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06 November 2023

James McDonough
Team Leader, Resource Assessments
NSW Department of Planning & Environment
12 Darcy Street,
Parramatta NSW 2150

Via: *NSW Major Projects Portal*

RE: Karuah South Quarry (SSD-8795) – Amended Project Application
Hunter Quarries Submission – Review of Implications to Existing Quarry Operations

Dear James,

As you're aware, Hunter Quarries Pty Ltd (HQPL) and affiliated company, Karuah East Quarry Pty Limited (KEQPL), together operate the Karuah Quarry Complex located approximately 5 km to the northwest of the Karuah village in the MidCoast Council LGA.

The complex consists of the currently operating Karuah Hard Rock Quarry (DA 265-10-2004) and the Karuah East Quarry (MP09_0175); as well as the proposed new Karuah Red Quarry (SEARs 937). These quarry sites surround the proposed Karuah South Quarry (KSQ) and will require careful coordination with any future KSQ operation to ensure the effective ongoing management of both incremental and cumulative environmental impacts.

To this effect, HQPL conceptually supports the continued extraction of the andesite and rhyodacite hard rock resources at the site. However, we raise a number of concerns regarding the proposal and request that these are addressed by the Department of Planning & Environment (the Department) through its assessment processes, and that any residual issues are included in any conditions of approval, if the project is successful in being granted a development consent.

Our concerns include the following matters as outlined below:

1. Commonwealth EPBC Act 1999 Referral,
2. Blasting Activities,
3. Traffic & Transport Management,
4. Environmental Monitoring (all disciplines),
5. Community Consultative Committee (CCC),
6. HQPL Conservation Offset,
7. Visual Impact, and
8. Rehabilitation.

Should you have any questions regarding our review of the KSQ Amended Project Application and its implications on our business please contact the undersigned on 0447 044 646 or by email at se@hunterquarries.com.au.

Kind Regards,

A handwritten signature in blue ink, appearing to read "S. Ellerton", with a stylized flourish at the end.

Scott Ellerton
Environment & Development Manager
Hunter Quarries

1. Commonwealth EPBC Act 1999 Referral

HQPL understands that a referral was made to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) (the former Department of Environment & Energy) in 2012 (EPBC 2012/6600). Whilst it is acknowledged that the EPBC process is separate to the NSW State Significant Development process, it is understood that at the time that the 2012 EPBC referral was made, the details provided in the EPBC Referral were for a much smaller project that included occupation of 8 Ha of land and an extraction rate of 300,000 tonnes per year for 10 years (as is stated in the Referral Decision dated 25 November 2012).

Given the timeframe that has elapsed since the previous EPBC Referral Decision in 2012 (some 11 years), noting that the KSQ project has significantly changed including an increase in disturbance area and production output, we raise concern regarding the validity of this 2012 referral decision that the development is not a controlled action under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.

Whilst it is acknowledged that the amendment report contains an updated BDAR Assessment, it is noted that in the request for the current SEARs (*Preliminary Environmental Assessment for Kiely's Karuah Quarry, Oct 2017*) that it was identified that the Applicant had intended to commission additional ecological survey to facilitate a new referral to the DCCEEW but it appears the applicant no longer intends to do this.

1.1. HQPL requests the Planning Secretary seek clarification from the Commonwealth Department of Climate Change, Energy, the Environment and Water whether the 2012 EPBC Referral Decision dated 25 November 2012 (EPBC 2012/6600) is valid for the KSQ Amended Project Application or whether a new referral should be submitted by the Applicant.

2. Blasting Activities

Access to Information and Peer Review of Blasting Assessments

HQPL notes the Department issued an RFI to the proponents of KSQ on 03 March 2021 advising that the Department had engaged Terrock Consulting Engineers (TCE) to undertake an independent blasting and flyrock assessment of the Project. It is understood this assessment included an assessment of worst-case blasting and flyrock-related impacts on adjacent landholdings.

HQPL considers this report to be an essential input and therefore requests a copy to enable consideration in relation to our site Management Plans and other documentation.

Additionally, given the criticality of safe blasting activities to our quarrying operations and other public areas including the M1 Pacific Motorway and surrounding road network including Blue Rock Close, HQPL considers any blasting assessments relied upon by the proponents of KSQ should be subject to an independent peer review by an independent suitability qualified industry-leading expert.

Similarly, peer review should be extended to secondary approvals including statutory Management Plans as regulated by the Department and the NSW Resources Regulator (Mine Safety Inspectorate).

2.1. HQPL requests the Planning Secretary require all blasting assessments and associated assumptions and input data be made publicly available to be reviewed and ensure the safety of Hunter Quarries' operations.

2.2. HQPL requests the Planning Secretary require any blasting assessments and subsequent Management Plans relied upon by the proponents of KSQ be subject to peer review by an independent suitability qualified industry-leading expert.

