

**BEFORE INDEPENDENT HEARINGS COMMISSIONERS APPOINTED BY WEST  
COAST REGIONAL COUNCIL**

**IN THE MATTER** of the Resource Management Act 1991  
("the Act")

**AND**

**IN THE MATTER** of submissions by Waka Kotahi NZ  
Transport Agency (submitter S450) on the  
Proposed Te Tai o Poutini – Combined  
West Coast District Plan – Hearing for  
Noise and Signs

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**EVIDENCE OF STUART PEARSON ON BEHALF OF WAKA KOTAHI  
NZ TRANSPORT AGENCY**

**6 August 2024**

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## **1. Introduction**

My name is **STUART PEARSON** of Christchurch and I work for NZ Transport Agency Waka Kotahi (NZTA). I have been requested by NZTA to assist them in the provision of evidence regarding their submission on the Proposed Te Tai o Poutini – Combined West Coast District Plan (TTPP) Review Hearing for Noise and Signs.

## **2. Qualifications**

I am employed by NZTA as a Senior Planner covering primarily the South Island. I have been practicing as a Planner for 8 years at NZTA.

I have a Bachelor of Environmental Management and Planning and a Master of Applied Science (Environmental Management) from Lincoln University.

## **3. Expert Witness Practice Note**

While not a Court hearing I note I have read, and agree to comply with, the Code of Conduct for Expert Witnesses as required by the Environment Court's Practice Note 2023. In providing my evidence all of the opinions provided are within my expertise and I have not omitted to consider any material facts known to me which might alter or qualify the opinions I express.

## **4. Scope of Evidence**

- 4.1. This evidence addresses the submission of NZTA that relates to the following topics:
  - a. Noise; and
  - b. Signs.
- 4.2. In preparing my evidence I have considered the Section 42A Hearings Reports (S42A) for Noise and Signs.
- 4.3. My evidence is limited to those matters within my planning expertise related to noise and signs. My evidence on noise should be read in conjunction with that of NZTA's technical noise expert, Dr Stephen Chiles.

## **5. The Statutory and Higher Order Planning Framework**

- 5.1. In preparing this evidence I have specifically considered the following:
  - a. Provisions of the RMA relevant to plan-making and consenting; and
  - b. West Coast Regional Policy Statement (RPS), specifically the following provisions:

## **Section 5**

- i. Objective 2: Incompatible use and development of natural and physical resources are managed to avoid or minimise conflict.
- ii. Policy 2: To recognise that natural and physical resources important for the West Coast's economy need to be protected from significant negative impacts of new subdivision, use and development by:
  - a) Avoiding, remedying or mitigating reverse sensitivity effects arising from new activities located near existing:
    - v. Regionally significant infrastructure

## **Section 6**

- iii. Objective 1: Enable the safe, efficient and integrated development, operation, maintenance, and upgrading of regionally and nationally significant infrastructure.
- iv. Policy 4: Recognise that Regionally Significant Infrastructure important to the West Coast's wellbeing needs to be protected from the reverse sensitivity effects arising from incompatible new subdivision, use and development, and the adverse effects of other activities, which would compromise the effective operation, maintenance, upgrading, or development of the infrastructure.

## **6. Noise – NZTA Submissions and Further Submissions**

6.1. The primary submission of NZTA on the noise provisions sought the following:

- a. Support of NOISE-O2, NOISE-O3, NOISE-P1, NOISE-P2, NOISE-P4, NOISE-R1, and NOISE-R2;
- b. Amend NOISE-R3 to ensure that requirements I, ii, and iii under R3.1 are applicable to both R3.1.a and R3.1.b. It also sought that an amendment be made to require that buildings within 20m of the state highway carriageway require vibration standards; and
- c. If available, that state highway noise contours as a Variable Noise Control Overlay replace the 40m and 80m distances within NOISE-R3.

6.2. A further submission was made in opposition of Buller District Council's submission (S538.333), which sought the deletion of NOISE-R3.

## 7. Noise – Section 42A Assessment

7.1. The S42A Author has responded to the NZTA submissions as described below; primarily those where amendments were sought and have been accepted in full or in part by the reporting officer, Ms Evans.

7.2. While NZTA has supported NOISE-O2, NOISE-P1, NOISE-P2, NOISE-P4, NOISE-R1 and NOISE-R2 as proposed with no changes the S42A Report has recommended amendments to these provisions. I have reviewed the amendments and consider that these are appropriate and do not affect NZTA.

