

IN THE MATTER of the Resource Management Act 1991(RMA)

AND

**IN THE MATTER Resource Consent Applications by Northport Ltd –
Port Expansion Project at Marsden Point.**

Application Numbers:

Whangarei District Council: LU2200107

Northland Regional Council: APP.040976.01.01

JOINT WITNESS STATEMENT (JWS) IN RELATION TO:

Terrestrial Noise

21 September 2023

Expert Conferencing Held on: 21 September 2023

Venue: Marshall Day Acoustics and online.

Independent Facilitator: The noise experts prepared the Joint Witness Statement. The statement was finalised online with Marlene Oliver (independent facilitator).

Admin Support: Emma Cairncross

1 Attendance:

- 1.1 The list of participants is included in the schedule at the end of this Statement.
- 1.2 Peter Runcie is an employee of SLR Consulting NZ Ltd (SLR). SLR has recently acquired 4Sight Consulting and Mark Poynter and Dee Isaacs (formerly 4Sight – now owned by SLR/4Sight) were engaged by the applicant to assist with the marine ecology assessment and Iwi/Hapū engagement process respectively. Peter can confirm that he has had no previous contact with Mark or Dee in this regard and that he has been engaged to act on behalf of Whangārei District Council for the purpose of reviewing the Northport Application as described below. Peter declares that he has no conflict of interest with the applicant.

2 Basis of Attendance and Environment Court Practice Note 2023

- 2.1 All participants agree to the following:
- (a) The Environment Court Practice Note 2023 provides relevant guidance and protocols for the expert conferencing session;
 - (b) They will comply with the relevant provisions of the Environment Court Practice Note 2023;
 - (c) They will make themselves available to appear before the Panel;

(d) This statement is to be filed with the Panel and posted on the Council’s website.

3 Matters considered at Conferencing – Agenda and Outcomes

3.1 The experts discussed the following matters:

- (a) Construction noise and vibration;
- (b) Port noise limits;
- (c) Port noise mitigation; and
- (d) Noise in open spaces.

3.2 The condition references in this JWS refer to the sets attached to Mr Hood’s evidence (dated 25 August 2023). Marked-up versions of the specific conditions are supplied separately to articulate the proposed changes recommended in this JWS.

3.3 Construction noise and vibration (NRC 51 – 52 and 82 – 88, WDC 32 – 33 and 38 – 43)

- (a) Mr Fitzgerald and Mr Runcie agree the Construction Environment Management Plan (CEMP) conditions (NRC 82 – 88 and WDC 38 – 43), which refer to the draft CEMP provided as part of the application, adequately address construction noise and vibration effects. On this basis Mr Fitzgerald and Mr Runcie agree a condition requiring a standalone Construction Noise and Vibration Management Plan (CNVMP) is not required.
- (b) Mr Fitzgerald and Mr Runcie agree that the proposal does not seek consent to infringe the construction noise or vibration permitted standards. Mr Fitzgerald and Mr Runcie agree therefore that the proposed construction noise limits which repeat the permitted standards (NRC 51 – 52 and WDC 32 – 33) can be deleted. Likewise, repeating the construction vibration permitted standards is not required.
- (c) Mr Hegley is not concerned with construction noise and vibration.
- (d) Outcome: The experts agree that the attached modified construction noise and vibration conditions are appropriate.

3.4 Port noise limits (WDC 47)

- (a) The experts agree that the $L_{dn(5-day)}$ noise limit is the relevant descriptor for establishing the compliance envelope and administering the mitigation scheme (WDC 48). The experts agree that the condition should note the 58 dB $L_{dn(5-day)}$ noise limit at the residential interface to reflect the highest predicted noise level at the most exposed site.
- (b) We agree that other short-term noise limits, as recommended by the Port Noise Standard, are useful for noise management purposes but are not necessary to be conditioned and should be administered through the Port Noise Management Plan if needed (WDC 52 – 56).
- (c) Mr Hegley and Mr Runcie consider that the predicted future noise contours included in the application should be included in the condition to make clear the spatial context of the noise limits as per the acoustic assessment prepared by Mr Fitzgerald. We agree that the most useful figure for this purpose is Figure G-2 attached to Mr Fitzgerald’s noise assessment report¹ (Appendix A of this document). A graphical error was identified related to the location of the noise wall shown in this figure and this has been corrected. There is no change to the noise contours. We recommend that this figure is attached to the conditions as the Future Port Noise Contour Map.

