



Our reference: EF14/9902: DOC14/245107
Contact: Michael Heinze 02 6229 7002

Planning Services
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001.

Attention: Manager, Mining Projects

21 November 2014

Dear Sir/Madam

Re: Modification of Project Approval 07-0074 - Gunlake Quarry Project - Marulan

I refer to an email of 20 October 2014 from Ms Phillipa Duncan, requesting comments from the NSW Environment Protection Authority (EPA) in relation to the proposed modification of Project Approval 07-0074 - Gunlake Quarry Project under a Transitional Arrangement for Part 3A of the *Environmental Planning and Assessment Act 1979*.

The EPA has conducted a review of the Environmental Assessment (EA) titled "*Gunlake Quarry Project Modification of Project Approval 07-0074*", prepared by Olsen Environmental Consulting and dated September 2014, for the modification proposal. The EPA has identified a number of issues in relation to the proposed modification for the Department of Planning & Environment's consideration. Attachment 1 to this letter outlines the specific details in relation to these issues but in summary, the issues relate to:

- a) Noise and blasting;
- b) Air quality; and
- c) Waste acceptance.

Given the proposed variations to noise limits, hours of operation and the acceptance of waste material at the premises, should the modification proposal be approved the applicant will need to apply to the EPA to vary the existing Environment Protection Licence No. 13012 for the premises. Apart from potential variations to noise limits, hours of operation and waste acceptance, most of the conditions contained in the Licence would remain unaffected remain if the proposal was approved.

I trust these comments are helpful. Should you have any queries or wish to discuss this matter, please contact Michael Heinze on Ph: 6229 7002.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'J. Thompson'.

JULIAN THOMPSON
Unit Head – South East Region
NSW Environment Protection Authority

ATTACHMENT 1

Noise

The EPA has conducted a review of the noise and vibration assessment contained within the EA, titled "*Marulan Gunlake Quarry - Modification of Approval - Noise and Vibration Assessment*" (the NVA), prepared by Pacific Environment Limited and dated September 2014.

The EPA notes that the proponent is proposing minor changes to the current approved noise limits for the Gunlake Quarry, including the removal of one noise sensitive location (Receptor 5) identified in previous environmental assessments. The proposed operational noise limit of 35dB(A) ($L_{Aeq, 15min}$) for Receptors 1 to 4 for Day, Evening and Night periods represents a tightening of noise limits for the project compared to the current approval. In addition, the sleep disturbance criteria limit of 45dB(A) ($L_{A1, 1min}$) for *all* receptors is a further tightening of noise goals compared to the current approval.

Although the NVA predicts that increasing the production area and operational hours (for tertiary crushing only) will not lead to an increase in noise impacts, the EPA recommends that validation of the predicted noise impacts should be undertaken as the quarry footprint expands. It is noted that the NVA recommends that the existing noise monitoring program should be revised to include night time quarrying operations, however the EPA suggests that post-construction validation of noise impacts should be undertaken regularly, including at Year 7 of the project – the year at which maximum noise impact is predicted in the NVA.

Blasting

The EPA notes that the NVA predicts a theoretical airblast overpressure exceedence (of 1 dB(A) above the 115 dB(A) ANZECC limit for 95% of all blasts) for Receptor 3. The NVA therefore recommends the modification of the maximum instantaneous charge for blasting within 700 metres of Receptor 3. Consistent with the ANZECC guidelines, the current Environment Protection Licence (No. 13012) for the quarry allows for an exceedence of 115 dB(A) for 5% of blasts over each reporting period (12 months). The exceedence predicted in the NVA is permissible as long as the number of exceedences do not total more than 5% of the total number of blasts. The existing Quarry Noise and Blast Monitoring Program should continue to be implemented as part of the modification proposal.

Air Quality

The Environment Protection Authority (EPA) has conducted a review of the air quality assessment contained within the EA, titled "*Air Quality Assessment - Gunlake Quarry*" (the AQA), prepared by Pacific Environment Limited and dated 5 September 2014.

It is noted that the AQA predicts an exceedence of 1 day per year of the cumulative 24-hour average PM_{10} assessment criterion for Receptor 1. There is currently no monitoring of PM_{10} at the quarry, although the EPA has in recent months been corresponding with Gunlake Quarry and the Department of Planning & Environment regarding the placement of a High Volume Air Sampler (HVAS).

Since commencement of operations at the quarry, the EPA has received a number of complaints alleging dust impacts from it. Considering this, and the following matters:

- The predicted exceedence of the 24-hour average PM_{10} criterion
- The quarry is approaching peak throughput, and
- The AQA predicts Year 7 to be the stage at which maximum environmental impacts are felt,
- The prevailing wind direction in autumn/winter/spring is westerly and in summer is easterly

the EPA believes that a HVAS should be installed immediately following any modification of the project approval and maintained for a period of at least three years, rather than the 12 months currently proposed.

The EPA is agreeable to the use of Receptor 3 (as proposed in the AQA) as a suitable location for the placement of the HVAS. In the predominant westerly and north westerly winds, this would be located generally downwind of the quarry and is likely to give a good indication of particulate impacts. The EPA also recommends that the Department of Planning & Environment consider requiring the placement of an additional HVAS at Receptor 4 which is located generally to the west of the Gunlake Quarry and (in

westerly winds) would provide a good indication of ambient air quality upwind of the Quarry, allowing the contribution of the quarry to particulate generation to be more accurately estimated.

The AQA also predicts that with the expansion of the quarry operations as proposed in the modification application, the volume of water required for annual dust suppression will more than double to 33 megalitres. The EPA recommends a revised Soil and Water Management Plan to address this increased demand and to detail the site dust management practices, and demonstrate that sufficient water is accessible to ensure adequate dust suppression.

Waste acceptance

The EPA notes that the EA details the current practice of Gunlake Quarry receiving unused ready-mixed concrete from Gunlake Group batching plants for blending with aggregate product from the quarry and on-selling as a useable commodity (road-base for rural roads). The EPA believes this unused concrete is a waste as defined in the *Protection of the Environment Operations Act 1997* (POEO Act).

The importation of the waste into the quarry does not trigger a licence to receive waste whilst the volumes being received and stored onsite are below EPA licensing thresholds in Schedule 1 of the POEO Act. The EA details that the volumes of this waste material received would be less than 30,000 tonnes per year (or less than 2,500 tonnes or 2,500m³ held on-site at any one time). These figures, if exceeded, would trigger licensing requirements for a waste storage facility under the POEO Act. The EPA is able to vary the existing EPL to allow the importation of waste material, but only where there is explicit planning consent/approval given to do so. The acknowledgement/permisibility of this action in any modification approval by the Department of Planning & Environment would allow this variation.

The blending and re-use of the waste concrete aggregate for on-sale is not permitted without licensing except where the processor fully complies with “The Recovered Aggregate Exemption 2010” (the exemption) under the *Protection of the Environment Operations (Waste) Regulation 2005*. Gunlake Quarry should be aware of the requirements and obligations within the exemption, specifically Condition 7.2 of the Exemption. Even if Gunlake Quarry complies with the requirements of the exemption (from EPA licensing), explicit planning consent for the importation of waste material is required.