



# **NOISE AND VIBRATION EMISSIONS**

**Tarkarri Engineering**



## Technical Memo

5 July 2017

Break O'Day Council  
32-34 Georges Bay Esplanade  
St Helens, TAS 7216

5036\_AC\_R\_R1  
AJM

Attn: Mr David Jolly

Dear Sir,

RE: Level 2 activity at 3M/2016 Merry Creek Road (commonly known as Billy Taylor Quarry)  
NOI section in relation noise and vibration emissions.

Please find below our NOI section in relation to potential noise and vibration impact from level 2 activity at the Billy Taylor Quarry.

### 1. NOISE AND VIBRATION

It is expected that noise and vibration may be generated by blasting, extracting, crushing, screening, and hauling activity within the Billy Taylor Quarry.

Operating hours would be in accordance with the requirements of the Quarry Code of Practice, 0700 and 1900 (7:00am to 7:00pm), Monday to Friday, and Saturday 0800 to 1700 (8:00am to 5:00pm).

The Billy Taylor Quarry is located within regrowth forest on the crest of a north-south trending ridgeline. The pit is > 5 km distance from the nearest noise sensitive residential locations which are in and around the township of Upper Esk, to the south-west of the quarry. At this distance, it is expected that noise and vibration emissions from activity within the Quarry would have minimal impact. It is expected that noise emissions wouldn't exceed approx. 30 dBA (assuming hemispheric spreading and minor topographic shielding) and this is highly likely to be below ambient noise levels and well within the acceptable standard in the Quarry Code of Practice (must not exceed 10 dBA above the normal ambient noise levels during daytime operations). Ground vibration and air blast overpressure would be expected to not exceed 1 mm/s and 100 dBL respectively (assuming a charge mass per delay of no greater than 100 kg), well within the acceptable standard in the Quarry Code of Practice (5 mm/s and 115 dBL).

Impact on fauna from noise and vibration generated in the quarry is not expected to be significant with the exception of potential impact on wedge-tailed eagle nesting sites. Annual checks are in place for this quarry under FPA requirements and where nests are discovered management strategies to minimise potential impact from noise and vibration would be developed.





Break O'Day Quarry – Noise and vibration section of NOI for Level 2 activity at Billy Taylor Quarry.

I hope this information meets your immediate requirements.

Please contact me directly if you have any questions concerning this work.

Yours faithfully,  
**Tarkarri Engineering Pty Ltd**

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