

5 November 2019

SF2012/002404; WST12/00016/10

The Manager Resource Assessments Department of Planning, Industry and Environment GPO Box 39 SYDNEY NSW 2001

Attention: Andrew Rode

Dear Mr Rode,

DEVELOPMENT APPLICATION 05_0117_15 MOOLARBEN COAL MINE (MCO) MOOLARBEN STAGE 1 MOD 15 - UG4 ANCILLARY WORKS

Thank you for the email dated 2 October 2019 referring the above application to Roads and Maritime Services for comment. Noteworthy is project approval for operation until 31 December 2038, with mining operations permitted to occur 24 hours per day, seven days per week

From review of the documentation submitted in support of the proposal it is understood the modification broadly involves:

- Relocation and expansion of dewatering sites.
- Development of a downcast ventilation shaft for UG4 and associated compound, and
- Development of a remote services infrastructure area above the UG4 mains.

With regards to road transport the modification proposes:

- Construction of a new site vehicular access to the ventilation shaft compound via Ulan Road, which will be used throughout construction, operation, maintenance and decommissioning activities.
- All construction traffic for the northern dewatering site via approved access from Saddlers Creek Road due to relocation and expansion of pre-approved dewatering bores in the north west region UG1.
- New internal access tracks from the CHPP access road to dewatering sites at the southern end of UG4, and
- New internal access roads and road crossings at Bora Creek from the existing CHPP access road to the RSIA.

Roads and Maritime Services

- Activities associated with the various work areas as part of this proposal will generally not occur simultaneously, however noting some overlap in these activities can be expected.
- Forecasts undertaken by GTA Consultants (2015) pertaining to peak hour traffic volumes at key
 intersections for 2017 were noted as being generally consistent with the surveyed conditions in 2018. It
 assumed potential impacts of this proposal on the operating conditions at key intersections by
 application of GTA's forecasts for both 2017 and 2027 scenarios are noted as being sufficient and the
 modification would have negligible impact on the operation of the existing intersections serving
 Moolarben Coal Complex.
- It was noted in the Statement of Environmental Effects (SEE) that MCO would separately seek approval under Section 138 of the *Roads Act, 1993* for the proposed new intersection with Ulan Road and any other works associated with the Modification with Road Corridors.

In relation to the proposed use of Saddlers Creek Road for access to the northern dewatering sites, noteworthy to Roads and Maritime is:

- Vehicular access to the two northern sites will be via Saddlers Creek Road and Ulan Road intersection, construction traffic of the southern and northern sites would not coincide, the northern site will be constructed approximately three years after the southern dewatering sites.
- Saddlers Creek Road with Ulan Road is currently a basic rural T-intersection, with no localised widening of the sealed surface of Ulan Road in the vicinity of the intersection. Roads and Maritime considers this will be unsatisfactory for the proposed use.
- Expected traffic accessing this road will include light vehicles, drill rigs, semitrailers, truck and dog combinations, cranes, wheeled cranes and equipment floats.
- Earthworks at the two northern dewatering sites which would generally be limited to Monday to Fridays during daytime hours are expected to take approximately twelve weeks.
- General construction in addition to the earthworks will involve an expected traffic peak generating 20 light vehicles per day and 30 heavy vehicles per day, generally between 7am to 6pm seven days per week.
- Further is the excavated material heavy vehicle movements from the northern dewatering sites again generally undertaken from 7am to 6pm, via Saddlers Creek Road to Ulan Road then enter the open cut operations via the Open Cut Access Road off Ulan-Wollar Road. This would generate up to 132 loads of material with a matching number of return trips via a campaign basis rather than continually throughout construction.
- Throughout operation, the intersection of Saddlers Creek Road and Ulan Road may experience a
 redistribution of trips of MCO related traffic, on occasion this may translate to up to 15 light vehicles
 and 10 heavy vehicles per day accessing this intersection, again possibly via a campaign basis where
 maintenance or replacement of installed infrastructure is required typically to and from the south. This
 would be 24 hours per day seven days per week, with a peak of three light and two heavy vehicles per
 hour.
- Affected parts of Saddlers Creek Road will be repaired/maintained as required during construction
 works of the northern dewatering sites and services corridor. Roads and Maritime seeks further details
 as to extent of upgrades to this road including sealing (including extent) as a dust mitigating measure to
 be provided by the proponent.

- It was further noted traffic management measure including provision of advance warning signs on Ulan Road to alert drivers to the presence of trucks turning in and out of Saddlers Creek Road, and traffic controllers to manage passing traffic during the movement of any larger equipment floats or cranes into or out of Saddlers Creek Road. With appropriate traffic management measures during construction activity, the increased use of Saddlers Creek Road would not warrant upgrading of the existing intersection. Roads and Maritime notes the increase in use of this road extends beyond construction and therefore needs to accommodate for the future and continued use beyond construction by MCO.
- Noting during peak periods the Modification is forecast to generate the same number of vehicles turning into and out of Saddlers Creek Road as those forecast at the proposed new access intersection, would operate with only short delays to turning vehicles and spare capacity, nonetheless and noting the route via Golden Highway onto Ulan Road and then onto Ulan/Wollar and beyond or continuing along Ulan Road to Mudgee will with proposal developments in this locality experience an increasing number of background traffic.

Construction of the Ventilation Shaft Compound (VSC) traffic would be via the proposed new access with Ulan Road and the construction of the Remote Services Infrastructure Area (RSIA) will be via the CHPP Access Road and a new internal access road with a road crossing of Bora Creek.

