

Mr Matthew Riley

NSW Department of Planning

GPO Box 39

Sydney NSW 2001

Dear Mr Riley,

Environmental Impact Statement: Vickery Coal Project WHC-03

The Hunter New England Local health district appreciates the opportunity to comment on the Environmental Assessment for the Vickery Coal project.

The project proposes the development of an open cut coal mine producing up to 4.5 million tonnes per annum of run-of-mine (ROM) coal for approximately 30 years. The Project is located approximately 15 kilometres (km) south-east of Boggabri and approximately 25 km north of Gunnedah in New South Wales. There are a number of residences close to the site that may be impacted by the development. There will likely be cumulative impacts from other mines including Tarrawonga, Rocglen and Boggabri Coal Mines.

AIR QUALITY

The following comments are contingent upon the Environment Protection Authority's confirmation that the air quality modelling approach complies with the requirements of the *Approved Methods*.

Air quality can be impacted by particulate matter arising from various sources such as motor vehicles, mining activities, industrial processes, agricultural practices, wood burning, unflued gas heating, bushfires, wind-blown dust and tobacco smoke. Particulate matter can affect public health by aggravating respiratory diseases, irritating airways and eyes; increasing the risk of death from chronic respiratory and cardiovascular diseases (Pope et al, 2002). Importantly, no threshold has been identified below which exposure to particulate air pollution is not associated with health effects. Therefore, if this proposal is approved, the conditions of approval must ensure that best practice measures are implemented so that particulate matter emissions are kept as low as reasonably practicable.

It has been suggested that clean air is a basic requirement of human health and wellbeing (WHO 2005). The health effects of air pollution can range from mild temporary respiratory symptoms through to asthma, cardiovascular conditions, chronic lung disease, cancer and premature death.

Hunter New England Local Health District
ABN 63 598 010 203

Hunter New England Population Health
Locked Bag 10
Wallsend NSW 2287
Phone (02) 4924 6477 Fax (02) 4924 6490
Email PHEnquiries@hnehealth.nsw.gov.au
www.hnehealth.nsw.gov.au/hnep

Both short term and long term exposure to air pollutants can cause disease as susceptibility to illness and disease depends on the duration and degree of exposure to the pollutants. Air pollutants are particularly harmful to the very young, elderly people and people with chronic respiratory or cardiovascular diseases (Australian Institute of Health and Welfare, 2008).

Dust deposition could have a negative impact on drinking water. Currently it is likely that many residents in the vicinity of the project use rain water tanks for their drinking water supply. It will be important to ensure local residents using tank water have functional first flush diverters to direct dust from the rain water collection systems.

Other areas impacted by mine-generated particulates, particularly the Hunter Valley, have now appreciated the importance of monitoring and mitigating air particulate exceedances in residential areas. This has resulted in the Office of Environment and Heritage establishing the Upper Hunter Air Quality Monitoring Network. The network is web based and intended to inform the public and industry of particulate matter levels and exposure in real-time so that measures can be taken to reduce exposure can be implemented. We note the intention to establish a real time regional air quality monitoring network in the Environmental Assessment and recommend the Upper Hunter model, with independent oversight and analysis be considered. Consideration could be given to establishing a dust monitoring station at Boggabri to enhance community confidence in dust control measures.

It is noted that the Director General Requirements call for assessment of emissions related to diesel combustion. It is not clear from tables 7.1 – 7.4 whether diesel emissions have been included in the model. It is recommended that the proponent clarifies this. If diesel emission have not been included, further modelling of PM_{2.5} should be undertaken incorporating this important source.

We note the Environmental Assessment assumes that ambient PM₁₀ level goals will remain static throughout the duration of the 10 year project. Even if regulatory standards do not decrease, societal expectations of cleaner air will increase.

Wind erosion of overburden is an important source of particulate matter. The Environmental Assessment assumes 99% control of wind erosion from partially rehabilitated overburden and 100% control of rehabilitated overburden. There are no details in the Assessment regarding what proportion of the modelled time scale was assumed to have 99% control versus a lower level of dust control pending rehabilitation. It would be useful to confirm that the methodology complied with the expectations or guidance provided by the EPA.

While the townships of Gunnedah and Boggabri are unlikely to be impacted by particulate emissions from this coal mine we note a number of significant impacts on a small number local residences.

Monte Carlo modelling of exceedances of the 24 hour average PM₁₀ standard of 50 µg/m³ at 10 residences close to the project predicted exceedance on between 3 and 12 days per year. Receptor 89b in particular is noted to have significant impacts with the maximum 24 hour average PM₁₀ increasing by 7 µg/m³ to 25 µg/m³. The same property is also exposed to a significant increase in annual average PM₁₀ concentration (up to 7µg/m³) and PM_{2.5} concentration (2µg/m³). The assessment notes this property may be acquired. It will be important to monitor and ensure that best practice dust controls are in place to limit the impact on these residences.

Consultation and Community Initiatives

The proposed project will have significant impact on the aesthetics of the surrounding environment. Extensive ground disturbance through open cut mining operations is very likely to have negative impact on the wellbeing of the residents in the affected location. It is important that the community is effectively engaged and satisfied with the process of consultation. The Consultation and Community Initiatives chapter of the Environmental Assessment reports on the consultation activities undertaken by the proponent but not on the communities satisfaction with the process or support or otherwise for the project.

Socio-economic Assessment

It is important to acknowledge that the location of current coal mines in the Peel and Mehi Clusters (Gunnedah LGA and Narrabri LGA) affect communities with a relatively high level of socioeconomic disadvantage, particularly among the Aboriginal population in these LGAs. Approximately 22% of NSW's Aboriginal population are resident in the HNEAHS and the LGAs with the highest proportion of Aboriginal residents are Moree (20.7%), Gunnedah (10.3%), Guyra (10.4%) and Narrabri (9.3%). It is important in planning that opportunities for employment of local people, including Aboriginal people, are prioritised.

The assessment states that: "Noise costs, air quality costs and agricultural production costs will occur at a local level, but have already been incorporated into the estimation of net production benefits via acquisition costs for affected properties and mitigation costs." It is not clear that all of these issues are fully costed or internalised in the assessment.

Should you wish to discuss further you can contact Mr Glenn Pearce, Senior Environmental Health Officer based in our Tamworth Office on 02 67648000.

Yours sincerely,

A handwritten signature in purple ink, consisting of a stylized 'C' followed by a horizontal line.

Dr Craig Dalton FAFPHM

Acting Director Health Protection

Hunter New England Population Health

Locked Bag 10, Wallsend NSW, 2287