BEFORE THE INDEPENDENT COMMISSIONERS

IN THE MATTER	of the Resource Management Act 1991 ("**RMA**")
AND	
IN THE MATTER	a submission by KiwiRail Holdings Limited ("**KiwiRail**") (submitter 187) on Hearing F (Other District-wide Matters, Hazards & Risks (Natural Hazards only)) of the Timaru Proposed District Plan ("**Proposed Plan**")

LEGAL SUBMISSIONS ON BEHALF OF KIWIRAIL HOLDINGS LIMITED

16 APRIL 2025

Russell McVeagh

L J E Rapley | N K Dally
P +64 9 367 8000
F +64 9 367 8163
PO Box 8
DX CX10085
Auckland

1. SUMMARY

1.1 KiwiRail is a State-Owned Enterprise responsible for the management and operation of New Zealand's rail network, which is an asset of regional and national significance. The designated corridor of the Main South Line ("**MSL**") runs through the Timaru district and it is a critical part of the national rail network.[1]

1.2 While KiwiRail's submission relates to most chapters of the Proposed Plan being addressed in this hearing stream,[2] these matters are addressed in detail in Ms Heppelthwaite's evidence and the key outstanding matters between KiwiRail and the Council relate to the provisions in the Noise Chapter of the Proposed Plan. These legal submissions are accordingly focused on KiwiRail's relief in respect of the Noise Chapter and the need to ensure there are appropriate plan provisions in place to manage sensitive activities seeking to locate near the MSL.

1.3 KiwiRail submitted on the Noise Chapter of the Proposed Plan to ensure development in and around the rail corridor is managed thoughtfully, with the safety and wellbeing of people and the success of the national rail network in mind. While KiwiRail works hard to manage effects from the operation of the rail network, there will be noise and vibration effects on land adjoining the rail corridor which cannot be internalised. As a result, it is our submission that the Proposed Plan needs additional controls on sensitive activities located on adjoining land in order to protect the health, safety and amenity of adjoining landowners, and to manage reverse sensitivity effects on KiwiRail's operations.

1.4 The Proposed Plan as notified includes some provisions for managing land use near the rail corridor through the inclusion of acoustic insulation and ventilation controls on sensitive activities within 40m of the rail corridor. However, KiwiRail considers these controls need to go further to adequately manage noise effects, including by extending the acoustic insulation and ventilation controls to 100m (with amendments to the associated standards) and applying a rail vibration "alert layer" within 60m of the rail corridor.[3]

---

1 Evidence of Michelle Grinlinton-Hancock dated 5 July 2024; Legal submissions on behalf of KiwiRail Holdings Limited dated 12 July 2024.

2 Signs, Earthworks, Temporary Activities, Natural Hazards and Coastal Environment.

3 The full relief sought by KiwiRail is set out in paragraph [2.5] of Ms Grinlinton-Hancock's evidence and Attachment A to Ms Heppelthwaite's evidence.

KiwiRail's proposed provisions are set out in **Attachment A** to Ms Heppelthwaite's evidence.

1.5 The provisions sought by KiwiRail are, in our submission, necessary and appropriate to manage effects, reasonable, and consistent with the Council's obligations to prepare and change its plan in accordance with the provisions of Part 2 of the RMA, including enabling people and communities to provide for their social, economic, and cultural well-being and their health and safety.

2. THE IMPORTANCE OF PROVISIONS TO MANAGE NOISE AND VIBRATION EFFECTS

2.1 A key concern for KiwiRail in respect of the Proposed Plan is to ensure the future development and / or intensification of sensitive activities near the rail corridor does not give rise to reverse sensitivity effects and to ensure people are living in healthy environments. Dr Chiles' evidence is that the adverse effects of rail sound and vibration include annoyance and sleep disturbance for people living nearby.[4] These effects have been documented by bodies like the World Health Organisation and are underpinned by robust scientific research.[5] KiwiRail is accordingly concerned to ensure that there are appropriate plan provisions in place to manage those adverse health effects on nearby communities.

2.2 While Ms Grinlinton-Hancock explains that KiwiRail is supportive of urban development around the rail corridor, it is also concerned to ensure that development near the rail corridor is compatible with its operations and does not give rise to reverse sensitivity effects.[6] As the Panel will be aware, reverse sensitivity is a well-established concept and is an adverse effect for the purposes of the RMA. It refers to the susceptibility of lawfully established effects-generating activities (which cannot reasonably internalise all effects) to complaints or objections arising from the location of new sensitive activities nearby those lawfully established activities.[7] Such complaints can place constraints on the operation of lawfully established activities, as well as their potential for future growth and development.