7.3. NOISE-O3 has been retained as notified and I support this position.

7.4. In relation to NOISE-R3 the S42A Report has made the following recommendations:

- a. That the requirements under NOISE-R3.1 (i, ii, and iii) be applied to NOISE-R3.1 subclause a. and b. as per NZTA's submission. It is agreed that without this change the rule may result in uncertainty and the minor formatting amendments will consolidate the scenarios under a. and b. to improve clarity and reduce ambiguity.
- b. That the rule be amended to include vibration requirements for buildings within 20m from the edge of the state highway under NOISE-R3.1.b.iii. This is supported by both Mr Peakall and Dr Chiles from a technical perspective.
- c. That if available, the 40m / 80m buffer approach be replaced with a Variable Noise Control Overlay (representing the 55 dB LAeq(24) contour). Ms Evans officer suggests that this will improve the efficiency of the rule requirements as they only relate to the state highway network. The following rewording is proposed:

*1. The building will be used by a sensitive activity and is located within:*

~~*a. 80m of the edge of the carriageway of a State Highway with a speed limit of 70kph or greater; or*~~

~~*b. 40m of the edge of the carriageway of a State Highway with a speed limit of less than 70kph; where*~~

*The High Noise Overlay shown on the planning maps:*

7.5. I support the recommendations in the S42A Report for NOISE-R3, including the use of the variable noise contours. However, to include the contours it has been requested that NZTA provide detailed evidence and planning analysis on this matter. I have provided this in Section 7 below.

## 8. State Highway Variable Noise Contours

- 8.1. Dr Chiles has provided evidence which demonstrates effects from noise and vibration and supports the use of the variable noise contours as an overlay. I accept and summarise his key findings as:
- a. Research confirms that noise and vibration have adverse health and amenity effects on people;
  - b. Up to 100m from the edge of the sealed carriageway is appropriate for road noise controls; and
  - c. A 3 dB allowance is preferred for measuring road noise measurements / predictions.
- 8.2. Overall, Dr Chiles has provided technical evidence which demonstrates health effects will occur as a result of noise and vibration and therefore it is appropriate to include noise and vibration control provisions.
- 8.3. I have attached a Section 32 Assessment for Noise as Attachment A. Dr Chiles was involved in the writing of the Section 32 Assessment and I am familiar with its content and agree with its recommendations. This supports the use of the noise contours as an overlay to be implemented into the District Plan.
- 8.4. I have also provided the State Highway Noise Contours for the West Coast Region, which has been submitted alongside this evidence.
- 8.5. However, Ms Evans supported the inclusion of an overlay that modelled a 55 dB LAeq(24) contour. I noted that the modelling undertaken to create the State Highway Noise Contours is based off on 54 dB LAeq(24) as per Appendix A of Dr Chiles evidence.
- 8.6. I consider that addressing noise effects from the state highway on new development that is a noise sensitive activity, as defined in the proposed District Plan, gives effect to the objectives and policies in Section 5 and Section 6 of the RPS as outlined in Paragraph 5.1 of my evidence. Noise is generated from the use of the state highway, which is defined under regionally significant infrastructure, and it can have adverse human health effects if not appropriately avoided, remedied or mitigated.
- 8.7. The proposed TTPP also includes objectives and policies to address noise effects associated to reverse sensitivity and public health from infrastructure within the West Coast Region, including the state highway network. Of particular note are (as per Appendix 1 of the S42A Report):

NOISE-O2: The function and operation of ~~existing and permitted future~~ lawfully established noise generating activities and ~~community~~ infrastructure are not compromised by adverse effects, including reverse sensitivity effects, from ~~noise~~ sensitive activities.

NOISE-P2: Require sensitive activities sited in higher noise environments and new sensitive activities adjacent to higher noise environments to be located and designed so as to minimise adverse effects on the amenity values, public health and wellbeing and the safety of occupants and minimise sleep disturbance from noise, while taking into account:

- a. The type of noise generating activity; and
- b. Other noise sources in the area; and
- c. The nature and occupancy of the ~~noise~~ sensitive activity; and
- d. Mitigation measures, including acoustic insulation, screening and topography.

For the purpose of NOISE - P2 higher noise environments include:

3. Locations in close proximity to a State Highway and the Railway Corridor.

- 8.8. On this basis, I consider that the State Highway Noise Overlay under NOISE-R3 sufficiently gives effect to the above proposed objectives and policies as it ensures that dwellings containing sensitive activities address reverse sensitivity and subsequently minimises effects of public and wellbeing of residentially. The inclusion of NOISE-R3 is also supported by Ms Evans in Paragraph 152 of the S42A Report.
- 8.9. The use of the State Highway Noise Contours on sensitive land uses is a key method in the proposed TTPP aimed at achieving the avoidance and/or mitigation of reverse sensitivity effects on the state highway and the health effects of people and communities as sought by the objectives and policies of the noise chapter. The State Highway Noise Contours only addresses the most significant adverse effects up to a maximum up 100m, even though it is recognised at times it may be beyond this extent. These adverse effects are not specifically addressed by any other controls within the proposed TTPP. In my opinion, it is reasonable for the TTPP to appropriately address these adverse effects.
- 8.10. It is also important to recognise that the current proposed approach of the 40m and 80m extents in NOISE-R3 may not sufficiently address where adverse effects may occur, given that the modelled approach of the State Highway Noise Contours goes up to 100m from the edge of the sealed carriageway. Without the amendments sought to include the contour, there could be adverse reverse sensitivity effects on the state highway or health effects on people or communities in areas between 80m to 100m. Therefore, I consider that due to how the contour

is modelled to identify where the actual effects are occurring that this approach sought by NZTA's submission should sufficiently address these adverse effects.