¹ MDA report Rp 002 R07 20200547 BL Northport Container Terminal Expansion (Noise Assessment), Appendix G, Figure G-2

Reference to the figure is included, along with key modelling assumptions as an advice note for clarity. The purpose of including this contour is to show the extent of where the noise limits apply, to reflect the applicant's assessment. As the contours are interpolations of calculation points it is not explicit in the contours that the upper predicted level at Residential zoned land in Marsden is 54 dB $L_{dn(5-day)}$ and at Settlement Zone land in Reotahi is 58 dB $L_{dn(5-day)}$. The experts agree this should be included in the condition for clarity.

- (d) We note that the NRC conditions set are silent on port noise. We recommend that the NRC conditions set should include wording to defer the assessment of port noise emissions to the WDC conditions for clarity. This will ensure assessment in accordance with the Port Noise Standard.
- (e) Outcome: The experts agree that the attached modified port noise limit condition is appropriate.

3.5 Port noise mitigation (WDC 48 – 51)

- (a) Mr Runcie agrees with Mr Fitzgerald that the Northport funded mitigation threshold of 55 dB $L_{dn(5-day)}$ is appropriate to ensure 40 dB $L_{dn(5-day)}$ inside (WDC 48). Mr Runcie's revised position is informed by the supplementary memo² supplied by Mr Fitzgerald in response to the S42A report. Mr Hegley is not concerned with this matter but supports this position based on his experience with port noise mitigation.
- (b) Mr Hegley considers the mechanical ventilation noise design noise limit of 35 dB L_{Aeq} in bedrooms should be lowered to 30 dB L_{Aeq} (WDC 49). Mr Fitzgerald considers the 35 dB L_{Aeq} requirement aligns with comparable requirements elsewhere, but accepts Mr Hegley's proposed amendment provided the requirement is linked to the low-speed setting for maintaining room temperature (i.e., excludes purge and start-up periods). Mr Runcie is comfortable with the proposal to reduce the noise limits for mechanical ventilation noise.
- (c) Outcome: The experts agree that the attached modified port noise mitigation conditions are appropriate.

3.6 Port noise in natural open spaces

- (a) Mr Fitzgerald and Mr Runcie note that the Cultural evidence of Juliane Chetham on behalf of Patuharakeke Te Iwi Trust Board raised port noise effects on "kaitiaki, whānau, community and so forth when utilising beach or harbour" (paragraph 3.39).
- (b) Mr Fitzgerald and Mr Runcie agree that Figure G-3 attached to Mr Fitzgerald's noise assessment report, which shows the peak future daytime predicted noise, is useful to demonstrate noise levels relative to this concern. Whilst Rule NAV 6.1 sets noise limits in the Natural Open Space zone, these are only applicable at the 'notional boundary'³. There are no residential units or other buildings used for noise sensitive activities in the surrounding Natural Open Spaced zoned land therefore this control is not applicable. Whilst not a compliance matter, we consider the levels predicted in the Natural Open Space are appropriate for residential use and would not influence conversation voice level or general amenity in outdoor spaces.
- (c) Outcome: Mr Fitzgerald and Mr Runcie agree that port noise in natural open spaces has been adequately addressed.

² MDA memo Mm 005 r01 20200547 CF (Open window sound level difference), dated 23 June 2023.

³ The term notional boundary is defined in the Whangārei District Plan as "means a line 20m from any side of a residential unit or other building used for a noise sensitive activity, or the legal boundary where this is closer to such a building"

(d) Mr Hegley is not involved with noise in the Natural Open Space.

4 PARTICIPANTS TO JOINT WITNESS STATEMENT

4.1 The participants to this Joint Witness Statement, as listed below, confirm that:

- (a) They agree that the outcome(s) of the expert conferencing are as recorded in this statement; and
- (b) They agree to the introduction of the attached information – Refer to para 3.2 and 3.4 (c) above; and
- (c) They have read the Environment Court’s Practice Note 2023 and agree to comply with it; and
- (d) The matters addressed in this statement are within their area of expertise; and
- (e) As this session was held online, in the interests of efficiency, it was agreed that each expert would verbally confirm their position in relation to this para 4.1 to the Independent Facilitator and the other experts and this is recorded in the schedule below.

