Dear Mr Neville

Vickery Mine Extension (SSD 7480)
Supplementary Response to Submissions (RTS) and Draft Conditions

I refer to your email of 25 February 2020 to the Department of Planning, Industry and Environment (DPIE) – Water about the above matter.

DPIE Water does not require any more information prior to approval. However, the department still has a number of concerns that must be addressed post project approval. The following comments and recommendations have been provided by DPIE - Water and the NSW Natural Resources Access Regulator (NRAR).

Supplementary RTS (detailed advice in Attachment A)

Licensing
- The proponent needs to ensure all required WALs will be available to account for water take for the project which includes lodging the appropriate dealing application to NRAR to nominate the project works prior to the water take occurring.

Assessment of the Upper Namoi Zone 4 borefield
- Prior to the construction of the Upper Namoi Zone 4 borefield, the proponent must lodge a dealing application with NRAR to licence the borefield as identified above. NRAR will refer this application to DPIE Water for assessment of impacts.

Emplacement of the out of pit spoil
- DPIE Water does not support emplacement of out of pit spoil on top of the alluvial aquifer associated with the Namoi Zone 4 alluvium groundwater source. If approved, the Water Management Plan will require detailed baseline and ongoing monitoring, reporting and Trigger Action and Response Plan (TARP) leading to eventual removal should unacceptable aquifer impact result. The proponent should acknowledge the associated commercial risk with this out-of-pit emplacement leading to potential for removal.

Draft conditions
- Groundwater Management Plan Condition B56 (v) dot point 3 should include performance criteria for water dependent assets inclusive of GDEs and 3rd order or above water courses.
- It should be made explicit in the Conditions of Consent that the Project Development approval does not grant consent for development and use of the borefield until such time as the legislative post-approval Dealing Assessment requirement is fulfilled.
- An additional requirement should be included in Condition B.56 g(v) Groundwater Management Plan to require the monitoring of groundwater take at the borefield and monitoring of any borefield impacts on the aquifer and water users.
Any further referrals to DPIE – NRAR & Water regarding this matter can be sent by email to: landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

Liz Rogers
Manager Assessments
Department of Planning, Industry and Environment: Water
11 March 2020
Licensing

The proponent has referred to the Water Access Licences (WALs) held for the project. Whilst it is recognised some of these WALs currently nominate water supply works used for mining, there are others that are linked to irrigation works. Additionally, DPIE Water is currently in receipt of a request involving water supply of 1.6 ML/d to Tarrawonga Mine Mod 8 from groundwater WALs held under Whitehaven Vickery Coal Project, which may further inhibit the proponent from accessing necessary WALs for the Vickery Mine Extension. The proponent needs to ensure all required WALs will be available to account for water take for the project which includes lodging the appropriate dealing application to NRAR to nominate the project works prior to the water take occurring.

The proponent has accepted the commercial risk of limitation to water supply during drought conditions and the need to adjust operations accordingly. This is a key aspect to understand potential operational impacts to the project during periods of limited water supply.

Assessment of the Upper Namoi Zone 4 borefield

DPIE Water accepts referral of the Upper Namoi Zone 4 borefield to a legislative post-approval requirement. Prior to construction of the borefield, the proponent must lodge a dealing application with NRAR to licence the borefield. NRAR will refer this to DPIE Water for assessment against the department's impact assessment criteria for dealings and licence applications. There is no guarantee that the requested volume will be approved. If approved, specific monitoring and impact assessment requirements must be encapsulated within the Water Monitoring Plan (WMP) that manages the cumulative impact of both the aquifer interference activity and the borefield extraction. The proponent must accept the commercial risk that the borefield may require modifications as a result of the dealing application and/or any negative outcomes identified as a result of the Water Management Plan and associated Trigger Action and Response Plan (TARP) performance measures.

It is an important point of note that the proponent’s aquifer conceptualisation is for a 'confined/semi confined' system. This conceptualisation will need to be evaluated against the bore layout, design and supporting information on aquifer depths and presence of confining layers. Impact considerations on a 3rd order or higher stream have not been considered in the RTS. The proposed borefield is adjacent to a 7th order stream on the southern boundary and in proximity to a 5th order stream on the northern boundary. Therefore, the aquifer conceptualisation will be a key matter to confirm as part of the borefield assessment.

Emplacement of the out of pit spoil

The proponent’s RtS advises the risk is negligible as:

- Emplacement is on clay dominated alluvium
- Represents only 0.2% of the Namoi Zone 4 alluvium groundwater source
- Previous impact area from Canyon Coal Mine final void
- Residual void will act as a groundwater sink.

DPIE Water does not consider emplacement of out of pit spoil on top of the alluvial aquifer associated with the Namoi Zone 4 alluvium groundwater source as negligible risk. Should project approval permit this out-of-pit emplacement to occur as presented, emplacement on alluvium will remain a focal point of risk for DPIE Water requiring detailed monitoring and assessment requirements to be addressed within the WMP. This will include detailed baseline and ongoing monitoring, reporting and TARP. The proponent should acknowledge the associated commercial risk with this out-of-pit emplacement leading to potential for removal should un-acceptable aquifer impact occur.

END ATTACHMENT A