---

4 Evidence of Dr Stephen Chiles dated 9 April 2025 at [4.1].

5 Evidence of Dr Stephen Chiles dated 9 April 2025, pages 2-3 of Appendix A.

6 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [2.3].

7 See *Affco New Zealand v Napier City Council* NZEnvC Wellington W 082/2004, 4 November 2004 at [29] as cited in *Tasti Products Ltd v Auckland Council* [2016] NZHC 1673 at [60].

2.3 The Environment Court has recognised the importance of protecting infrastructure from reverse sensitivity effects and has declined applications for resource consent where developments have the potential to give rise to such effects.[8] The High Court also recently confirmed, in the context of Auckland Airport's operations, that the Airport is vulnerable to reverse sensitivity effects and those effects have the potential to impede or limit the operation of its infrastructure.[9]

2.4 In the context of rail, reverse sensitivity effects arise where sensitive activities (such as dwellings) locate in proximity to the rail corridor. As explained in Ms Grinlinton-Hancock's evidence, the potential for reverse sensitivity effects is apparent in the context of rail noise and vibration.[10] Trains are large, travel at speed, and generate noise and vibration as part of their operation. That has the potential to result in annoyance and complaints, which can in turn result in operational constraints on the rail network.

2.5 KiwiRail is a responsible infrastructure operator that endeavours to avoid, remedy or mitigate the adverse rail noise and vibration it produces, through its ongoing programme of upgrade, repair and maintenance work to improve track conditions.[11] Not only is this important to KiwiRail as a good neighbour, but it is also under a statutory obligation to use the best practicable option to avoid unreasonable noise and to avoid, remedy or mitigate adverse effects on the environment.[12]

2.6 However, the nature of rail operations means that KiwiRail cannot fully internalise all noise and vibration effects within the rail corridor boundary. In any case, KiwiRail is not required to internalise all its effects, as the RMA is not a "no effects" statute.[13] The relief sought by KiwiRail seeks to manage the potential for both reverse sensitivity effects and adverse health effects on neighbouring communities by requiring new and altered buildings containing sensitive activities within the Rail Noise Control Boundary Overlay to acoustically insulate against rail noise, and seeks to put landowners on notice of the potential vibration effects through a Rail Vibration Alert Area Overlay.

---

8 See for example, *Gargiulo v Christchurch City Council* NZEnvC Christchurch 137/2000, 17 August 2000.

9 *Auckland International Airport Limited v Auckland Council & Anor* [2024] NZHC 2058 at [29] and [75].

10 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [2.4].

11 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [2.2].

12 Resource Management Act 1991, section 16.

13 *Poutama Kaitiaki Charitable Trust v Taranaki Regional Council* [2020] NZHC 3159 at [245].

3. ACOUSTIC INSULATION AND VENTILATION CONTROLS

The controls should apply within 100m of the rail corridor

3.1 Both KiwiRail and the Council agree the Proposed Plan should include acoustic insulation and ventilation controls for buildings containing sensitive activities. The key difference between the parties is the distance over which these controls should be applied.

3.2 The notified version of the Proposed Plan applies controls on noise sensitive activities within 40m of the rail corridor. In our submission, this is insufficient to manage noise effects arising from the rail corridor – the controls should be applied within 100m of the rail corridor.

3.3 As set out in Dr Chiles' evidence, the 100m distance sought by KiwiRail aligns with the assumed sound levels for rail volumes, and also reflects a reasonable compromise to capture the most affected sites without requiring assessment where building treatment is less likely to be required.[14]

3.4 Ms White does not consider it is necessary or efficient to extend the application of the controls in NOISE-R9 from 40m to 100m to address noise effects from the MSL.[15] This is based on Mr Hunt's view that the MSL "is not a busy railway line with few movements per day" and rail noise levels received beyond 40m of the rail corridor are not sufficiently high to require acoustic insulation and ventilation.[16]

3.5 Ms Grinlinton-Hancock has provided evidence which demonstrates that the MSL is a busy line. There are 42 freight trains scheduled per week (with a greater number of daily movements between Monday to Friday) that pass through the Timaru district when travelling between Christchurch and Dunedin.[17] In addition, there are 30 freight trains scheduled per week which travel between Timaru and Washdyke and 10 freight trains scheduled per week which travel between Timaru Port and Pareroa.[18] There are also other

---

14 Evidence of Dr Stephen Chiles dated 9 April 2025 at [6.2].

15 Section 42A Report: Light and Noise prepared by Liz White dated 26 March 2025 at [8.13.17].

16 *Proposed District Plan Noise Chapter – Response to Technical Noise Issues Raised* prepared by Malcolm Hunt Associates dated 24 March 2025, page 6.

