Before the Hearing Commissioners Appointed by the Grey District Council and West Coast Regional Council

Under the Resource Management Act 1991

In the matter of Resource consent applications by TiGa Minerals and Metals

Ltd to establish and operate a mineral sands mine on State

Highway 6, Barrytown (RC-2023-0046; LUN3154/23)

Summary Statement of Jon Farren

2 February 2024

Applicant's solicitor:

Alex Booker/Alex Hansby
Anderson Lloyd
Level 3, 70 Gloucester Street, Christchurch 8013
PO Box 13831, Armagh, Christchurch 8141
DX Box WX10009
p + 64 27 656 2647
alex.booker@al.nz



Summary of evidence

- 1 My name is Jon Farren.
- I prepared a statement of noise evidence dated 19 January 2024. My qualifications and experience are set out in that statement of evidence.
- I repeat the confirmation given in that statement that I have read and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court.
- My role in this proposal to date has been as technical reviewer and supervisor for all noise monitoring, modelling and analysis. Working with my colleagues, I was responsible for reviewing and providing input to the 2023 Assessment of Noise Effects (Noise Assessment) that accompanied the Application. I was also responsible for noise assessment of the previous application at this site in 2020.

Summary

- My assessment shows the Application Site can comfortably comply with the permitted activity noise levels within the proposed Te Tai o Poutini Plan, which reflects the current best practice noise criteria set out in New Zealand Standard NZS 6802:2008¹ and the World Health Organisation published guidance.
- Mining and processing activities are predicted to comply with the Grey District Plan (GDP) daytime and night-time permitted activity noise limits of 55 and 45 dB L_{A10} respectively. The exception is during the day on Sundays when a 45 dB L_{A10} daytime limit currently applies.
- I consider noise effects from the Application Site will result in acceptable noise amenity at the nearest dwellings with respect to the permitted activity noise levels and the existing noise environment. Overall, I consider noise effects will be less than minor.
- I have modelled noise emissions associated with the proposed mining activities and processing operations based on measurements of similar equipment around New Zealand including a mineral sands mine near Westport.
- My calculations assume a conservative worst case with all mining plant and equipment operating at the same time at the closest practical points to existing dwellings. In practice, and for most of the time, I anticipate noise levels will be lower than predicted when mining is occurring in other parts of the site away from

¹ New Zealand Standard NZS 6802:2008 Acoustics - Environmental Noise

the boundaries and when operating within the excavated area where the perimeter pit wall will act as a noise barrier.

- Since completion of the detailed noise modelling submitted with the Application, the site access road has been moved further north away from the dwelling at 3195 Coast Road. Whilst this change will result in a small reduction in overall site noise at 3195 Coast Road of approximately 1 dB, the perceptibility of truck noise will reduce for residents. I consider this to be a positive outcome for 3195 Coast Road.
- Whilst noise on public roads is exempt from compliance with the District Plan permitted activity noise limits, my assessment is that truck movements between 0500 and 0700 hours will result in a just perceptible change in noise level of 3dB. During successive hours of the day, the relative increase in noise level from trucks is reduced, with a corresponding diminishing noise effect.
- I have discussed the Application with Council's noise peer reviewer, Mr Darran Humpheson, and note we are in overall agreement regarding prediction methodology and noise level criteria. I agree with several of the proposed changes to consent conditions suggested by Mr Humpheson, the notable exception being the ongoing requirement for 3 monthly noise monitoring over the life of the project. In my opinion 12 monthly monitoring is more appropriate after the first year of operation.

Jon Farren

Dated this 2nd day of February 2024