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31st July 2020

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30th July 2020

Narrabri Shire Council
P.O. Box 251
Narrabri NSW 2390

Attention: Michelle Henry
By email: michelleh@narrabri.nsw.gov.au

Dear Michelle,

Re: Proposed Increased Extraction Raye for Wavehill Quarry
SMK Consultants received a copy of correspondence written by Daniel Boyce in the Narrabri Shire Council, dated 27th July 2020, which was sent to Johnstone Concrete and Landscape Supplies (JCLS) in relation to DA2020/85. The letter raised matters relating to the water balance presented in the Environmental Impact Statement (EIS) for the proposed changes to the annual extraction rate at the Wave Hill Quarry.

The following provides details to the clarification requirements presented by NSW EPA.

Water Deficit in a 10-percentile rainfall year
The EIS included a calculation for potential runoff in a 10-percentile rainfall year to highlight the fact that in such a year, the onsite catchment system will not supply the water required for use on the site. As a result of this fact that is included in the EIS, we have identified that JCLS haul water to the site in a 23,000 Litre capacity semi water truck that is dedicated for use on this site.

The letter of response submitted to Council on the 8th of July 2020 included additional detail relating to obtaining the required water supply in a dry year. Page 5 of the addendum submitted on July 8 identifies that an existing groundwater entitlement, held by one of the Applicants (Mr. Brock Johnstone), will provide an alternative water supply. This licence (Water Access Licence 12779) has a 72 ML entitlement and was purchased primarily in order to supply water to the Wave Hill Quarry as required. To date, water requirements at Wave Hill Quarry have never exceeded 72 ML and surplus water has regularly been sold to mines in the region through an external agent. While it is highly unlikely that this would be the case, in the event that a supplementary water source would be required, the potential is also available to utilise town water from Narrabri.

If this water Licence held by the current owner is sold or the current owner sells the quarry and therefore separates from the quarry ownership, the quarry can purchase water from either Council or other groundwater entitlement owners. Alternatively, quarry operations are reduced until appropriate water is available.

We are of the belief that the water source to be utilised for water supply requirements at Wave Hill Quarry in dry years has already been identified, both in the EIS and in the addendum provided on July 8th, 2020.

Water Balance Scenarios
We note that it is standard practice to calculate a water balance on a monthly basis. The SEARs do not request a daily balance and therefore this is not provided.

The water balances provided are based on estimates of daily water use. The daily use estimate is 87,500 litres which calculates to be 2.1 megalitres per month based on 6-day operations for 4-weeks each month. This does not allow for closure periods such as public holidays and Christmas periods when the quarry will not operate.

The calculations presented therefore over-estimate the potential water use on this site. This is considered as preferable to underestimating the water applied for mainly dust suppressions purposes.

The EIS has clearly identified that water is available onsite from the sediment pond in an average or above average rainfall year. In such years, potentially less water would be required due to higher levels of rainfall, and the moisture content of the quarry material will be higher when compared to moisture content in a dry year.

The EIS report and addendum also clearly identify an alternative source of water (WAL 12779 and town water) in circumstances where insufficient supply is available from the onsite sediment pond. The water supply available to Wave Hill Quarry is not a limiting factor for dust suppression. This has been explained both in the EIS and the addendum provided on July 8th.

5-Day Treatment Window
It is understood that this statement refers to runoff from the quarry site that is captured in the sediment pond.

Appendix 5 of the addendum provided on July 8th provides calculations for the requirement for sediment laden water in accordance with the Blue Book. The calculations are based on the required methodology used in the "Blue Book". The calculations have determined that the existing sediment capture pond has a capacity in excess of the recommended requirements and therefore the discharge quality of water from the pond will be better than the minimum standard required in NSW.

The quarry currently operates under EPL 20139 issued by NSW EPA. Condition P1.3 of this environment protection licence identifies the Bywash of the existing sediment pond as a discharge point. Condition L2.5 of the Licence allows the discharge of water from the sediment ponds. This is a monitoring point under the Licence.

It is unclear why the 5-day treatment window is identified in Council's correspondence as it appears unrelated to the methodology of determining the required sediment control system identified in the SEARs and which is standard for NSW.

Under severe conditions, discharge can occur from the quarry sediment pond after one fall of rain. It is unclear how the quarry would be able to hold 5-days of rainfall to provide a 5-day treatment window. This appears to be a principle outside of current guidelines. It would be appreciated if we could be provided with further detail if it is a requirement to hold runoff on the site for 5-days before it can be released.

We await your reply.

Yours faithfully,

Peter Taylor *BSc MEIANZ CIAg LAA*
Environmental and Resource Consultant
SMK Consultants