

SWD17/37050

Mr Paul Freeman
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Freeman

RE: Hume Coal Project Environmental Impact Statement

Thank you for the opportunity to comment on the Environmental Impact Statement (EIS) for the Hume Coal Project. South Western Sydney Local Health District (SWSLHD) has focused its response to matters directly related to health although we recognise the indirect health impacts of the proposal, including potential economic and employment related benefits to the populace of South Western Sydney. The main issues identified by SWSLHD with the potential direct health impacts are air pollution, noise and water quality.

Air pollution

Air pollution is mainly restricted to coal dust from surface infrastructure and diesel particulate pollution from machinery and trains. The annual average values of fine particulate pollution ($PM_{2.5}$) for nearby residences is predicted to increase by $0.2-0.3\mu g/m^3$ and the estimated increase in additional mortality and other health outcomes is approximately 1 in 100,000 per annum. The methods used to estimate health effects in the Health Impact Assessment Report are standard and appropriate although the documented calculations appear in a footnote rather than a table. The conclusion in the EIS is that these increases should be of no health concern. Although health impacts from this are likely to be low, there is established evidence of health effects occurring at levels below current air quality standards and any increase in $PM_{2.5}$ will have additional impacts on health. Therefore, it is important that all reasonable and feasible measures are taken to minimise exposure to air pollutants for local residents.

Noise pollution

Noise was assessed as intrusion above the background. The Hume Highway is a major background noise source and generally residences affected by the background noise do not exceed thresholds. Operational noise will mainly affect quieter residences away from the highway to the north of surface infrastructure. Two residences exceed thresholds for the voluntary acquisition and another eight are less affected. The EIS states that sleep disturbance and health impacts associated with noise are not expected to occur. However, assessment methods for sleep disturbance in the Industrial Noise Policy are limited and some references to older policy documents such as the Road Noise Policy are not appropriate. Establishing thresholds for sleep disturbance is difficult and depends on context. Night-time operation and noise events such as coal train movements will occur and sleep disturbance may result.

South Western Sydney Local Health District acknowledges the traditional owners of the land.

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It is strongly recommended that a comprehensive noise monitoring and mitigation program is put in place to reduce noise exposure to levels and to appropriately and promptly respond to noise complaints.

Water quality

Groundwater and bore water

The proposed coal mine has the potential to impact on groundwater and the quality of the aquifer. In the area surrounding the project, in addition to registered bores there is likely to be a number of unregistered bores. Unregistered bores can be used for a variety of purposes, including stock and domestic use such as drinking water purposes. Given the uncertainty of potential impacts on groundwater and bores, it is recommended an assessment of the impact on groundwater quality accessed by bores is undertaken to assess suitability for drinking water purposes even though this use may not have been an expected use.

The private bores surrounding the site should be monitored during the mine operation phase to ensure there is no deterioration in water quality, especially if used for drinking purposes, and for any chemical markers associated with operation of the coal mine. A bore water quality monitoring plan for bore water extraction points surrounding the coal mine should be established in consultation with the Department of Primary Industries - Water and the NSW Environment Protection Authority.

Runoff collected in sediment dams during the construction phase and in the stormwater basins, mine water dams and the primary water dam during the operation phase should be constructed, maintained and monitored so as not to become a mosquito breeding hazard.

Effluent management

The EIS outlines grey water being managed by primary treatment and drip irrigation on landscape areas, and black water being tertiary treated for reuse in the coal preparation plant. The potential risk of exposure of workers to black water effluent is not covered. There is also no discussion on the quality of effluent. It is recommended that effluent quality is monitored and the quality should dictate its end use.

Sewage management and grey water/sewage recycling on site should be carried out in accordance with the requirements of Wingecarribee Council and the NSW Environment Protection Authority.

I trust this information is of assistance.

Should you require any further information, please contact Dr Kate Alexander, Public Health Physician, Public Health Unit, South Western Sydney Local Health District on 8778 0855.

Regards



Amanda Larkin
Chief Executive

Date: 19/7/17