Confirmed online: 21 September 2023

EXPERT’S NAME & EXPERTISE	PARTY	EXPERT’S CONFIRMATION REFER PARA 4.1
Craig Fitzgerald	Marshall Day Acoustics (advising Northport)	Yes
Peter Runcie	SLR Consulting NZ Ltd (advising Council)	Yes
Nevil Hegley	Hegley Acoustic Consultants (advising Marsden Cove Ltd)	Yes

DRAFT PROPOSED WDC CONDITIONS: NORTHPORT LIMITED PORT EXPANSION – SH15, Marsden Point

To undertake the following activities at or near Ralph Trimmer Drive, Marsden Point:

[To insert summary of activities/buildings/consents etc]

Note: All location coordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection (unless expressly stated otherwise).

Subject to the following conditions:

Construction noise

32 — Expansion Project construction noise from activities on land must not exceed the noise limits in Table One:

Table One: construction noise limits

RESIDENTIAL ZONES AND DWELLINGS IN RURAL AREAS:

Upper limits for construction noise received in residential zones and dwellings in rural areas

Time of week	Time period	Noise limits (dB)	
		L _{Aeq}	L _{AFmax}
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

INDUSTRIAL OR COMMERCIAL AREAS:

Upper limits for construction noise received in industrial or commercial areas on all days

Time period	Noise limits (dB L _{Aeq})
0730-1800	70
1800-0730	75

~~**Advice Note:** The limits in **Table One** are reproduced from New Zealand Standard NZS 6803: 1999 “Acoustics – Construction Noise”~~

- ~~33. Construction noise must be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 “Acoustics – Construction Noise”.~~

~~**Advice Note:** Northland Regional Council resource consents for the Expansion Project include noise limits for construction noise from activities within the coastal marine area.~~

- 47 Noise from Port Activities within the area shown in the figure at **Appendix 1**, ~~as measured within any residential or Settlement Zone land~~ when received on land, must not exceed the levels shown in the Future Port Noise Map in **Appendix 3** which reflects limits of 58 dB L_{dn} (5-day) in the Settlement Zone in Reotahi and 54 dB L_{dn} (5-day) in the Residential zone in Marsden. ~~dB L_{dn} (5-day), the following limits:~~

~~(a) Day-night (Long Term):~~

~~58 dB L_{dn} (5-day)~~

~~61 dB L_{dn} (1-day)~~

~~(b) Night time (Short term):~~

~~53 dB L_{night} (10pm – 7am)~~

~~58 dB L_{Aeq} (15 min)~~

~~75 dB L_{Afmax}~~

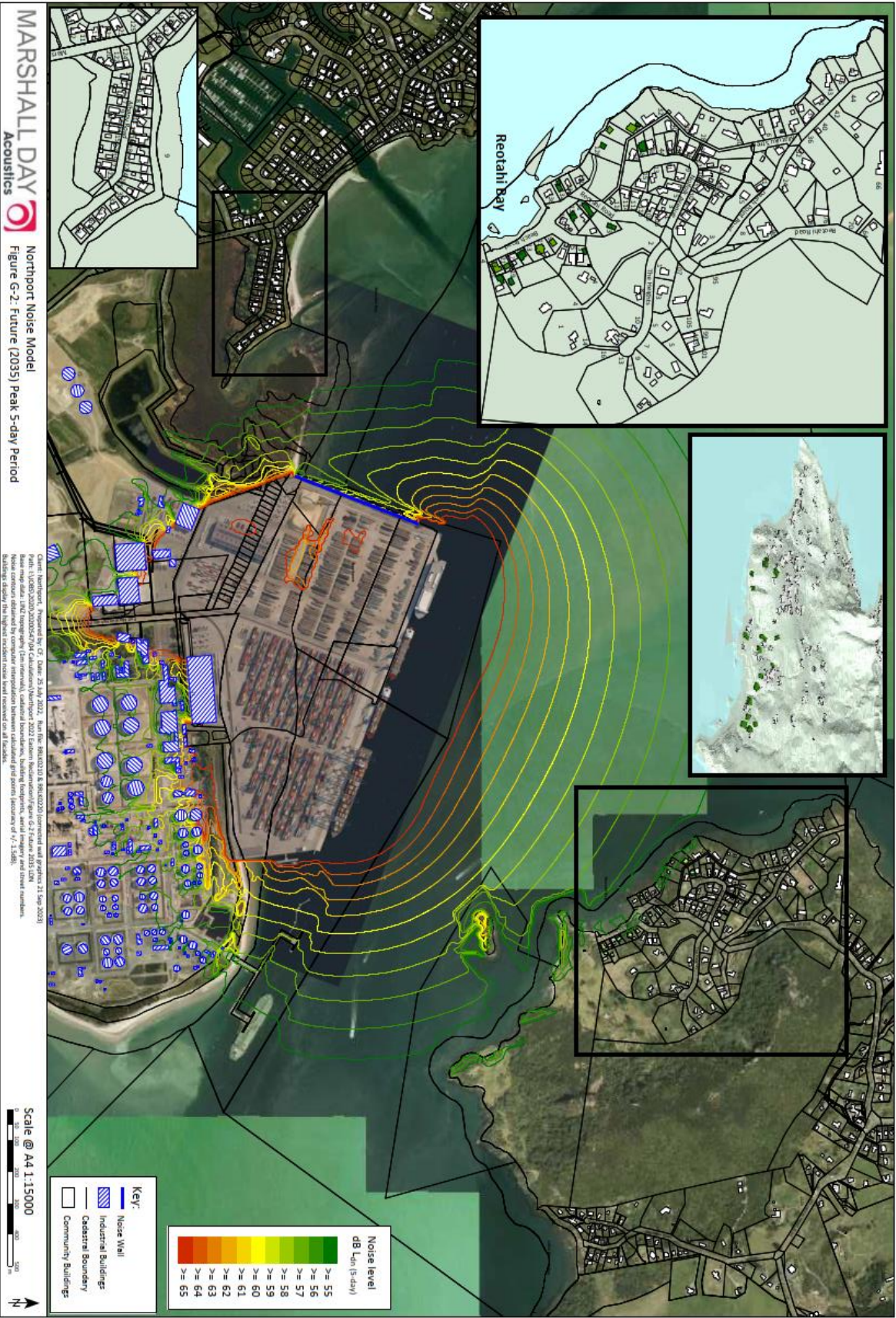
~~**Advice Note:** The noise contours in the Future Port Noise Contour Map were interpolated between grid points calculated at 10m intervals and 1.5m above ground level. Topographical contours and building outlines were sourced from LINZ (2017) and assumed a generic building height of 4.5m.~~

