

**BEFORE THE WHANGAREI DISTRICT COUNCIL AND NORTHLAND REGIONAL COUNCIL**

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of a resource consent application by Northport Limited under section 88 of the Resource Management Act 1991 for a port expansion project at Marsden Point

**APPLICATION NO.** APP.005055.38.01

LU2200107

---

**STATEMENT OF EVIDENCE OF NEVIL IAN HEGLEY**

**8 SEPTEMBER 2023**

---

## **INTRODUCTION**

### **Qualifications and Experience**

1. My full name is Nevil Ian Hegley. I am the principal of Hegley Acoustic Consultants Limited.
2. I have the following qualifications and experience relevant to the evidence I shall give:
  - (a) I have specialised in acoustics for over 40 years;
  - (b) I have an MSc from Southampton University (UK) where I undertook research in acoustics in 1975/76;
  - (c) I have been on most of the Standards sub-committees dealing with sound issues since 1977 (including NZS 6809:1999 Acoustics - Port Noise Management and Land Use Planning) and I was the Chairman of both of the sub-committees that approved the 1984 and 1999 versions of the Construction Noise Standard NZS6803.
  - (d) I have been involved with a number of projects related to port noise and numerous projects that relate to noise control to the neighbours.

### **Involvement**

3. I undertook the original noise assessment for Northport Ltd and continued to advise them until about ten years ago. I have not been involved with Northport Ltd since then.
4. I have been engaged by submitters Marsden Cove Limited (Submitter 165) and Marsden Cove Canals Management Limited (Submitter 179) to review the Northport Limited port expansion application east of the existing port.

### **Code of Conduct**

5. I confirm that I have read the Code of Conduct for Expert Witnesses that are contained in the Environment Court Practice Note (2023) and I agree to comply with it. In that regard, I confirm that this evidence is written within my expertise, except where I state that I am relying on the evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

## SCOPE OF EVIDENCE

6. My evidence addresses the potential noise and vibration effects of the proposed development for Marsden Cove Limited and Marsden Cove Canals Management Limited. I have not considered the noise effects for any other sites.

## DRAFT CONDITIONS OF CONSENT

7. I have reviewed the recommended conditions of consent with respect to noise as set out in the “Draft WDC Council Conditions (17 August 2023) Northport Ltd: Port Expansion – SH15, Marsden Point” prepared by Beca.
8. Conditions 36 – 38 set out the proposed Construction Noise and Vibration Limits. As proposed these conditions will ensure the noise and vibration limits are well within an acceptable limit within the Marsden Cove area.
9. Condition 70 adopts NZS6809 Acoustics – Port Noise Management and Land Use Planning and this is supported.
10. Condition 71 sets the noise limits although does not adopt the recommended limits of NZS6809. While not changing the outcome, it is recommended the 55/65dBA  $L_{dn(5day)}$  contours should be adopted as recommended in NZS6809 rather than the 58/61dBA  $L_{dn(5day)}$  limits so maintaining full compatibility with NZS6809.
11. To provide the necessary design tools the intermediate noise contours could also be included at, say, 1dBA steps. Similarly, the short term levels should also reflect the recommendations of NZS6809 of 60dBA  $L_{eq(9hr)}$  at night time and 65dBA  $L_{eq}$  for any single 15 minute period at night time. Again, the intermediate contours may be included without any potential conflict.
12. Condition 73 adopts the requirements of AS/NZS 2107:2016 “Acoustics-Recommended Design Sound Levels and Reverberation Times for Building Interiors”. However, the limit set in the bedrooms is 35dB  $L_{Aeq}$  compared to the recommendations of AS/NZS 2107:2016 of 25 to 30dB at night time. I note both the World Health Organization and NZS6802:2008 Acoustics – Environmental Noise adopt an upper limit of 30dB  $L_{Aeq}$  to allow for undisturbed sleep. When taking the cumulative noise effects into account it is desirable ventilation noise is limited to 25dB  $L_{Aeq}$ .

## **CONCLUSION**

13. In conclusion, the proposed noise conditions will provide good acoustic protection for dwellings in the Marsden Cove area.
14. Specifically, conditions 36 – 38 set the appropriate construction and vibration noise limits for the proposed development to minimise any adverse effects for the residential areas.
15. It is recommended the conditions should be made compatible with the recommendations of NZS6809 Acoustics – Port Noise Management and Land Use Planning. This will not change the intention of the noise levels as proposed; it will simply satisfy the recommendation of NZS6809.
16. The night time ventilation noise limit in bedrooms should be compatible with the recommendations of AS/NZS 2107:2016 “Acoustics- Recommended Design Sound Levels and Reverberation Times for Building Interiors” as adopted in proposed condition 73.
17. By adopting the requirements of NZS6809 to control noise (proposed condition 70) and including noise contours (preferably the 55/65dBA  $L_{dn}$  contours) in the condition then the noise at Marsdon Cove will be well within a reasonable noise limit at all times.

**Nevil Hegley**

**September 2023**