Supplementary submission on the Rocky Hill Mine to the NSW PAC

November 2017

Doctors for the Environment Australia

67 Payneham Road
College Park SA 5069
P 0422 974 857
E admin@dea.org.au
W www.dea.org.au

Healthy planet, healthy people.

DEA Scientific Committee
Prof Peter Doherty AC
Prof Stephen Leeder AO
Prof Lidia Morawska
Prof Hugh Possingham
Dr Rosemary Stanton OAM
Prof Stephen Boyden AM
Prof Michael Kidd AM
Prof Ian Lowe AO
Prof Peter Newman AO
Prof Lawrie Powell AC
Dr Norman Swan
Prof Emeritus Chris Burrell AO
Prof David de Kretser AC
Prof Robyn McDermott
Prof Emeritus Sir Gustav Nossal AC
Prof Fiona Stanley AC

Doctors for the Environment Australia (DEA) is an independent, self-funded, non-government organisation of medical doctors and students in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices. We work to prevent and address the health risks- local, national and global- caused by damage to our natural environment. We are a public health voice in the sphere of environmental health with a primary focus on the health harms from pollution and climate change.

Since the initial DEA submission[1] there has been new evidence regarding the impact of open cut coal mines on health as well the rejection of a similar proposal, the New Acland Coal mine extension, by the Land Court in Queensland[2].

Executive Summary

The proposed Rocky Hill open cut mine will have a major impact on the health of the local community as well as inhabitants along the "coal path" to port. It will also increase emissions resulting in worsening of Australia's greenhouse gas emissions which will make it even harder to fulfil its Paris Agreement commitments. There will be significant impacts on water quality and agriculture in the local area impacting on food security. It will not be able to protect intergenerational equity.

John Turner describes in best in the NSW Department of Planning and Environment executive summary, October 2017:

"The Council's previous Administrator, Mr John Turner, summed up his view of the amended project as "this coal mine proposal is simply in the wrong place" and is "simply too close to residential areas". The Department shares Mr Turner's views, which it would seem, are also held by the majority of residents of the former Gloucester LGA."[3]

Health Impacts of Coal

Since our submission in 2016 there has been further evidence regarding the adverse health impacts of coal. These have been summarised in DEA's fact sheet regarding the health impacts of coal.[4]

There are multiple health impacts including deterioration in air quality resulting in worsening respiratory disease, cardiovascular disease, cancers and impaired development of children's lungs.[5]

Rejection of Acland Mine Extension

The Acland mine extension has been rejected in the Land Court of Queensland. There were multiple reasons for the rejection. These included air quality, water quality, excess noise, overstatement of the economic benefits, loss of agricultural land being contrary to intergenerational equity and prejudice to the public interest.[6]

The Rocky Hill proposal has many similarities to the Acland mine scenario and should be rejected on similar grounds to the Acland mine.

Rejection of Millennium Bulk Terminal in Washington, USA

This proposed new coal loading terminal was rejected due to the "significant unavoidable adverse impacts". Obviously the Rocky Hill proposal is different to a coal loader but there are overlapping concerns for there will be coal loading, transport to the port of Newcastle and loading at the terminal. The health of the population will be affected continuously along this "coal path". This was the major reason for rejection of the Millennium Bulk Terminal. These reasons included:

- Air Quality: due to the effect of diesel emissions from the coal trains there will be an increase cancer risk of 30 per million population. It should be remembered that the diesel emission standards in the USA are more stringent that in Australia, so it is likely that this risk is under-estimated in Australia.

- Vehicle Transport: there would be an increase traffic resulting in increased noise, pollution and risk of accidents.

- Noise and vibration effects which cannot be mitigated.

- Rail safety: due to increase in rail transport there would be an increased risk of accidents.

- Water quality and water resources: there would be an irreversible effect on a number of water resource.

These reasons for the rejection of the proposal in the USA reflect the general recognition in Western societies of health impacts which should no longer be imposed by the mining and transport of coal.

Blast Plumes

As stated in the NSW Department of Planning and Environment final recommendations:

"The main community concerns with blast fumes derive from experience with mining operations in the Hunter Valley, with well-publicised examples of orange-brown clouds of blast fumes (consisting of nitrogen dioxide (NO2) from incomplete combustion of blasting materials) leaving mine sites and drifting across privately-owned land and public roads. NO2 can affect human health by causing headaches and difficulty in breathing.

