

# Submission on the Rix's Creek North Mod 8

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Healthy planet, **healthy people.**

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Doctors for the Environment Australia (DEA) is an independent, self-funded, non-government organisation of medical doctors in all Australian States and Territories. Our members work across all specialties in community, hospital and private practices. We work to minimise public health impacts and address the diseases local, national and global caused by damage to our natural environment.

The fundamental rationale of the EIS process is to assess the balance of positive and negative impacts upon which informed decisions can be made. The impacts may be environmental, health, social and economic. Whilst DEA addresses public health issues pertaining particularly to environmental causes of ill health, it is clear that good health exists within the wider context of sustainability and preservation of ecological support systems. On this basis we make this submission.

## Summary finding

Due to the poor performance of the mine to date with regards to dust management, and the lack of economic benefit, this mine modification should be rejected.

## Preamble

DEA makes this submission to highlight the harms from air pollution that will occur if this proposal proceeds.

Relevant to this submission is the *DEA Policy on air quality*<sup>2</sup> and several recent submissions on air quality, coal mining and coalfired power station pollution in the Hunter region:

Submission on the proposed amendment to prohibit open cut mining at Drayton South

<https://www.dea.org.au/wp-content/uploads/2017/12/Submission-to-the-open-cut-mining-prohibition-for-Drayton-South-12-17.pdf>

Clean Air for NSW Consultation Paper submission

<https://www.dea.org.au/wp-content/uploads/2017/02/Clean-Air-for-NSW-Consultation-Paper-submission-01-17.pdf>

Rix's Creek Continuation Project submission

[https://www.dea.org.au/wp-content/uploads/2017/07/Rixs\\_Continuation\\_submission\\_12-15.pdf](https://www.dea.org.au/wp-content/uploads/2017/07/Rixs_Continuation_submission_12-15.pdf)

## Health effects: Local air quality

The modification to Rix's Creek mine should be rejected on the basis that it is causing continual breaches of air quality in the surrounding areas adding to the widespread effect on human health from coal mining.<sup>3</sup>

The current dust management plans are an abject failure and the mine should not be allowed to continue due to its adverse effects on respiratory health for nearby residents.

There are 2 air quality monitoring stations in proximity to the mine, Camberwell to the north west, and Singleton North West to the south east. These monitors are adjacent to residential areas and therefore record the exposure of the general population, including children and the elderly who are more sensitive to respiratory exposures.

Examining the NSW Office of Environment and Heritage record for PM<sub>10</sub> from the start of 2015 to July 2018, shows that in Camberwell there have been 76 exceedances of the daily standard for PM<sub>10</sub> of 50 µg/m<sup>3</sup>, and in Singleton NW there have been 31 exceedances over this three-and-a-half-year period. For Camberwell this is 21.7 exceedances per year, and for Singleton NW this is 8.9 exceedances per year. Camberwell had a maximum 24-hour average value of 101.5 µg/m<sup>3</sup>, more than double the standard.<sup>4</sup>

Exposure to particle pollution in the PM<sub>10</sub> size range has been associated with heart disease, stroke and respiratory disease including lung cancer.<sup>5</sup> This level of exposure poses an unacceptable risk to the adjacent population and is sufficient grounds for the mine activities to be rejected.

The air report by Todoroski Air Sciences dated 15 August 2017 provided by the proponent shows that the modification will lead to no decrease in dust emissions and will even cause a slight increase. Coal mines in the Hunter Valley are supposed to operate with dust control measures under a program known as *Dust Stop*. These measures are clearly ineffective as the continued exceedances of air quality standards demonstrates.

## Health effects: Regional air quality

The report on air quality makes no mention of SO<sub>2</sub> and CO<sub>2</sub> emissions from spontaneous combustion of exposed coal. This is a recognised problem when uneconomic coal is part of the overburden, and when there is residual coal in the wash plant rejects.<sup>6</sup>

Carbon dioxide from this source contributes to global climate change and is a source of major environmental damage. Sulphur dioxide from spontaneous combustion contributes to health effects directly as a respiratory irritant, and by formation of sulphate particles which are a component of fine particle pollution. Sulphate particles can travel hundreds of kilometres and contribute to poor health across the population of the Hunter and even Sydney.<sup>7</sup>

Without specific assessment of the coal component of the overburden and rejects, and the susceptibility to spontaneous combustion, the assessment of air quality effects is incomplete and hence inadequate to make a decision to approve the modification.

## Employment effects

The application document titled *Modification 8 to DA 08\_0102* clearly states that there will be no capital investment due to the modification and it will create no construction or operational jobs, so there is clearly no local economic benefit from the modification.

## Conclusion

Due to the poor performance of the mine to date with regards to dust management, and the lack of economic benefit, this mine modification should be rejected.

## References

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<sup>1</sup> [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=9459](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=9459)

<sup>2</sup> <https://www.dea.org.au/wp-content/uploads/2014/05/DEA-Policy-Ambient-Air-Pollution-June-2017.pdf>

<sup>3</sup> [https://www.dea.org.au/wp-content/uploads/2017/07/DEA-Health-Toll-of-Coal-Fact-Sheet\\_final.pdf](https://www.dea.org.au/wp-content/uploads/2017/07/DEA-Health-Toll-of-Coal-Fact-Sheet_final.pdf)

<sup>4</sup> Data downloaded from <http://www.environment.nsw.gov.au/AQMS/search.htm> on 23 July 2018

<sup>5</sup> Review of the health impacts of emission sources, types and levels of particulate matter air pollution in ambient air in NSW. Woolcock Institute of Medical Research, Centre for Air Quality and Health Research and Evaluation (CAR). Produced for NSW Environment Protection Authority and NSW Ministry of Health, Environmental Health Branch. Neil Hime Christine Cowie Guy Marks. December 2015.

<sup>6</sup> Spontaneous Combustion in Open Cut Coal Mines — Recent Australian Research Carras, JN, Day, S, Saghafi, A and Roberts, OC, in Aziz, N (ed), Coal 2005: Coal Operators' Conference, University of Wollongong & the Australasian Institute of Mining and Metallurgy, 2005, 195-200.

<sup>7</sup> Sydney Particle Characterisation Study PM2.5 Source Apportionment in the Sydney Region between 2000 and 2014 David D Cohen, Armand J Atanacio, Eduard Stelcer, David Garton Australian Nuclear Science and Technology Organisation. 2016, NSW EPA.