17 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [4.3].

18 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [4.4].

frequent uses of the MSL for local shunts, work trains, testing new units, survey trains and charter trains.[19]

3.6 Based on the volumes provided by Ms Grinlinton-Hancock, the provisions in the notified version of the Proposed Plan do not, in our submission, sufficiently protect the communities who live near the rail corridor, nor the current and future operations of the rail network. Dr Chiles supports the application of controls to 100m based on this data.[20] He also explains it is appropriate to consider not just current train volumes, but the rail corridor over the life of the Proposed Plan which may see increased train volumes.[21] The MSL has the potential to get busier over the life of the Proposed Plan as demand for rail grows generally.[22] In our submission, this reinforces the need to ensure there are appropriate plan provisions in place that protect the rail corridor and the communities around it over the life of the plan. A forward-looking approach is, in our submission, prudent.

3.7 Dr Chiles disagrees with Ms White and Mr Hunt that the noise levels from the MSL received beyond 40m of the rail corridor are not sufficiently high to justify the application of controls requiring the installation of acoustic insulation and ventilation in sensitive activities out to 100m.[23] His evidence confirms that noise levels from individual freight train movements are relatively high.[24] Dr Chiles also confirms the importance of having controls in place in circumstances where a significant proportion of the scheduled freight services on the MSL pass through Timaru in the evening or at nighttime.[25]

3.8 In our submission, KiwiRail's evidence necessarily supports extending the application of the noise controls in NOISE-R9 to 100m. Mr Hunt accepted that 100m noise controls may be appropriate for busy rail routes with frequent daily train movements.[26] KiwiRail's evidence is that is the case here.

---

19 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [4.5].

20 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.3].

21 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.4].

22 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [4.6].

23 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.2] – [7.3].

24 Evidence of Dr Stephen Chiles dated 9 April 2025, pages 6-7 of Appendix A.

25 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.3].

26 *Proposed District Plan Noise Chapter – Response to Technical Noise Issues Raised* prepared by Malcolm Hunt Associates dated 24 March 2025, page 6.

Alterations to buildings containing sensitive activities should be captured in NOISE-R9

3.9 KiwiRail seeks that the noise controls in NOISE-R9 apply where an existing sensitive activity is altered (eg a habitable space is added to an existing building). Dr Chiles considers the same rail noise controls should apply to both new buildings and alterations to existing buildings (which Ms Heppelthwaite endorses in her evidence).[27]

3.10 As Dr Chiles explains, acoustically treating buildings when they are altered provides an opportunity to efficiently address rail noise ingress.[28] Bearing in mind the purpose of the controls to provide healthy living environments and to protect the rail corridor from reverse sensitivity effects, it is appropriate in our submission to mitigate sensitive spaces as they develop and expand. This sentiment is reflected in Mr Hunt's memorandum.[29]

3.11 Mr Hunt agrees that alterations should be captured in NOISE-R9.[30] However, he goes on to say that only "significant alterations" where the floor area in a habitable room in an existing building is increased by 20% or more should be captured. Dr Chiles disagrees with Mr Hunt and considers it is inappropriate to set an arbitrary threshold based on floor area increases for the application of these controls.[31]

3.12 Ms Heppelthwaite also disagrees with Mr Hunt's proposal and considers NOISE-R9 should be amended to capture any "alteration to an existing building".[32] KiwiRail also seeks changes to the definition of noise sensitive activity which are discussed in Ms Heppelthwaite's evidence.[33] It is our submission that the provisions sought by KiwiRail to require alterations to sensitive activities to also acoustically insulate are most appropriate to protect communities around the rail corridor, as well as the current and future operations on the MSL.

---

27 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.6]; Evidence of Catherine Heppelthwaite dated 9 April 2025 at [7.9.iii].

28 Evidence of Dr Stephen Chiles dated 9 April 2025 at [6.4].

29 *Proposed District Plan Noise Chapter – Response to Technical Noise Issues Raised* prepared by Malcolm Hunt Associates dated 24 March 2025, page 5.

30 *Proposed District Plan Noise Chapter – Response to Technical Noise Issues Raised* prepared by Malcolm Hunt Associates dated 24 March 2025, page 5.

31 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.6].

