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NSW GOVERNMENT Health
Hunter New England
Local Health District

8 December 2016

Mr Thomas Watt
Senior Planning Officer
Resource Assessments
NSW Planning & Environment
GPO Box 39
Sydney NSW 2001

Dear Mr Watt

Rix's Creek Coal Mine Extension Project (SSD 6300) – Response to Submissions

I refer to your email of 31 October 2016 inviting Hunter New England Population Health (HNEPH) to review and provide comment on the Response to Submissions (RTS) by Bloomfield Collieries Pty Ltd (the proponent) for the Rix's Creek Coal Mine Extension Project.

The RTS has been reviewed with particular attention being paid to issues HNEPH raised in relation to air quality, noise, and water, which may have an impact on public health.

Air Quality
While the EIS considers the particulate matter (PM) impacts of the mine in relation to criteria specified in the *Approved Methods* and NEPM air quality goals, it is important to note that there is no evidence of a threshold below which exposure to PM is not associated with health effects. Therefore, if the project is approved, the proponent should be required to take all reasonable and feasible measures to ensure PM emissions from all sources are as low as reasonably practicable.

The proponent states that the project would result in a small incremental increase to PM and that this increase is acceptable. The incremental and cumulative impacts of a project are both of importance. As the air quality of this area is impacted by other sources, the addition of this project could result in levels of particulate matter that would make it difficult to meet NEPM goals in the area.

The RTS states: "It is important to note that NEPM air quality standards are not designed to be applied to specific Projects. The NEPM standards apply to the average exposure to

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the air pollutants of the general population, in each state." It is still important to consider NEPM guideline levels as they relate to the cumulative impacts an area experiences and reflects the resultant health risks to a community.

We appreciate the guidance identifying the more detailed dust contour maps in Appendix L, however, we note these were difficult to identify in this document. Figure E26 in Appendix L provides the most detailed cumulative annual average PM_{10} predictions for the highest impact year of 2023 (below). The areas highlighted with orange lines indicate significant population areas predicted to lie between 20 and 30 $\mu g/m^3$ in Singleton Heights and McDougalls Hill and higher in Camberwell. This suggests the annual PM_{10} emissions will exceed the current NEPM of 25 $\mu g/m^3$. We acknowledge the response that health impacts are predominantly driven by $PM_{2.5}$ rather than PM_{10} effects, however, there is emerging evidence that the long term exposure to the course fraction ($PM_{2.5-10}$) can have respiratory impacts.

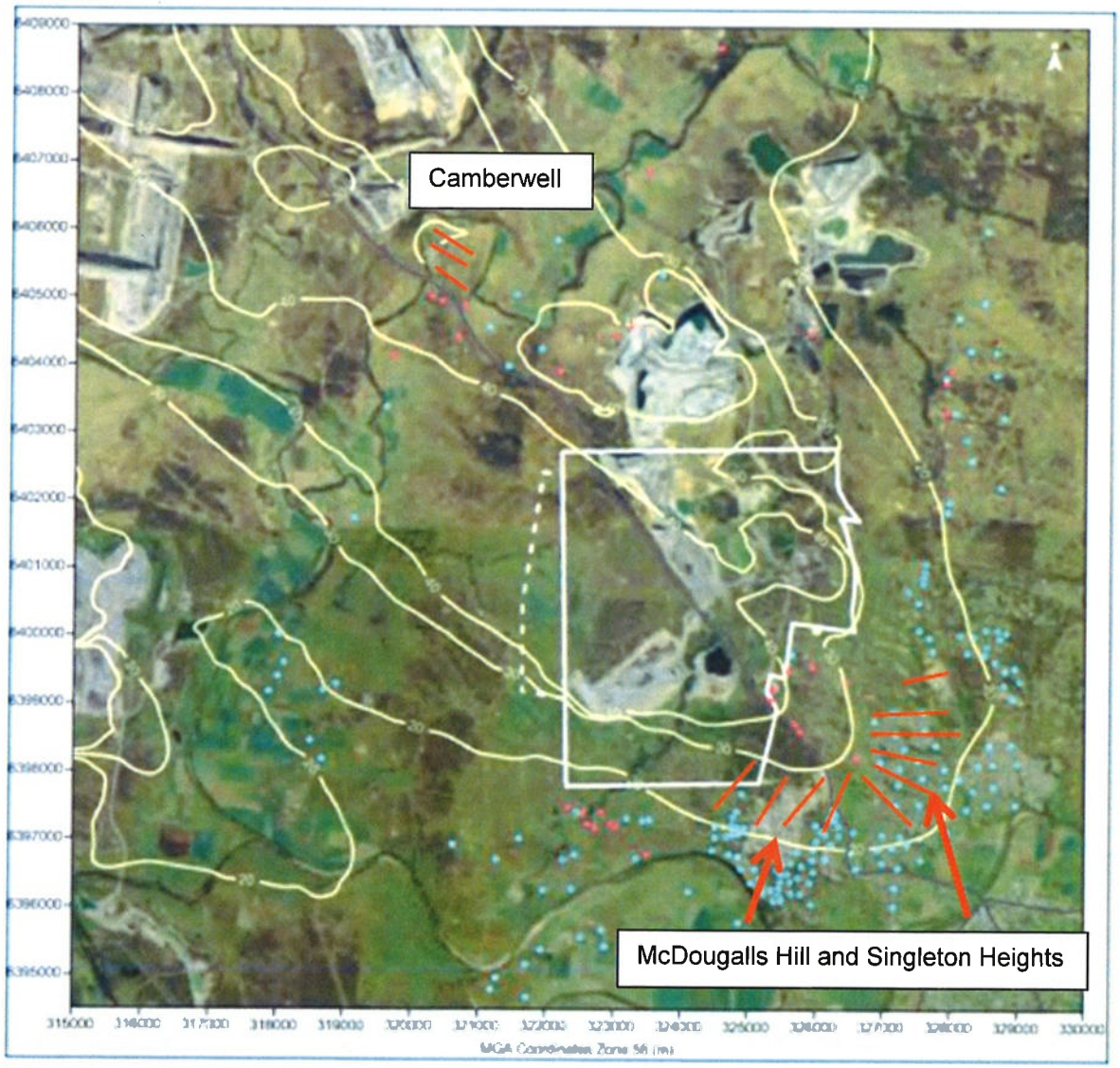

Figure E-26: Predicted annual average PM_{10} concentrations due to emissions from the Project and other sources in 2023 ($\mu g/m^3$)

Noise and Blasting

It is acknowledged that the RTS explains the early implementation of mitigation measures such as fully attenuated dump trucks and loaders which have been acquired recently, and will reduce noise emissions in the early stages of the Project.

The RTS explains the contemporary noise management plan developed by the mine, including reactive measures to reduce noise emissions to acceptable levels when required. Given the large number of operational noise related complaints in the past, it is recommended that there be an intention to review the new plan in consultation with the community to ascertain its effectiveness, and modify it if necessary.

Should you require any additional information in relation to the above, please telephone Ms Carolyn Herlihy, Environmental Health Officer on 4924 6477.

Yours sincerely

Professor David Durrheim
Service Director - Health Protection