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I refer to the modification application for Werris Creek Coal Mine (PA10\_0059 MOD 2) referred to the NSW Environment Protection Authority (EPA) on 23 April 2015 for its review and comment further to the public exhibition of the environmental assessment (EA). The EPA has reviewed the EA and provides the following comments for DPE's consideration in determining this matter:

#### Noise

- The noise assessment by Spectrum Acoustics (2015) predicts exceedance of the applicable night time noise criteria at 6 locations (R22 by 1 dB, R96 by 1 dB, properties 16, 64 & 97 by 3dB and R98 by 2 dB)
- The EPA notes that there are no residential premises on properties 16, 64 and 97 and therefore does not consider that it is necessary to apply noise limits at these locations.
- The EPA notes that the proponent has negotiated noise agreements with the owners of R22 and R98 that require it to implement additional noise mitigation measures at the residence in the event that noise levels exceed 40dB and acquire the property if noise levels exceed 45dB. The EPA recommends that these agreed commitments are reflected in the noise limits established for the modification to ensure that the terms of this agreement are legally binding (i.e. apply limits of 40dB at each of these residences unless and until additional noise mitigation measures are applied at the relevant residence, in which case the limits should then increase to 45dB unless the residence is acquired by the Applicant.
- This leaves receptor R96, which the EPA recommends should be provided with noise mitigation rights within the modified project approval to be consistent with the way other receptors within the 5dB noise affectation zone have been treated in the past.

#### Air

- The review by SLR Consulting of the 2010 Air Quality Assessment by Heggies Pty Limited has not remodelled air quality impacts at surrounding receptor locations. It has instead relied on a comparison of estimated emissions from the proposal based on current best practice techniques against the three scenarios modelled by Heggies (for Years 3, 7 & 15 of the 2010 Life of Mine Project) as a quasi means of validating this past modelling. On the basis of this approach, SLR have chosen to use the Year 3 scenario as they assert it is most representative of the post modification operations.
- This approach however has not considered the different geographic locations of key emissions sources (e.g. the main overburden dump), nor the location of additional sources (e.g. the proposed additional haul trucks, or the dry separation plant) of the Heggies Year 3 scenario relative to the modification proposal. There is a risk therefore that the Heggies (2010) predictions that SLR assert are representative of impacts at the nearest receptors may be under-predicting impacts.
- The EPA therefore recommends that the impacts of the proposed modified operations are assessed by remodelling the site to accurately reflect the proposed operating scenario, to confirm that air quality impacts at the nearest receptor locations comply with the relevant assessment criteria, prior to the approval of the modification.

#### Irrigation

- The EPA is concerned that the proposal to allow the irrigation of void water has been presented as something that will only be pursued in the event that wet conditions are experienced. The water balance modelling presented in the EA indicates that insufficient out-of-pit void water storage is available to cater for a 90<sup>th</sup>

percentile wet year. If irrigation is not pursued until wet conditions are experienced there is a risk that such intervention will be too late to prevent an uncontrolled discharge of void water from the site. Furthermore, in a wet year, irrigation is generally not required to supply the water requirements of any crop, and there may be a significant lead time required to install the necessary irrigation infrastructure and establish a suitable crop for irrigation purposes.

- It is considered unlikely that surrounding landholders would be interested in investing in appropriate irrigation infrastructure (which is generally quite expensive) for the relatively short period of the remaining mine life (6 years), which may only provide them with a secure water supply in a wet year when they may not need to irrigate to achieve suitable levels of crop production
- The EPA concedes however that it may be possible to irrigate the void water without causing soil degradation or water pollution, if appropriate safeguards and management measures are implemented. It is therefore recommended that the modified project approval requires the proponent to prepare an irrigation management plan in close consultation with the EPA, for approval by the DPE. This proponent should be required to prepare and submit this plan within a maximum period of 3 months. The plan should then be implemented within a further 3 months to ensure that stored void water volumes can be utilised without unnecessary delay in order to maximise available storage at all times in order to cater for a potential wet year during the remaining life of the mine. This will significantly reduce the potential risk of uncontrolled void water discharges from the site. Alternatively, the proponent should be required to implement other means of ensuring it can contain the void water generated by the site (e.g. expanding out-of pit void water storage capacity, employing additional evaporators etc.).

#### Dirty Water Management

- The EPA has previously advised the proponent that the existing dirty water management infrastructure for areas where stormwater can come into contact with coal (e.g. stockpile areas, ROM pad etc.) do not meet the accepted design criteria (capacity to capture and hold a 1 in 100 yr, 72 hour rainfall event, with a liner of 1m of compacted clay or equivalent with a permeability of less than  $1 \times 10^{-9} \text{ ms}^{-1}$ ).
- The current environment protection licence does not provide the proponent with any protection from committing an offence under section 120 of the *Protection of the Environment Operations Act 1997* (pollution of waters) in the event that an overflow were to occur from a coal contact catchment as a result of undersized sedimentation ponds. This could mean that in such an event the proponent would potentially breach the POEO Act and be exposed to regulatory action.
- The proponent has advised the EPA that it is undertaking a review of site water management infrastructure in an attempt to determine whether it can meet these requirements due to site constraints, or whether the same outcome (i.e. preventing discharges from coal contact catchments in all rainfall events up to and including the 1 in 100 yr 72 hour recurrence interval) can be delivered in some other way. The EPA is willing to consider alternative proposals that the proponent may wish to put forward as a means of meeting this environmental performance outcome.
- The EPA recommends that the modified project approval requires the proponent to review the current site water management plan in consultation with the EPA to reflect the proposed changes to drainage and to implement measures that enable it to capture and hold runoff from the required design rainfall event within any coal contact catchment areas.

Please do not hesitate to call if you wish to discuss any of the above.

Kind regards

***Lindsay***

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