32 Evidence of Catherine Heppelthwaite dated 9 April 2025 at [7.9.iii].

33 Evidence of Catherine Heppelthwaite dated 9 April 2025 at [7.16] – [7.19].

Amendments to NOISE-S3 and NOISE-S4

3.13 KiwiRail seeks amendments to NOISE-S3, including a new clause which sets out the acoustic insulation requirements and new matters of discretion in NOISE-S3 where the acoustic insulation standard is not complied with.

3.14 One of the proposed matters of discretion sought by KiwiRail in NOISE-S3 relates to the outcome of consultation with KiwiRail. As Ms Grinlinton-Hancock explains, this is a helpful mechanism of ensuring Council and applicants are aware of any existing or future changes in the rail network which may impact decisions on building location and maintenance options.[34]

3.15 KiwiRail also seeks amendments to the matters of discretion in NOISE-S4 to focus the matters on the purpose of ventilation controls. Ms Heppelthwaite supports the matters sought by KiwiRail to better aid the assessment of applications where the ventilation standard is not complied with.[35]

3.16 In our submission, the suite of provisions sought by KiwiRail (as stated in **Attachment A** to Ms Heppelthwaite's evidence) are necessary and appropriate to adequately mitigate adverse health effects, as well as reverse sensitivity effects on KiwiRail's operations.

4. RAIL VIBRATION ALERT AREA OVERLAY

4.1 The notified version of the Proposed Plan does not include any controls for managing rail vibration effects on sensitive activities seeking to locate near the rail corridor. Dr Chiles' evidence demonstrates that rail vibration has a very real effect on the occupants of sites adjacent to the rail corridor that requires mitigation.[36] Both Dr Chiles and Ms Heppelthwaite support vibration controls. However, KiwiRail has revised its position on vibration and now seeks the inclusion of a vibration "alert layer".[37] This alert layer would apply to all properties within 60m of the rail corridor, consistent with KiwiRail's approach in other parts of New Zealand.

4.2 A vibration alert layer is an information layer to signal to property owners that higher levels of vibration may be experienced in the area due to its proximity

---

34 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [4.9]; Evidence of Catherine Heppelthwaite dated 9 April 2025 at [7.14].

35 Evidence of Catherine Heppelthwaite dated 9 April 2025 at [7.15].

36 Evidence of Dr Stephen Chiles dated 9 April 2025 at [4.1] and page 4 of Appendix A.

37 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [3.4].

to the rail corridor. There are no rules or other provisions associated with the vibration alert layer.[38]

4.3 Alert layers still provide some management of effects, as landowners will be prompted when constructing buildings which contain sensitive activities to consider incorporating vibration attenuation measures of their own accord, or to consider locating new buildings outside the alert layer. New purchasers will also be alerted when purchasing a property that they may experience such effects. The Environment Court has accepted that such layers are an effective tool to manage effects in the absence of controls to manage vibration on sensitive uses.[39]

4.4 Ms White relies on Mr Hunt's advice on a number of technical matters in making a recommendation to reject the vibration controls sought in KiwiRail's submission. Dr Chiles disagrees with Mr Hunt's opinion on vibration controls and has addressed these matters from a technical perspective in his evidence.[40]

4.5 However, it is important to note that KiwiRail is now proposing a vibration alert layer in lieu of controls requiring landowners to install vibration attenuation. In our submission, this alternative relief addresses any concerns that Ms White has regarding the cost of vibration controls given that the Rail Vibration Alert Area Overlay does not impose any compliance requirements on people located within the overlay.

4.6 The evidence provided by KiwiRail demonstrates that rail vibration adversely affects sensitive activities in the Timaru district. In our submission, the Rail Vibration Alert Area Overlay sought by KiwiRail is a pragmatic planning tool to manage these potential vibration effects on future sensitive uses located in proximity to the rail corridor (as has been accepted in other parts of the country).

5. CONCLUSION

5.1 In our submission, the relief sought by KiwiRail will most appropriately achieve the purpose of the RMA, protect the health and safety of the future residents

---

38 Evidence of Michelle Grinlinton-Hancock dated 9 April 2025 at [3.5].

39 *Kāinga Ora - Homes and Communities v Auckland Council* [2022] NZEnvC 218; *KiwiRail Holdings Ltd v Whangārei District Council* [2023] NZEnvC 004; *HD Land Ltd v Waikato District Council* [2024] NZEnvC 054.

40 Evidence of Dr Stephen Chiles dated 9 April 2025 at [7.9].

located near the rail corridor in the Timaru district, and ensure the ongoing safe and efficient use and operation of the rail corridor as nationally and regionally significant infrastructure.

DATED: 16 April 2025

L J E Rapley / N K Dally

Counsel for KiwiRail Holdings Limited