

MIDCENTRAL DISTRICT HEALTH BOARD'S PUBLIC HEALTH SERVICE ORAL SUBMISSIONS FOR THE NOTICE OF REQUIREMENT HEARING: KIWIRAIL REGIONAL FREIGHT HUB.

1. Kia ora kotou, my name is Andrew Watt. I appear today for MidCentral District Health Board's Public Health Service (MidCentral Public Health Service) that made formal submission on this Notice of Requirement to construct and operate a freight hub.

2. The reason for our submission generally is to promote the reduction of adverse environmental effects on the health of people and communities and to improve, promote and protect their health pursuant to the New Zealand Public Health and Disability Act 2000 and the Health Act 1956.

3. I will not repeat what is stated in our written submission other than to summarise our interest in this Notice of Requirement.

4. MidCentral Public Health Service has a neutral stance as to whether or not the proposed freight hub is built under the Notice of Requirement. Our only concern is that adequate conditions are included to avoid, remedy and mitigate potential adverse health effects on people and communities.

5. I do not appear as an expert witness.

6. The construction and operation of the Freight Hub has the potential to create adverse effects on the health of people and communities in the vicinity, these include:

- Exposure to airborne contaminants created through both construction and the operation of the freight hub.

-Noise effects.

7. This list does not imply we have no interest in other matters in the Notice of Requirement to construct and operate the freight hub that could create adverse health effects. It simply means we have chosen at this hearing to seek relief by recommendation or decision on those issues submitted on. This approach should not be inferred as agreement or support for the matters on which submissions have not been made.

Air Quality

8. MidCentral Public Service advocates for the inclusion of conditions to both monitor and mitigate impacts of dust and other airborne contaminants to protect public health. Such conditions are required for the construction and operational phases of the freight hub.

9. The assessment of environmental effects noted that PM10 is an airborne contaminant that would be produced during both operation and construction.

10. PM10, and PM2.5 are associated with adverse health effects caused by both chronic and acute exposure. Environmental Health Intelligence New Zealand note that the health effects of PM10 can be acute or chronic. Symptoms range from mild to severe illness such as cardiovascular or

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respiratory disease requiring hospitalisation and/ or causing death. The World Health Organisation notes that even at low levels of exposure, small particulates have health impacts. There is no exposure threshold identified below which adverse health effects are not observed.

11. I consider that adequate monitoring and assessment of air quality in planning, construction and operation is essential to ensure that regional rules and National Environmental Standards are met and to ensure mitigation measures are in place to protect the health of neighbouring residents.

12. MidCentral Public Health Service's submission point 2 requested relief by including conditions to define a comprehensive construction dust management plan.

13. Air quality conditions 59(i)-(l) or wording to similar effect, as noted in the section 42A officers recommended conditions to manage and monitor construction dust, would meet the relief sort in submission point 2. I support inclusion of those conditions or conditions to the same effect.

14. I consider the approach of including clear, comprehensive conditions to manage and monitor construction dust, as outlined in proposed conditions 59(i)-(l) as a preferable approach to proposed condition 59(d) of appendix 1 of the statement of evidence by Karen Bell. I note however that in the proposed conditions, interim version 13 August that condition 59(d), as included in appendix 1 of Karen Bell's statement of evidence has been removed. It appears to have been incorporated into a generic condition 59(c). 59(c) makes no specific mention of a construction dust management plan.

15. I acknowledge that resource consents are likely to be required for earthworks or other construction activities that would have conditions to manage discharges to air. Given the number of potential consents required, inclusion of air quality conditions 59(i)-(l) as outlined in the section 42A officer's recommended conditions, would provide overarching and consistent conditions for all construction activities. Inclusion of those conditions should ensure that consistent air quality conditions apply to all aspects of construction.

16. I support the inclusion of proposed air quality condition 94 as stated in the section 42A officers recommended conditions. That condition would meet the relief sort in MidCentral Public Health Service's submission point 3 by explicitly stating that an objective of operational air quality management is to protect public health. That objective was not previously stated and is not included in the proposed conditions interim version 13 August. The inclusion of condition 94 would provide clarity when applying and interpreting all conditions relating to the management, mitigation and monitoring of air quality. That the protection of human health is a fundamental objective.

17. As noted in MidCentral Public Health Service's submission point 3, if dust is settling on rooftops to the extent that conditions such as 99. of Kiwirail's proposed conditions are required to mitigate contamination of water supply by operational dust, those residents near the marshalling yards could also be exposed to breathing that same dust that would contain PM10 and other airborne contaminants.

