

4 December 2020

SF2012/000358; WST07/00087/08

The Manager  
Resource and Energy Assessments  
Department of Planning, Industry and Environment  
PO Box 39  
Sydney NSW 2001  
(By email only)

**Attn: Philip Nevill, Senior Environmental Assessment Officer**

Dear Mr Nevill,

**SSD-10269: Lot 152 DP 816020 and others; 10 Kurrajong Creek Road, Baan Baa Narrabri Underground Mine Stage 3 Extension Project**

Thank you for referral of SSD-10269 via the NSW Major Projects Planning Portal dated 29 October 2020 inviting comment from Transport for NSW (TfNSW).

From review of the documentation submitted in support of this proposal, TfNSW understands that:

- The proposal is required to be referred to TfNSW pursuant to:
  - *SEPP (Infrastructure) 2007*, Clauses 84, 85 and 86 as it is adjacent to a rail corridor and level crossing, and Clause 104 as it will generate road traffic above the referral threshold, and
  - Clause 16 of the *SEPP (Mining, Petroleum Production and Extractive Industries) 2007* as it will involve transport of materials by a public road in support of mine operations.
- The mine operates under a previous Part 3A Approval (Stage 1) and MP08\_0144\_MOD6 (Stage 2). Current approvals allow production and processing of up to 11 million tonnes per annum (Mtpa) of run of mine (ROM) coal until July 2031. The total amount of ROM coal that may be extracted under existing approvals is approximately 170 Mt, although based on current mine planning, it is estimated actual extraction may reach up to 145 Mt.
- The Stage 3 extension proposes to extend the expiry date to year 2044, with no change to the annual limit on extraction, production, and transport by rail. Total approved ROM coal production over the life of the mine operation would increase to approximately 252 Mt.

- Product coal is transported by rail via the Werris Creek Mungindi Railway to the Port of Newcastle. The site is understood to generate an average of 4 trains per day, and a peak of 8 trains per day, and this would not change as a result of the proposal.
- The applicant submits that employment of up to approximately 520 full-time equivalent personnel (employees and contractors) would continue unchanged. Possible short-term increases in employment multiple times throughout the project life are sought in addition for construction and development activities, for up to 20 Full Time Equivalent (FTE) personnel onsite.

In order for TfNSW to adequately assess this proposal, we seek the following is further addresses by the applicant:

- The Road Transport Assessment (TTPP, August 2020) Section 3.4.2 states:

*It is understood that the channelised storage lanes and taper zones in the Kamilaroi Highway at the intersection with Kurrajong Creek Road (Figure 3.1) were designed with consideration of the storage requirements of the anticipated traffic volumes arriving at the intersection over the maximum closure time of the crossing (RW Corkery, 2009).*

A copy of the 2009 Environmental Assessment report by RW Corkery, which supported the original Narrabri Coal Stage 2 application (MP08\_0144), has been reviewed by TfNSW and discussion relevant to this point was not found. Please confirm the specific sources for this information and if not publicly available, provide TfNSW with copies.

- The transport assessment refers to the use of trucks larger than semi-trailers (19m), specifically B-doubles, during construction. Kurrajong Creek Road is not an approved B-double route with reference to the TfNSW Restricted Access Vehicle (RAV) map. The applicant is requested to confirm whether it is proposed:
  - To amend the proposal so only unrestricted truck combinations (e.g. up to 19m semi-trailers less than 50 tonnes) may be used on the project, or
  - To reclassify that section of Kurrajong Creek Road and the highway intersection, by initiation with Council in consultation with TfNSW and the National Heavy Vehicle Regulator in order to change the current gazetted status.
- The basis for the claim that existing approvals permit 520 FTE personnel, and that this would not change as part of the Stage 3 development, could not be verified. The most recent Environmental Assessment report for Narrabri Mine Stage 2 (MP08\_0144 Mod 5) refers at Table ES-1 to an operational workforce of 370 employees and contractors. Subsequently, TfNSW seek confirmation of this previous approval demonstrating the level of traffic generation associated with the workforce if this is to be considered the 'existing approved' baseline for this application.