- It is noted MCO would confirm the design of the proposed new intersection with Ulan Road as part of the approval required under Section 138 of the NSW *Roads Act, 1993* in consultation with Roads and Maritime and Council.
- The location of Corporate Road within relative close proximity to the proposed new access along Ulan Road will need consideration. Noting this access will be used throughout construction, operation and decommissioning activities associated with the proposal the capacity should ensure it is future-proofed to accommodate for its use and the safety and efficiency of all road users along Ulan Road.
- Since 2015 various development modifications and new development applications in this location have transpired. It is unlikely the traffic impacts on the broader network could have been factored into the traffic analysis undertaken by GTA Consultants in 2015 even accounting for their traffic forecasting and therefore need further consideration as to the level of required intersection treatments associated with this proposal.

Roads and Maritime does not object to the proposal subject to provision of additional information provided by the proponent and subject to the following conditions being included in any consent issued in relation to MP05_0117 MOD15 by the consent authority:

- Prior to commencement of construction associated with Modification 15- UG4 Ancillary works, the
 proponent is required to provide further detail as to the proposed new access intersecting with Ulan
 Road (MR214). Relevant consent in accordance with Section 138(2) of the Roads Act, 1993 is to be
 obtained via Mid-Western Regional Council and Roads and Maritime, prior to works commencing and
 is to include:
- The intersection works are to be designed and constructed for a 100km/h speed zone and be able to accommodate the largest vehicle required to access the ventilation shaft compound.
- The likely intersection treatment for the new access with Ulan Road will consist of:
 - A Channelised Right (CHR(s)) turn lane constructed in accordance with Figure A 29 Part 4A of Austroads Guide to Road Design (copy enclosed) and relevant Roads and Maritime supplements to Austroads, is to be provided in Ulan Road at its intersection with the new access to the VSC. The intersection works are to be designed and constructed for a 100km/h speed zone and able to accommodate the largest vehicle accessing the intersection.

- An Auxiliary Left (AUL(s)) turn lane constructed in accordance with Figure 8.3 Part 4A of Austroads Guide to Road Design (copy enclosed) and relevant Roads and Maritime supplements to Austroads, is to be provided in Ulan Road at its intersection with the new access to the VSC. The intersection works are to be designed and constructed for a 100km/h speed zone and able to accommodate the largest vehicle accessing the intersection.
- The proponent is to provide further detail as to the proposed extent and composition of the access road connection with Ulan Road, Roads and Maritime would recommend the road is to be sealed a minimum of 100 metres from the intersection with Ulan Road.
- Safe Intersection Sight Distance (SISD) requirements as outlined in the Austroads Guide to Road Design Part 4A and relevant Roads and Maritime supplements is to be provided and maintained in both directions at the proposed site access on Ulan Road. For a 100km/h speed zone the minimum SISD is 285 metres for light vehicles and 351 metres for heavy vehicles.
- Prior to the commencement of construction works, the proponent is to contact Roads and Maritime's Field Traffic Manager on 1300 656 371 to determine if a Road Occupancy Licence (ROL) is required. In the event a ROL is required, the proponent is to obtain a ROL prior to works commencing within three (3) metres of the travel lane of Ulan Road.
- Any ancillary works, such as relocation of services, vegetation removal, transitions for drainage, batter slopes and arrangements being made for any required road reserve widening acquisition.
- Noting concerns raised by the proponent regarding the need for a Traffic Control Plan (TCP) required at the intersection with Saddlers Creek Road, Roads and Maritime seeks the proponent considers the change in use of this intersection with Ulan Road resulting from MCO's proposal. The current Tintersection arrangement with Ulan Road appears unsatisfactory.
- As part of Modification 7, MCO committed to implementing traffic management for construction vehicles entering and exiting the northern dewatering site to Ulan Road and along Saddlers Creek Road. Traffic management measures would be designed and implemented in accordance with the relevant RMS requirements, taking into consideration the traffic volumes and nature of the construction activity. This requirement has not been adequately addressed. To address this requirement A Traffic Management Plan (TMP) developed in consultation with relevant council(s) and Roads and Maritime. The TMP is to outline measures to manage traffic related issues associated with the proposal and to determine the final details of haulage, road specific mitigation measures and haulage timing. Road intersection improvement works are to be approved and completed prior to the commencement of construction of this proposal.
 - Further details of proposed haulage routes, confirmation of vehicles types and volumes, including peaks during construction including use of Oversize/Overmass (OSOM) heavy vehicles is to be provided. Use of OSOM will subject to provisions under the relevant special permit via the Heavy Vehicle Regulator.
 - Safe Intersection Sight Distance (SISD) within a posted 100km/h posted speed limit at this
 intersection for the proposed use does not meet relevant *Austroads* requirements and requires
 further consideration.
 - Safety of all road users together with MCO employees using this intersection again requires a more considered approach.

 Installation of Advance Truck Warning Signs (W5-22 Size B) with a distance plate (W8-5 Size B) under, located 250 metres in advance of the proposed new access and the intersection with Saddlers Creek Road along Ulan Road.

Please forward a copy of the determination to Roads and Maritime when it is sent to the applicant. If you wish to discuss further please contact Ainsley Bruem A/Manager Land Use Assessments on (02) 6861 1449.

Yours faithfully

Holly Davies A/Senior Manager Regional Customer Services Western Region