australia and the health of its residents.

When assessed holistically, this project is not in the community interest despite short term local economic benefits for some parties.

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