8.11. In Paragraph 157 Ms Evans has suggested that if the overlay is provided and the approach is supportable then the rewording to NOISE-R3 that I outlined in paragraph 6.4.c. of my evidence is proposed. I generally support the wording proposed; however, I consider that it could be clearer to refer to the overlay as the 'State Highway Noise Corridor Overlay' rather than the 'High Noise Overlay'. I believe that this will make it easier for plan users to interpret as it more accurately relates to where the noise is being generated. Therefore, I proposed the following wording:

*1. The building will be used by a sensitive activity and is located within:*

~~*a. 80m of the edge of the carriageway of a State Highway with a speed limit of 70kph or greater; or*~~

~~*b. 40m of the edge of the carriageway of a State Highway with a speed limit of less than 70kph; where*~~

*The High State Highway Noise Corridor Overlay shown on the planning maps:*

8.12. Overall, I consider the use of the State Highway Noise Corridor Overlay and the underlying provisions is an efficient and effective method to manage the potential health effects of noise for new buildings containing sensitive activities in close proximity to the state highway.

## **9. Noise – Other Matters**

9.1. It is noted that the Appendix 1 – Recommended Provisions of the S42A has shown the deletion of NOISE-R3.1.b.ii. based on the relief sought by several submitters to delete NOISE-R3 in its entirety. However, it does not appear in the S42A Report as to why this specific provision has been deleted due to no reasoning being provided by Ms Evans. Additionally, the recommendations in Paragraph 173 of the S42A Report do not show this provision being deleted.

9.2. Dr Chiles has provided the technical basis within Appendix 1 of his evidence as to why the 3 dB allowance is required to allow for future traffic increase of the state highway. I agree with his position and consider that NOISE-R.1.b.ii. be retained.

9.3. I have reviewed the addition of NOISE-APP1 and while I have no objections to the inclusion of providing alternative pathways to achieve compliance with noise and vibration, it does not appear to appropriately address ventilation requirements as identified in Paragraph 5.4 of Dr Chiles evidence. I agree with his position that if

NOISE-APP1 is to be retained then it should require compliance with ventilation standards that are in accordance with NOISE-R3.1.f.

- 9.4. Lastly, in relation to NOISE-R3.1.f.v. an amendment was recommended to be made for clarity by Ms Evans. This is addressed by Dr Chiles in Paragraph 5.5 of his evidence. I agree with his position that NOISE-R3.1.f.v. should be retained as notified, which requires the removal of the recommended wording 'at least' from the rule set.

## **10. Signs – NZTA Submissions and Further Submissions**

10.1. The primary submission of NZTA on the signs provisions sought the following:

- a. Support of SIGN-O1, SIGN-P1, SIGN-P2, SIGN-P3, SIGN-P5, and SIGN-R2.
- b. Amend SIGN-R1 as follows:
  - i. Replace 'Exceed' with 'Be smaller than' in R1.10;
  - ii. Sought that any new sign adjacent to the state highway should meet the standard TNZ P/24:2008 to require frangibility of signage;
  - iii. Sought the inclusion of a standard to require that signs shall not be permitted if the sign is not related to the activity occurring at the site;
  - iv. Sought that signs shall not be permitted if they are digital or LED;
  - v. That any digital or LED signs or billboards shall have restricted discretionary activity status with traffic safety as a matter of discretion; and
  - vi. Sought standards to require unrestricted visibility of signs that had different requirements depending on the posted speed limit.
- c. Amend the following Noise Rules:
  - i. SIGN-R4 – amend to include an advice note for NZ Transport Agency Waka Kotahi General Election Sign guidance when adjacent to the state highway.
  - ii. SIGN-R13 – To delete 'or an adjoining site' from the rule.
  - iii. SIGN-R15 – To delete 'or an adjoining site' from the rule.
  - iv. SIGN-R19 – to include additional safety matters of discretion, such as the content of the sign.



10.2. A further submission was made in opposition of Go Media Limited (S501.003), which sought amendments to enable advertising for off-site activities.

## **11. Signs – Section 42A Assessment**

11.1. The S42A Author has responded to the NZTA submissions as described below; primarily those where amendments were sought and have been accepted in full or in part or have been rejected by the reporting officer, Ms Easton.