The EPA has expressed concern that the very stable meteorological conditions in the Gloucester Valley would mean that blasting between 9 and 10 am and between 4 and 5 pm would risk causing exceedances of either the 1-hour average or annual average criteria for NO2.

GRL has committed to limiting its blasting operations to between 10 am and 4 pm and operating in accordance with a comprehensive Blast Management Plan which would incorporate a Blast Fume Management Strategy. The Department considers this to be an appropriate response for normal blasting operations. However, blast fume is usually not a problem for normal blasting operations, but for abnormal operations when orange-brown clouds of NO2 occur when there is incomplete combustion of the blast explosive, often associated with water seepage into the blast holes.

The Department's concern is that, should an abnormal blast generate a cloud of NO2, the cloud would not have to drift too far before affecting residents. The local topography and prevailing winds would then lead to elevated risks for the residents of Gloucester. This is a concern also expressed by Doctors for the Environment Australia and Groundswell Gloucester in their submissions on the amended project."

This is a major problem for the Rocky Hill Proposal. It is not possible to mitigate against the unpredictable event of a blast plume. These plumes can have serious health implications resulting in death. Even though it may seem unlikely, if a blast plume were to travel across Gloucester, it would be a major tragedy. The risk is just too high to allow approval.

There have been documented events where workers have been affected both 3km and 6 km from the blast site. These workers needed to be hospitalised. It would be unacceptable to expose the local population to this risk.

If the project did go ahead then there would need to be an extensive educational programme for the community. There would need to be an upgrade of the facilities at Gloucester hospital including intensive care facilities. Those homes located within 2 kilometres should also be given breathing equipment and instruction on how to use it.

Mine Combustion

As stated in the NSW Department of Planning and Environment final recommendations:

"Spontaneous Combustion
The Department is aware of spontaneous combustion events that occurred at the nearby Stratford and Duralie Coal Mines, where the same coal seams are extracted as are proposed to be extracted at Rocky Hill. The Department's view is that it is reasonable to expect that GRL would have to deal with a spontaneous combustion event, or events, at some time in the mine's life.

Spontaneous combustion events can be very difficult to extinguish, with the event at the Stratford Mine continuing for about 18 months. During this time, foul odours were emitted, resulting in complaints from residents within this relatively sparsely-populated area.

GRL contends that it is highly unlikely that a spontaneous combustion event would occur at the project and, in any event, it would be able to quickly and effectively deal with the event. The Department does not share GRL's confidence. Again, it is the proximity of the mine to residential areas that is one of the main concerns. Should any event occur, the potential consequence is that a large number of residents would be affected by foul odours, possibly for an extended period of time?

It is the Department's view that spontaneous combustion events are a risk to the amenity of residents of Gloucester due to the proximity of the mine to residential areas."

Combustion at the coalmine has been shown to have significant effects on health. This was seen at the Morwell fires in Victoria. This was a disaster for the local community. The coalmine burnt for 45 days on the edge of town. The subsequent inquiry noted an increase in deaths in the local community due to this fire.[7]

Conclusions

DEA rejects the Rocky Hill Proposal on health grounds. The mine is simply too close to the township of Gloucester. The risk to the health of the local population is too great. However there are risks to the nearby population from pollution along the coal corridor.

The additional health impacts from this project from the climate change it will cause have not been detailed in this submission. However all new projects should be recognised as risky for their continuation will soon have to be equated against

the vital need to reduce all emissions if civilisation is to survive in its present form.

References

[1] https://www.dea.org.au/rocky-hill-coal-project-submission/
[2] https://archive.sclqld.org.au/qjudgment/2017/QLC17-024.pdf
[3] https://majorprojects.accelo.com/public/39bec827a10ce780dc804786b3315a0f/Rocky%20Hill%20Assessment%20Report%20Final.pdf
[4] https://www.dea.org.au/wp-content/uploads/2017/07/DEA-Health-Toll-of-Coal-Fact-Sheet_final.pdf
[5] https://www.dea.org.au/wp-content/uploads/The_human_health_tolls_of_coal_fact_sheet_06-15.pdf
[6] https://archive.sclqld.org.au/qjudgment/2017/QLC17-024.pdf
[7] http://report.hazelwoodinquiry.vic.gov.au/wp-content/uploads/2014/08/Hazelwood_Mine_Inquiry_Report_Intro_HR.pdf