

31 October 2014

Mining and Industry Projects
NSW Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam

Re: Centennial Coal Development Application SSD 5581

I am writing in regard to the development applications currently on public exhibition for the Airly Mine Extension Project, owned by Centennial Airly Pty Ltd located in Lithgow Local Government Area, NSW. Officers from the Public Health Unit have reviewed the documents available on your website with regard to the development proposal and provide the following comments for your consideration.

Air quality issues due to mining activities

The comments provided in this letter are contingent upon the EPA's confirmation that the modelling approach is consistent with their *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*

1. The background data source for air quality measurement prediction was Bathurst 2010. The report mentions that the characteristics of the location and activities that could affect the air quality is very different in Bathurst and the adoption of data should be regarded as very conservative. Hence any modelling conducted using this data is likely to underestimate the decline of air quality levels at Airly Mine area. A sensitivity analysis should be used to determine the effect of using higher background levels.
2. It is not explained why background data for 2010 was chosen instead of the most recent data. The maximum PM10 24 hour concentration in year 2010 was 43.3 µg/m³ which was 12µg/m³ lower than in year 2012. This would mean that the maximum 24 hour PM10 concentration for year 2012 was 55.3µg/m³. However for the modelling, year 2010 data was used rather than more recent 2012 data which was already higher than the maximum recommended level. Modelling should use the most recent available data.
3. There was no background data for PM2.5 (annual average and 24 hours average) available. However modelling was conducted in the absence of background data applying only the increments to predict the 24 hour average and annual average PM2.5 concentrations. The conclusions were made that those concentrations are expected to be much lower than the EPA criteria. If

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background data is unavailable then reasonable estimates derived from known TSP background concentrations should be used in the absence of appropriate background PM2.5 data.

4. Real-time air quality monitoring is mentioned as the best practice, but the proponent has deemed the monitoring unnecessary as the predicted air quality parameters are well below the DGR criteria. However as discussed above due to the problems that we have identified on the methodology of calculation of predicted particulate matter levels, in addition to the absence of any data on PM2.5, it is highly recommended that the proponent considers real time air quality monitoring.
5. Predicted or known impacts from the Excelsior Limestone Quarry located 6.5km northwest of Airly Mine have not been considered. The applicant has mentioned that due to its distance from the proposed development, the cumulative impact on air quality is unlikely. However it is well known that particulate matter can travel several kilometres, especially PM2.5. It is recommended that air quality impacts from this quarry are included in modelling.

The health effects of particulate matter are well established. To minimise any potential health impacts it is recommended that, should the project be approved, the proponent is required to implement all reasonable and feasible measures to minimise particulate matter emissions. Such measures should include proactive and reactive dust management systems, and a robust complaints management system to respond to air quality concerns from residents in the wider area.

Noise and vibration

There is increasing evidence that exposure to noise is associated with health effects. We recommend that the noise mitigation strategies listed in the application become part of the conditions of approval to ensure there are minimal impacts on the local community from noise.

If Planning Officers wish to discuss any of the above comments further, please contact George Truman, Public Health Epidemiologist, Nepean Blue Mountains Public Health Unit, on (02) 4734 2022.

Yours sincerely

Kay Hyman
Chief Executive
Nepean Blue Mountains Local Health District