Port noise mitigation

- 49 Mechanical ventilation noise within mitigated dwellings identified in condition **Error! Reference source not found.** must be measured in accordance with AS/NZS 2107:2016 “Acoustics- Recommended design sound levels and reverberation times for building interiors”. The mechanical ventilation noise levels in habitable spaces must not exceed the following ~~on the low-speed setting:~~

- (i) ~~30~~ 5 dB L_{Aeq} in bedrooms, and
- (ii) 40 dB L_{Aeq} in all other habitable spaces.

APPENDIX 3: FUTURE PORT NOISE MAP



DRAFT PROPOSED NRC CONDITIONS: NORTHPORT LIMITED

PORT EXPANSION, SH15, MARSDEN POINT

To undertake the following activities at or near Ralph Trimmer Drive, Marsden Point and/or within the Whangārei Harbour:

Note: All location coordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection (unless expressly stated otherwise).

AUT[XXXXXXX]

[Activity description]

AUT[XXXXXXX]

[Activity description]

[...]

[...]

SUBJECT TO THE FOLLOWING CONDITIONS:

Construction noise

~~51. Construction noise from activities within the CMA, including from capital and maintenance dredging, must not exceed the noise limits in the following table:~~

~~RESIDENTIAL ZONES AND DWELLINGS IN RURAL AREAS:~~

~~Upper limits for construction noise received in residential zones and dwellings in rural areas~~

Time of week	Time period	Noise limits (dB)	
		L _{Aeq}	L _{AFmax}
Weekdays	0630-0730	55	75
	0730-1800	70	85
	1800-2000	65	80
	2000-0630	45	75
Saturdays	0630-0730	45	75
	0730-1800	70	85
	1800-2000	45	75
	2000-0630	45	75
Sundays and public holidays	0630-0730	45	75
	0730-1800	55	85
	1800-2000	45	75
	2000-0630	45	75

~~INDUSTRIAL OR COMMERCIAL AREAS:~~

~~Upper limits for construction noise received in industrial or commercial areas on all days~~

Time period	Noise limits (dB L_{Aeq})
0730-1800	70
1800-0730	75

~~Advice Note:~~ ~~The limits in the above table are reproduced from New Zealand Standard NZS 6803: 1999 "Acoustics – Construction Noise"~~

~~52. Construction noise must be measured and assessed in accordance with New Zealand Standard NZS 6803:1999 "Acoustics – Construction Noise".~~