11.2. While NZTA has supported SIGN-O1 and SIGN-P2 as proposed with no changes, the S42A Report has recommended amendments to these provisions. I have reviewed the amendments and consider that these are appropriate and do not affect NZTA.

11.3. SIGN-P1, SIGN-P3, SIGN-P5 and SIGN-R2 has been retained as notified, subject to minor amendment to SIGN-R2 requested by KiwiRail Holdings Limited, of which I support this position.

11.4. In relation to SIGN-R1 the S42A Report has made the following recommendations:

- a. Accept the amendments to SIGN-R1.10 to delete 'Exceed' and replace with 'Be smaller than'.
- b. Reject the inclusion of the TNZ P/24:2008 standard as signs on private property are appropriately setback from the road and do not require this standard. NZTA can still require this standard for any signs within the state highway corridor.
- c. Rejected the amendment to include a standard to require that signs shall not be permitted if the sign is not related to the activity occurring at the site, as this is dealt with via the specific zone standards.
- d. Accepted the amendment to include 'digital or LED' as SIGN-R1.6.v.
- e. Rejected the restricted discretionary status for digital or LED signs as these are appropriately dealt with under SIGN-R19. However, it has been accepted to include traffic safety as a matter of discretion.
- f. Rejected the unrestricted visibility requirements as these are not considered necessary for local roads.

11.5. I consider the amendments as per the S42A Report to SIGN-R1 in relation to NZTA's submission to be appropriate and I support these recommendations.

11.6. Additional amendments were made to SIGN-R1 as follows:

- a. Davis Ogilvie & Partners Ltd in their submission (S465.029) and Griffen & Smith Ltd (S253.012) sought to remove the standard for a maximum number of words and/or symbols or maximum number of characters for signs when the sign is located in a posted speed limited that is below 70 km/h. This submission has been accepted by the S42A Report.
- b. Go Media Limited in their submission (S501.008) sought to delete the spacing requirements between signs in a posted speed environment that is 70 km/h or lower in SIGN-R1.11.i. This has been accepted by the S42A Report.

11.7. I have reviewed the additional amendments as described above and consider that these are generally appropriate. However, in relation to SIGN-R.1.11.i I consider that the separation requirement should still be applicable to speed environments of 70 km/h or greater, as these are typically considered high speed rural environments. This would also be consistent with other standards such as SIGN-R1.10 which has minimum lettering heights of 120 mm and 160 mm for signs below 70 km/h and 70 km/h or greater, respectively. This depicts the split between low speed urban and high speed rural environments. Therefore, I suggest the following amendment:

*11. Be smaller than the following separation distances between signs where these are located within 10 metres of a road:*

*i. 70m separation distances between signs facing a road with a posted speed limit of ~~74~~70-80 km/h, or*

*ii. 80m separation distances between signs facing a road with a posted speed limited of >80 km/h.*

11.8. The relief sought for SIGN-R4 has recommended to be rejected in the S42A Report as advice notes should refer to statutory requirements or for interpretation or administration reasons, so an advice note for third party guidance is not supported. I accept the reasoning and recommendation on this matter.

11.9. The S42A Report has recommended that the amendments sought by NZTA to SIGN-R13 and SIGN-R15 are to be accepted. I support this recommendation.

11.10. Lastly, in relation to SIGN-R19 as per the recommendation addressed above in 9.4.e, the S42A Report has included traffic safety as a matter of discretion. I support this recommendation.

11.11. Overall, I support the recommendations of the S42A Report subject to a minor amendment associated with to SIGN-R.1.11.i., I consider that the sign provisions as proposed are suitable and appropriately address the potential safety effects on the state highway.

## **12. Conclusion**

- 12.1. I support the use of the State Highway Noise Corridor Overlay as the preferred approach to address health effects from state highway noise that should replace the current 40m and 80m approach. The contours provided show the actual effects of noise based on modelling up to a maximum of 100m from the edge of the sealed carriageway where new buildings containing sensitive activities should be required to address these effects. I consider that this also give effect to the RPS and the proposed objectives and policies of the TTPP to ensure that reverse sensitivity effects from new activities on the state highway are minimised.
- 12.2. I generally support the amendments to the sign chapter, subject to a minor amendment to SIGN-R.1.11.i, which I consider will ensure consistency with other provisions under R1.
- 12.3. I consider that the Hearings Panel should take into account the matters raised in my evidence for noise and signs, alongside the technical evidence of Dr Chiles for noise, and amend the District Plan. In my view these amendments are necessary to appropriately mitigate the effects on the state highway.

**Stuart Pearson**

**6 August 2024**

## Appendix 1 – Section 32 Analysis on State Highway Noise Contours