2.3. HQPL requests the Planning Secretary require appropriate post-blast review and process auditing to provide an assurance mechanism of the proponents' blasting activities.

Cooperative Blasting Agreement

HQPL notes the Amendment Report (RW Corkery & Co, September 2023) and associated blast flyrock assessment (Fromble Corp, dated 14 August 2023) extensively references the Cooperative Blasting Agreement between Hunter Quarries and the proponent of KSQ executed on 12 November 2021.

This agreement was based upon the previous Karuah South Quarry layout (submitted as part of the 2019 EIS) and does not include consideration of the proposed Karuah Red Quarry (SEARs 937).

Therefore, whilst agreement remains valid for current operations at Karuah Hard Rock Quarry and Karuah East Quarry, HQPL considers the agreement should not be relied upon by proponents of KSQ to satisfy the standard condition requiring landholder consent to blast within 500 m of land not under the control of the party undertaking the blasting activities.

2.4. HQPL requests the Planning Secretary require the Cooperative Blasting Agreement with Hunter Quarries be updated prior to allowing any blasting activities at the KSQ site.

Blast Damages to Hunter Quarries Infrastructure

HQPL notes the blasting flyrock assessment (Fromble Corp, 14 August 2023) provides a Maximum Flyrock Range, R_{max} , (m) of 75 m, with a likely Factor of Safety, FoS, of 2 for mobile equipment, corresponding to a likely flyrock range of 150 m. This range extends to significant areas of HQPL's ancillary infrastructure, plant processing and stockpile areas of Karuah Hard Rock Quarry and in-pit infrastructure areas of Karuah East Quarry.

Therefore, appropriate blast monitoring, including visual footage, should be undertaken to assist in the assessment of any blast damage claims to Hunter Quarries' infrastructure due to the undertaking of blasting activities by the proponents of KSQ.

2.5. HQPL requests the Planning Secretary require the proponents of KSQ to undertake blast monitoring of all blasts in relation to receptors at Karuah Hard Rock Quarry and Karuah East Quarry. This should include ground vibration & overpressure monitoring, as well as flyrock ejection and dust/fume emission filming. All data should be made available to Hunter Quarries.

Closure of Blue Rock Close

HQPL notes the blasting flyrock assessment (Fromble Corp, 14 August 2023) states:

"Routine closure of Blue Rock Close should not be necessary for blasting, however brief closures may be appropriate for some blasts to best manage access to the blast clearance zone".

HQPL raises concern that the Cooperative Blasting Agreement explicitly excludes Blue Rock Close from the agreed clearance zone and remains silent on any road closure procedure, including emergency access/egress from Karuah East Quarry or compensatory commercial arrangements associated with the loss of trading hours at Karuah East Quarry.

Therefore, HQPL is strongly opposed, on both safety and economic grounds, to allow the closure of Blue Rock Close without written agreement from Hunter Quarries.

It is also noted that Blue Rock Close is a public road under the control of MidCoast Council. It is suggested that the Applicant will also need to consult with Council and seek Council's agreement for any road closure.

2.6. HQPL requests the Planning Secretary require the proponents of KSQ to enter a written agreement with Hunter Quarries to enable the closure of Blue Rock Close if assessed as being required.

2.7. HQPL requests the Planning Secretary require the proponents of KSQ to consult with Council regarding the closure of a public road if assessed as being required.

3. Traffic & Transport Management

Review and Update of the Traffic and Transport Assessment

HQPL notes that the Traffic and Transport Assessment has not been reviewed since the time of 2019 EIS and has not been updated to reflect a number of project changes, including the proposed additional movements at KSQ associated with the inclusion of the proposed concrete batching plant, concrete and resource recovery processing facility, pre-coat facility, and the importation of VENM fill materials.

Additionally, the assessment has not considered the proposed rescheduling of the KSQ project in terms of production outputs. Given the variability in quarry development, mine planning and product sale logistics it is considered essential that any traffic assessment considers the full consented production limits.

Furthermore, the Traffic and Transport Assessment has not been updated to include consideration of KEQ's extended hours of operation that were approved under MOD 9 to Project Approval MP09_0175.

As such, we consider a revision to the assessment to be required to appropriately consider:

- Extended operating hours of Karuah East Quarry (MP09_0175-Mod9),
- Maximum consented production of Karuah East Quarry (1.5 Mtpa),
- Maximum proposed production of Karuah Red Quarry (100 ktpa),
- Maximum proposed KSQ quarry production (600 ktpa), and
- Maximum proposed KSQ ancillary material production, including:
 - 20,000 m3 concrete plant (inclusive of the import of raw material),
 - 20 ktpa concrete recycling and resource recovery plant,
 - Pre-coat facility (unspecified imports and outputs),
 - 100 ktpa import of VENM material, and
 - 150 kt import of construction materials.