- Primary evidence confirming the actual peak workforce size required to achieve the maximum 11 Mtpa production, and peak numbers of workers assigned to each shift (including day, afternoon, and night, operational, administrative and construction shifts), is requested. The daily and hourly trip generation volumes surveyed onsite in June 2019, and peak hourly volumes assessed in the road transport report, do not clearly correlate with a peak site operational workforce of 520 FTE personnel.
- For example, a weekday peak hourly operational shift traffic (two-way) volume of some 120-150 vehicles per hour was surveyed, along with a weekday daily total (two-way) volume of 858 movements. This is less than the minimum ~1,000 daily vehicle trips to be expected if the average occupancy rate per light vehicle is close to 1 person, plus lunch trips, deliveries, visitors and so on.
- Without provision or reference to a mine attendance log, for example, it is difficult for TfNSW to confirm the size of the workforce present during the June 2019 traffic survey period. If it was less than the peak workforce sought under this proposal, supplementary traffic analysis identifying the impacts of the peak operational workforce to be approved under this consent is required in order for a thorough assessment to be undertaken. The focus should be on potential queuing and safety impacts – further discussion of Levels of Service at either the highway intersection or mid-block is not required by TfNSW, as these are currently shown to remain at LOS A or B and are not likely to significantly deteriorate.
- The traffic survey was taken during a one-week period. Additional information identifying other critical (peak) traffic scenarios that may be expected for atypical periods during mine operation, such as during railway and mine operational shutdowns would be of benefit.
- Table 3.5 in the transport assessment provides indicative daily train movements based on GTA Consultants (2018). The GTA Consultants report refers to the 2016 ARTC Master Train Plan and it is unclear how it arrived at the daily average and peak train movements cited. An updated forecast of daily average and peak train movements is required to better understand the road-rail interactions at the mine access road level crossing. This should include both the anticipated year of Stage 3 opening and the scenario 10 years post-development (10 years being the appropriate planning horizon set out in *Austroads Guide to Traffic Management Part 12*). The forecast should consider likely changes in train demand due to major projects within that planning horizon such as Inland Rail, Narrabri Inland Port intermodal and the Moree Special Activation Precinct.
- Sections 3.4.4 and 3.4.5 in the transport assessment noted level crossing delays based on observational data only, without clarifying the deliberate rail corridor planning considerations that are applied to this facility. It is unclear whether the observed performance is representative of future train use cases. Further analysis of the current length of coal trains using the rail loop, the lengths and characteristics of the existing rail loop sections that result in slow progression through the level crossing, and likely and potential future lengths of trains that would use the facility. If the lengths of trains or delays at the level crossing will increase in the future, likely delays are to be clarified and fed into any further traffic impact analysis.

- Provision of any reported rail safety incidents at the mine access road level crossing within the past 5 years, while sensitive, can assist with better ascertaining mitigation measures. Understanding root causes and preferred mitigation measures (if applicable) where the incident history indicates there is a significant risk to the safety of road and rail traffic in connection with the current project proposal it is anticipated will assist TfNSW in comprehensively assessing this proposal and the resulting transport impacts.
- Table 3.17 in the transport assessment summarises queue lengths based on the average number of vehicles. Estimations of the 95<sup>th</sup> percentile queue lengths and show working is sought by TfNSW. It is preferable that this estimate outline reasonable worst-case duration (e.g. monthly) of delays caused by a coal train at the level crossing based on available data. Queue analysis is to reflect the likely frequency of heavy vehicle arrivals. Further information on preferred modelling type can be supplied via TfNSW directly.
- While there have been no publicly recorded casualty or tow-away collisions associated with the Kamilaroi Highway intersection, any reported near-miss or lead indicator data that Whitehaven holds internally should be reviewed by a transport professional as part of this application to identify if there are any opportunities to improve road facilities, and ultimately, safety of the mine workers and travelling public.
- Confirmation of the range of hours the applicant proposes to limit construction of surface works to occur within is requested.
- In conjunction with the proposed extension of mine life, it is recommended that the applicant outline practical measures that are to be implemented as part of a traffic management plan and driver code of conduct for staff, contractors and suppliers to reduce transport- and travel-related hazards. A key measure to be considered may include provision of buses to transport staff and/or meet minimum car-pooling occupancy rates, to reduce peak hourly traffic volumes and the number of kilometres driven.
- The transport assessment refers at Section 4.2 to co-disposal of 15,000 m<sup>3</sup> of exploration drilling waste at the Narrabri Mine reject emplacement area '*via ... the Kamilaroi Highway*', but the location of the reject emplacement area is understood to be within the site boundary, forming part of the surface facilities. Please clarify the route such traffic would take along any public roads (if applicable).
- Copies of any third-party (government or community) submissions in relation to road or rail transport received in response to exhibition of this Stage 3 application are also requested. The EIS at page 5-12 states '*Key issues raised by members of the CCC in relation to the Project have included: concern around road network impacts associated with increased traffic.*'

Thank you for the opportunity for TfNSW to engage with you on this project to date. If you wish to discuss this matter further, please contact Bevan Crofts, Development Assessment Officer on (02) 6861 1449.

Yours faithfully



Ainsley Bruem  
A/Manager Land Use Assessment  
Western Region

cc     General Manager  
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         (By email only)