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18. To mitigate that risk, I support the inclusion of air quality condition [59A] of the officer's recommended conditions. That condition would help ensure that discharges from construction and operation are managed to avoid noxious, dangerous and offensive dust that cause an adverse effect beyond the designation boundary. Such a condition would strengthen protection for neighbouring residents from exposure to dust and other airborne contamination. I note that wording of this condition differs from Rule 8-2 of the Manawatū-Whanganui Regional Council's regional plan so is not a replication of that regional rule.

Noise

19. Excessive or prolonged noise can disrupt sleep and cause adverse health effects. People living near noisy activities are at increased risk of various adverse health effects. The World Health Organisation's Environmental Noise Guidelines for the European Region, a document linked as reference material from the Ministry of Health's website, notes that the burden of disease from environmental noise is quantified for cardiovascular disease, cognitive impairment in children, sleep disturbance, tinnitus and annoyance. Adverse health effects are more highly associated with long-term exposure. If adequate noise mitigation measures aren't included in conditions, neighbouring residents could be exposed to noise levels that can cause adverse health effects.

20. MidCentral Public Health Service's submission point 4 asserts that noise contour modelling must adequately assess and must not underestimate the extent of off-site noise effects by excluding assessment of special audible characteristics. An underestimation of noise effects could have the flow on effect of not identifying all neighbouring residences that require insulation or ventilation to protect those residents from excess night-time noise. Such an underestimation of noise could expose those residents to noise that could be injurious to health.

21. I note in Nigel Lloyd's Section 42A Technical Evidence, Paragraph 190, that he agreed with MidCentral Public Health Service's submission that there was a non-application of special audible characteristics in the AEE's for noise assessment.

22. Stephen Chiles notes in his statement of evidence 8.18, special audible characteristics are normally but not always subject to a penalty, typically the addition of 5 decibel to a noise level prior to determining compliance with a limit. Such penalties can be triggered by either subjective or objective evaluations. In 8.19 Stephen Chiles explained his rationale as to why he considered subjective assessments of special audible characteristics of railway noise problematic and had excluded them from recommended conditions.

23. Stephen Chiles recommended condition 85(a) in appendix 1 of Karen Bell's evidence. That condition does in part address the relief sort in MidCentral Public Health Service's submission point 4 by including 'NZS6802:2008 Acoustics-Environmental Noise'. It did not meet all relief sort in

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submission point 4 as corrections for noise characteristics could only be made using objective methods.

24. I note in the Proposed Conditions Interim version 13 August, that a change has been made to condition 85A that would allow subjective measures to be used for tonality. That comes closer to meeting the relief sort in submission point 4 though would still exclude subjective acceptability for other noise characteristics such as impulsiveness.

25. Condition 85A of the Section 42A officer's recommended conditions, would allow subjective assessments of all special audible characteristics.

26. I support the inclusion of proposed condition [85A] or wording to similar effect, as stated in the section 42A officers recommended conditions. That condition meets the relief sort in submission point 4. That condition removes the requirement that corrections for noise characteristics would only be made using objective methods except for tonality characteristics.

27. In this respect I rely on Nigel Lloyd's opinion and agreeance with submission point 4, as outlined in paragraphs 190 and 191 of their section 42A Technical Evidence.

28. In the officer's recommended condition [85A], by removing the statement 'and corrections for noise characteristics shall only be made using objective methods,' Nigel Lloyd appears to assert that assessment of operational railway noise using NZS:6802:2008 should include allowance of subjective evaluations of special audible characteristics beyond tonality.

29. Stephen Chiles in their statement of evidence 'Acoustics' notes agreement in 8.16 with MidCentral Public Health Service's submission point 6 that Kiwirail should offer to meet the costs of treating houses if necessary to meet proposed criteria.

30. The Proposed Conditions Interim version 13 August includes conditions 85B(b)(i) and (ii). Condition 85(b)(ii), or a condition worded to similar effect, would meet the relief sort in submission point 6. I support the inclusion of such a condition.

31. In relation to MidCentral Public Health Service's submission point 7, Stephen Chiles notes in 8.16 of his statement of evidence that he agree with that submission point and Kiwirail should adopt the best practical option to avoid unreasonable noise. Stephen Chiles states that should be implemented under both the construction and operational noise and vibration management plans as required by imposed conditions. **I note that proposed conditions 71, 72 and 85 of the Proposed Conditions Interim version 13 August have wording of similar effect to the relief sort in submission point 7. Inclusion of those conditions or conditions to similar effect would meet the relief sort by MidCentral Public Health Service for submission point 7.**

That concludes MidCentral Public Health Service's oral submission.

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