Further, the assessment utilises a design vehicle with a maximum length of 19 m. The application of this design vehicle and associated vehicle tonnages should be reviewed to ensure the validity of assessments.

3.1. HQPL requests the Planning Secretary require the proponents of KSQ to review and update the submitted Traffic and Transport Assessment based on these considerations.

Intersection Compliance with Austroads Guidelines and Performance of Blue Rock Close

HQPL notes that the Traffic and Transport Assessment remains silent in relation to the detailed design of the KSQ driveway intersection with Blue Rock Close and how the intersection will comply with current Austroads Guidelines.

Similarly, we raise concern that the assessment remains silent on how the driveway intersection will perform with existing transport volumes on Blue Rock Close entering and exiting the existing Karuah East Quarry. Left-in-left-out and subsequent U-turn facilities should be considered to assist with the management of this traffic conflict.

3.2. HQPL requests the Planning Secretary require the proponents of KSQ to ensure the driveway intersection with Blue Rock Close to comply with Austroads Guidelines.

3.3. HQPL requests the Planning Secretary require the proponents of KSQ to confirm the methodology used to manage the potential traffic conflicts at the KSQ Driveway/Blue Rock Close and Blue Rock Close/Andersite Road intersections.

4. Environmental Monitoring (all disciplines)

Identification of Pollution Source and Assessment Peer Reviews

HQPL has reviewed the supporting documentation for all environment management disciplines and notes the Amended Summary of Environmental Management and Monitoring Measures (Appendix 2 of the Amended Application Report) does not include any consistent methodology to differentiate between the source of any monitored environmental parameters.

As such, we raise concern regarding the management of any potential future exceedances of monitoring parameters and whether these can be appropriately attributed (or apportioned) to either Hunter Quarries operations or the proponents of KSQ.

Given the uncertainties involved, management difficulties and the high potential for dispute, we request these assessments are subject to appropriate peer review to confirm both incremental and cumulative impacts of the proposed KSQ project.

4.1. HQPL requests the Planning Secretary require the proponents of KSQ implement appropriate environmental monitoring procedures and data assessment methodologies to distinguish both incremental and cumulative impacts from the KSQ and surrounding Hunter Quarries operations.

4.2. HQPL requests the Planning Secretary ensure all environmental management assessments are subject to peer reviews to confirm their validity of both incremental and cumulative impacts of the KSQ project.

Identification of Sensitive Receptors

HQPL notes that the treatment of sensitive receptors appear to have not been consistently applied to all the environmental management disciplines.

Of particular note, tenanted dwellings are located on lands owned by HQPL (or affiliated companies) on Lot 14 DP 1024564, Lot 5 DP 838128 and Lot 4 DP 838128 (currently under exchange). HQPL has a duty of care to the tenants of these properties and accordingly it is requested that all relevant studies be updated to assess these tenanted dwellings as sensitive receivers.

Additionally, any subsequent determination of suitable criteria limits should include these tenanted properties.

4.3. HQPL requests the Planning Secretary include tenanted properties owned by HQPL as sensitive receptors, including:

- ***5915 Pacific Highway, Karuah (Lot 14, DP 1024564),***
- ***1517 The Branch Lane, Karuah (Lot 5, DP 838128), and***
- ***1613 The Branch Lane, Karuah (Lot 4, DP 838128).***

Monitoring Coordination Agreements

HQPL notes that the submitted EIS documentation variously references coordination of environmental monitoring and data sharing between Hunter Quarries and the proponents of KSQ. However, it should be noted that no Monitoring Coordination Agreements have been executed with the proponents of KSQ.

- 4.4. HQPL requests the Planning Secretary require appropriate monitoring arrangements be implemented in conjunction with Hunter Quarries' operations prior to the commencement of operations at the KSQ site to ensure effective environmental management across the Karuah Quarry complex.***

5. Community Consultative Committee

HQPL notes that the Social Impact Assessment (March 2019) proposes to include a combined Community Consultative Committee (CCC) meeting with the existing Karuah East Quarry CCC. For simplicity, we support maintaining separate community consultation processes for each operation.

- 5.1. HQPL requests the Planning Secretary maintain separate community consultation processes for each quarry site under current arrangements.***

6. HQPL Conservation Offset

Ecology Edge Effects

HQPL notes that the Amended Biodiversity Development Assessment Report (BDAR) (Ecoplanning Pty Ltd, September 2023) does not include a detailed assessment on impacts, particularly edge effects, on the existing Conservation Offset located on Part Lot 12 DP 1024564 associated with the Karuah Hard Rock Quarry.

