

Technical Specialist Memo - Noise and Vibration

To: Colin Hopkins - Lead Planner & Doug Fletcher - Principal Project Lead

From:

Bin Qiu, Senior Noise Specialist - - Contamination, Air & Noise Team, Planning and
Resource Consents Department, Auckland Council

I hold the qualification(s) of *National Diploma in Applied Health Science Massey University (formerly Wellington Polytechnic)* and have **30** years of experience in Environmental Noise and **acoustics**.

I have prepared expert evidence and technical assessments for resource consent

& Relevant

Experience:

I have prepared expert evidence and technical assessments for resource consent applications, plan changes, notices of requirement for designation and fast-track applications and have appeared as an expert witness before consent authorities on multiple occasions.

Preparation in Accordance with the Code of Conduct:

I confirm that I have read the Environment Court Practice Note 2023 – Code of Conduct for Expert Witnesses (Code), and have complied with it in the preparation of this memorandum. I also agree to follow the Code when participating in any subsequent processes, such as expert conferencing, directed by the Panel. I confirm that the opinions I have expressed are within my area of expertise and are my own, except where I have stated that I am relying on the work or evidence of others, which I have specified.

Date: 19/09/2025

1.0 APPLICATION DESCRIPTION

Application and property details

Fast-Track project name: Drury Quarry Expansion – Sutton Block

Fast-Track application number: FTAA-2503-1037 (EPA reference) + BUN60449474 (Auckland Council reference)

Site address: 121 MacWhinney Drive, Drury; 1189 Ponga Road, Drury; 2113 and

Ponga Road, Papakura



2.0 Executive Summary / Principal Issues

I support the application overall.

3.0 Documents Reviewed

- DRURY QUARRY SUTTON BLOCK ASSESSMENT OF NOISE EFFECTS Prepared by MDA 26 March 2025
- Stevenson Aggregates Drury Quarry Expansion Blast Vibration and Noise Study prepared by Orica New Zealand Limited 13/12/2023
- H28. Special Purpose Quarry Zone, Auckland Unitary Plan Operative in part
- German standard DIN 4150-3 1999: Structural vibration Part 3 Effects of vibration on structures

4.0 Additional Reasons for Consent Not included in AEE

NA

5.0 Specialist Assessment

The Construction and Operational Noise

The applicant's noise report has assessed and concluded that the construction noise and operational noise of the proposed Sutton Block can be managed to achieve full compliance with the AUP permitted construction noise standards and the relevant AUP permitted noise standards for the relevant zoning: Rural – Mixed Rural Zone and Special Purpose – Quarry Zone.

MDA advises in their report that the future quarry activity noise may be noticeable for some neighbors (mainly at 291, 337, 347, 354 and 359 MacWhinney Drive) in Stage 3 development, but the noise increases (ranging 3 dB to 7 dB) will occur slowly over 30 years to occur, and the noise levels at the receivers will still fully comply with the AUP noise standards. Therefore, the noise effect is considered to be reasonable.

I agree with the MDA assessment and conclusions on the noise effects for the proposed operation of Sutton Block, and their recommended conditions are appropriate.

The quarry blasting noise and vibration

The blast vibration and noise study report prepared by Orica New Zealand Limited has shown that the blasting activity in the future Sutton Block operation can be designed, managed, controlled to meet the AUP blast noise limits and the vibration standards which are referred to DIN 4150-3 1999: Structural vibration – Part 3 Effects of vibration on structures (5 mm/s PPV) and the



standards set out in AUSTRALIAN STANDARD AS2187.2:2006 Explosives – Storage and Use, Part 2: Use of Explosives (AS2187.2:2006).

I note the proposed conditions requiring blast management and monitoring.

As such the noise and vibration effects from operating the Sutton Block can be managed to a reasonable level.

I support the application overall.

6.0 Section 67 Information Gap

I have identified that there are no section 67 information gaps.

7.0 Recommendation

I support the application overall.

8.0 Proposed Conditions

I note the proposed conditions requiring blast management and monitoring.

As such the noise and vibration effects from operating the Sutton Block can be managed to a reasonable level.

I support the application overall.

9.0 Supporting Documents

N/A