

25 July 2017

Mr Matthew Sprott
Team Leader – Resource Assessments
Resource Assessments & Compliance Division
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Sprott

Mount Pleasant Coal Mine (DA 92/97 MOD 3) – Modification Proposal

I refer to your email of 19 June 2017 inviting comment on the Environmental Assessment (EA) exhibited on the NSW Department of Planning & Environment web site in relation to the Mount Pleasant Coal Mine Optimisation Modification (the Project).

The Project is located approximately 3 kilometres north-west of Muswellbrook in the Upper Hunter Valley area. The Project is an open cut coal mine which was originally approved in 1999, but major construction did not commence until recently when purchased by new owners. The modification proposal is for an extension of time from 2020 until 2026, and for a change to mining method (truck and shovel rather than dragline) and associated variation to the open cut mining sequence, along with an extension to an emplacement area, and changes to final landform. The Project modification would not increase already approved annual maximum or total coal or waste rock that would be produced throughout the life of the operation.

Hunter New England Population Health (HNE Health) has reviewed the EA report paying particular attention to the management of air quality, noise, water and issues which may have an impact on public health. The following points are discussed and should be considered in the approval process for this project.

Air Quality

There is no evidence of a threshold below which exposure to particulate matter (PM) is not associated with health effects. Therefore, it is important that all reasonable and feasible measures are taken to minimise human exposure to PM, even where assessment criteria are met.

The Mount Pleasant mine is in close proximity to the township of Muswellbrook and the primary air quality impact will be the increase in PM₁₀ exceedances on the western edge of the town with a relatively minor increase in PM_{2.5}. The EA predicts nine privately-owned residences will exceed the current annual PM₁₀ goal of 25µg/m³.

The National Environment Protection Council (NEPC) document *Variation to the Ambient Air Quality NEPM – particles standards* (which can be downloaded at:
<http://www.nepc.gov.au/resource/variation-ambient-air-quality-nepm-%E2%80%93-particles->

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[standards](#)), came into effect in February 2016 and includes an annual average PM₁₀ standard of 25 µg/m³, and PM_{2.5} standard of 8µg/m³. It also includes an aim to move to annual average and 24-hour PM_{2.5} standards of 7µg/m³ and 20µg/m³ respectively by 2025.

The air quality goals for the area surrounding the mine should be consistent with the current standards (annual PM₁₀ of 25µg/m³) and not former development approvals when lower air standards were in place. Where a development is unlikely to proceed for years or have impacts out into the future then proponents should demonstrate a cognisance of future air quality standards as flagged by the NEPC.

The EA describes a time scale for 3 scenario timelines as below:

- Scenario 1 (approximately Year 2018) representing when the mining activity is closest to Muswellbrook
- Scenario 2 (approximately Year 2021) representing when the activity reaches its peak for the Modification, and
- Scenario 3 (approximately Year 2025) representing when activity is at a peak level and the active pit has reached its full extent within the Modification period.

The year 2025 for Scenario 3 in the EA aligns with the timeline for the NEPC aim to move to annual average and 24-hour PM_{2.5} standards of 7µg/m³ and 20µg/m³. While the impact of the mine will primarily be due to the increased annual PM₁₀ on the western side of Muswellbrook, it is difficult to assess the impact of future compliance with air quality standards due to limitations in the display of the PM isopleths in Appendix G that apply to Scenario 3 when more stringent air quality standards are intended to be in place – specifically:

- *Figure G-23: Predicted annual average PM2.5 concentrations due to emissions from the Modification and other sources in Scenario 3 (µg/m³).* There are private residences between the 5 and 8 µg/m³ isopleths, so without a 7 µg/m³ isopleth it is difficult to assess the impact of the proposed standard of 7 µg/m³ at that time.
- *Figure G-26: Predicted annual average PM10 concentrations due to emissions from the Modification and other sources in Scenario 3 (µg/m³).* There are multiple private residences close to the 25 µg/m³ that may exceed the proposed standard of 20 µg/m³.

We request that future revisions of the isopleth graphics be rendered in higher resolution as it is difficult to read the values for the contours or discern the colour coding of receptors.

Noise and Blasting

Environmental noise can have negative impacts on human health and well-being and trigger ongoing community complaints about annoyance, sleep disturbance and stress. Evidence concerning the adverse health effects of environmental noise is detailed in a number of publications, for example, the *World Health Organization Night Noise Guidelines for Europe* (2009) and the *WHO Guidelines for Community Noise* (1999). To protect public health, it is prudent to take all reasonable and feasible measures to minimise public exposure to mine-related noise, irrespective of compliance with the relevant noise policies.

The *NSW Industrial Noise Policy* (EPA 2000) details the response and mitigation measures required when noise trigger levels are met or exceeded. The operational noise assessment for the modification in Appendix A of the EA shows the addition of privately owned receiver 136 to the list of proposed land subject to acquisition upon request shown in Table 5-4. The list of proposed land subject to additional noise and/or air quality mitigation measures upon request shown in Table 5-5 includes the addition of one privately owned receiver, 140c. It is advised that the proponent engage in clear and open consultation with the owners/occupiers of these residences to ensure they are aware of the additional impacts and their options.

It is noted that the approved Mount Pleasant Operation includes a pro-active and reactive noise management system which will be implemented for the Project, incorporating the modification, to maintain compliance with the relevant noise criteria.

The EA states that with implementation of reduced blast maximum instantaneous charge (MIC) to maintain compliance at the nearest receivers, it is predicted there will be no exceedances of vibration and airblast criteria at any privately owned receivers. We emphasise the need to ensure strict control of blast conditions to protect the public from the impacts of vibration, overpressure and blast fume emissions.

Surface Water

The current approval for the Project includes some of the water requirements being met via extraction of surface water from the Hunter River. Surplus water will be discharged into the Hunter River (or its tributaries) in compliance with the Hunter River Salinity Trading Scheme (HRSTS) and an EPL.

There is a health risk from direct human exposure to contaminated surface water or if contaminated surface water enters a drinking water supply. The Muswellbrook town water supply is sourced from the Hunter River, with the raw water offtake being just a short distance downstream of the Project. We have serious concerns over how the quantity and quality of the town water supply may be impacted by any water extraction from, or discharge into the river by the Project. We request that the proponent address these issues further.

Potable Water

The EA states that “potable water will be pumped from the Hunter River and stored in localised tanks. If required, water will be treated to appropriate potable water standards prior to use. Potable water may also continue to be delivered to site via trucks by a contractor.”

The water from the Hunter River is not potable, and will require treatment in order to be used as a potable supply.

Businesses or facilities that supply drinking water from an independent water supply (i.e. not town water) need to follow the *NSW Health Private Water Supply Guidelines (2014)*. The *Public Health Act 2010* and the *Public Health Regulation 2012* require drinking water suppliers, including private water suppliers, to develop and adhere to a ‘quality assurance program’ (or drinking water management system). The quality assurance program for the site should be submitted to this office at the address on the front page of this letter prior to commencement of use. Further information and templates can be found at:

<http://www.health.nsw.gov.au/environment/water/Pages/private-supplies.aspx>.

NSW Health recommends regular testing of drinking water at facilities with a private supply. If a private water supply is contaminated, or is not monitored or not treated then consumers should be warned.

If you require any further information please telephone Carolyn Herlihy, Environmental Health Officer on 4924 6477.

Yours Sincerely



Dr Tony Merritt
**Acting Service Director – Health Protection
Hunter New England Population Health**