- 6.1. HQPL requests the Planning Secretary require the proponents of KSQ to review and update the submitted Biodiversity Development Assessment Report (BDAR) to consider edge effects of the project on the existing Part Lot 12 Conservation Offset.***
- 6.2. HQPL requests the Planning Secretary consider applying a 50 m offset from the existing Part Lot 12 Conservation Offset from any approved surface distance for the KSQ project.***
- 6.3. HQPL requests a protocol be established by the KSQ application to rehabilitate any actual edge effect impacts that may be caused by the operation of the KSQ.***

Water Management

HQPL notes that the eastern sediment dam located adjacent to the main haul road bund will likely discharge into the water course located in the vicinity of the western boundary of the existing Conservation Offset on Part Lot 12 DP 1024564.

The assessment should be updated to reflect the potential impacts on the Conservation Offset area, including general stream-health, aquatic ecology, changed water flow regimes in terms of both water quality and quantity, and any impacts of uncontrolled discharges of sediment-laden water.

- 6.4. HQPL requests the Planning Secretary require the proponents of KSQ to assess the impact of eastern dam on the existing Part Lot 12 Conservation Offset.***

7. Visual Impact

HQPL notes that the proposed KSQ provides a continuation of operations at the existing Karuah Hard Rock Quarry site by extracting the southern benches towards the M1 Pacific Motorway and residential receptors to the south along Mill Hill Close. This extraction will expose the remnant highwall between the Karuah Hard Rock Quarry & Karuah East Quarry as illustrated by the annotated cross-section provided by **Figure 1**.

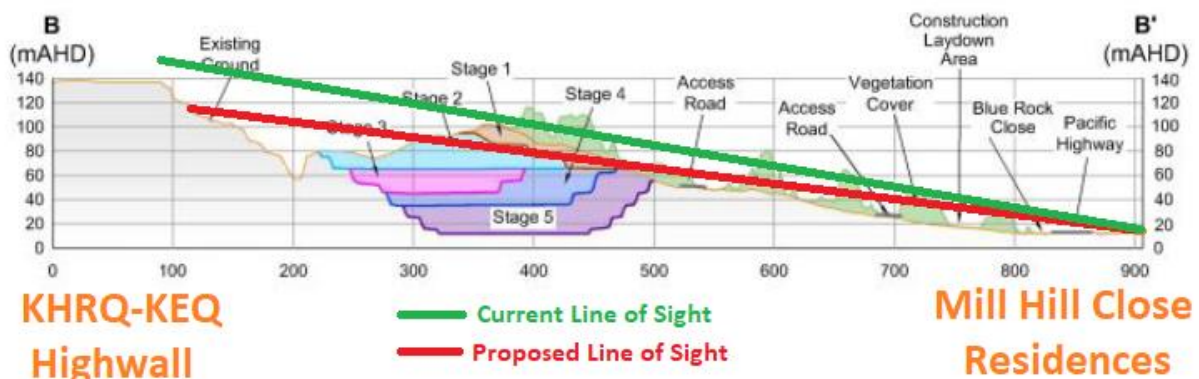


Figure 1 – Annotated Cross-Section of KSQ (Figure 2.5 – Amended Project Description).

This view of the final landform will have an adverse impact on the residual landscape of the Karuah East Quarry for both Mill Hill Close residential receptors and for vehicles along the M1 Pacific Motorway. The Department should consider substantially reducing this impact by requiring removal (or lowering) of the remnant highwall between the Karuah Hard Rock Quarry & Karuah East Quarry.

Additionally, the updated visual assessment has not considered the addition of the concrete batching plant, particularly the visually prominent features such as cement silos.

7.1. HQPL requests the Planning Secretary provide consideration of extraction sequencing to minimise adverse visual impacts by requiring the remnant highwall to be removed (or lowered) prior to the commencement of the KSQ project.

7.2. HQPL requests the Planning Secretary require the proponents of KSQ update the visual amenity assessment to include visually prominent features of the development such as the silos of the proposed batching plant.

8. Rehabilitation

HQPL notes that the proposed KSQ includes reusing the existing Karuah Hard Rock Quarry Stage 2 extraction area located on Lot 11 DP 1024564 as the infrastructure area for KSQ. Additionally, it is noted that the closure vision for this area is proposed to consist of industrial land-uses.

If the KSQ is approved, HQPL cannot reasonably or feasibly undertake rehabilitation, including the flooded final void lake system, as currently approved under the Karuah Hard Rock Quarry Development Consent (DA 265-10-2004) and Rehabilitation & Closure Plan. Therefore, if the KSQ project is approved, rehabilitation liability (including bond obligations) for the portion of the quarry site on Lot 11 DP 1024564 should be transferred to the proponents of the KSQ.

8.1 HQPL requests the Planning Secretary transfer rehabilitation responsibilities for the Karuah Hard Rock Quarry Stage 2 extraction area on Lot 11 DP 1024564 to the proponents of the KSQ.