

**BEFORE THE INDEPENDENT HEARING PANEL
APPOINTED BY THE WEST COAST REGIONAL COUNCIL AND THE GREY DISTRICT COUNCIL**

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application by TIGa Minerals and Metals Ltd for resource consents to establish and operate a mineral sand mine on Barrytown Flats. Reference WCRC: RC-2023-0046 and GDC: LUN-315/23.

**SUMMARY STATEMENT OF ORAL EVIDENCE
KATE SIMISTER FOR THE DIRECTOR-GENERAL OF CONSERVATION
26 February 2024**

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1. Firstly, I would like to thank the Panel for the opportunity to speak today, as I was unable to present during the time period set for the majority of submitters, due to a pre-existing work commitment in Stewart Island, undertaking research.
2. I have provided you with my Statement of Evidence dated 26th of January, which I presume you have had time to read and so I will not repeat to you now all of the information provided within it. I welcome any questions you may have arising from it, which I will take after I summarize the most critical remaining issues in my opinion.
3. I understand a significant change to the application has occurred with the applicant offering a condition of consent that there will be no night-time trucking or mining activities and commend them for doing so. The details and impact of this change however, remain unclear to me.
4. I note in Statement of Evidence - Kate McKenzie (planning), updated hours of operation and/or clarified shift times are not provided. From Statement of Evidence - Kate McKenzie "2.26 There will be no mining activities or trucking of Heavy Mineral Concentrate during the hours of darkness, defined as being 30mins after sunset and 30 mins before sunrise. This has been offered by the applicant as a means of avoiding effects on the Westland Petrel".
5. The operational and shift hours directly influence the number of people onsite, their activities and vehicle movements to and from site, and so it determines what lighting sources will be required and for what time periods. I also would like clarification on whether loading or movement of material to stockpiles or trucks outside will still occur during the hours of darkness at the processing plant, or if that is included in what is being defined as 'mining activities'. The term 'mining activities' in the condition itself is unclear, as work within the processing plant is a mining activity and will continue during the hours of darkness. Clearer definitions as to what activities will and will not occur are required.
6. It is critical, in order to assess the level of risk that remains of attracting Westland petrel to the site and onto SH6, to have these factors clearly defined to understand the practical implications of this proposal. As per my Statement of Evidence dated 26th of January, to avoid adverse effects on Westland petrel, operations should be finished for the day, with all lights turned off, and staff should have left the site no later than sunset, not as birds begin flying approximately 30 minutes later, as this still leaves birds exposed to lighting coming from the site as staff pack-up, and higher levels of traffic as the shifts end, just as they begin to enter or leave the colony.

Likewise, staff and trucks should not return until after sunrise. It is important to note that in poor weather conditions affecting visibility, it is common for people to use vehicle lights earlier in the day in this area. A precautionary approach factoring in poor weather when setting operational hours is appropriate, given the known susceptibility of the birds to light attraction.

7. I am not a mining operation management expert and so do not know the tasks required, nor the length of time in which it takes to complete them, but imagine there will need to be an allowance for time after mining in the pit ceases to pack up, store and/or transport equipment back to sheds, cleaning and servicing, staff washing, collecting their things, getting into the shuttle/vehicles and driving offsite.

8. My interpretation of the condition's intent is that, for example, on the shortest day which will be June 30th 2024, sunrise will be at 7.53am and sunset at 5:02pm. This would result in shift hours being at maximum 7.15am - 5.30pm for the year, if only one shift time is still proposed. Nevertheless, there will still be processing plant workers arriving to and departing from the site during the hours of darkness at 6:00am and 06:00pm throughout the breeding season. This is addressed in part by the offer of a shuttle bus, but it remains an outstanding concern. The summary statement and rebuttal evidence of Nick Fuller (on transport) states, "I expect that the majority of staff at the site would come from the south, as this is the direction to / from the closest population centre. As such, I anticipate the staff traffic volume of traffic to / from the north of the site would be low. I also note that the page 4 proposal includes a minivan service to get staff to / from the site and this will reduce the traffic volumes on the network (including in the hours of darkness)." This highlights the unknown factor of how vehicle movements can be managed, that movements will still occur, and there is no certainty that staff will use any minibus.

9. There is still no expert lighting plan and so it is difficult to comment on the effects of the lighting that will remain on site and in the mine. I accept that the applicant will follow the Australian Light Pollution Guidelines but as stated in my substantive statement, these are generic guidelines for marine wildlife in general and were not written or tested with Westland petrel in mind. Given the quantity of groundings of Westland petrel due to lighting, it appears that there is something about their physiology and behaviour that makes them particularly susceptible to light pollution. For instance, another seabird species that nests in the Barrytown area and travels to and from their breeding colonies in the hours of darkness are Sooty shearwater, which have not yet been recorded as attracted to lighting and succumbing to fallout in the local area. Even with the application of the Guidelines, mitigation is not guaranteed, and petrels may still be attracted to the lighting

10. I also agree with Dr Waugh and Bruce Stuart-Menteath's evidence (paragraphs 37-38) that the AMP Accidental Discovery plan 'does not reflect Westland petrel behaviour, for instance the 50m discovery protocol, an uninjured bird may walk more than 50m before being found, or birds may not be discovered for some days after becoming grounded, due to the difficulty of seeing them at night and their behaviour of hiding under vegetation, or objects during daylight hours.' In my opinion, if Westland petrel are grounded by the mine activities, there remains a high risk that birds will be critically injured or killed, during or after fallout. The prospect of discovery (or discovering a healthy bird that could be rehabilitated) remains low for the reasons explained by Mr Stuart-Menteath.

11. I wish to highlight again the fragility of the species status, as per my Statement of Evidence dated 26th of January. At the time of the last population assessment in 2018, the population was thought to be relatively stable with a growth rate of 1.022% per annum, with 95% confidence. In 2023, Westland petrel ranked in first place in the updated fisheries risk assessment framework, being the seabird at highest risk from fisheries bycatch in the Southern Hemisphere, with the current level of mortality in fisheries being calculated as above the threshold of population sustainability, meaning any additional loss (from whatever cause) is considered a population level effect.

12. There is also significant uncertainty around the species ability to persist with future predictions, particularly of the severity and increasing frequency of marine heatwaves, which can alter prey resource distribution and availability. These impacts may already be occurring with the number of Westland petrel occupying monitored burrows, breeding, and chick weights declining since 2020. NIWA has recorded abnormally high sea surface temperatures and multiple marine heatwaves on the West Coast during these years. The Department has been undertaking research throughout this period, which will provide an insight at its completion in 2025. As highlighted in Dr Waugh's evidence, at least 13 of 27 Westland petrel sub-colonies have suffered erosion and tree-fall impacts. From personal observation this damage and impact on the species is ongoing, including complete landslides killing birds nesting underground, disruption to breeding due to loss of a burrow or mate.

13. I agree with Mike Harding that Dr Susan Waugh has undertaken extensive research on Westland petrel and should be considered an expert on this species, therefore I endorse her conclusions and the content of her expert witness statement. I also agree with Mr Harding's assessment that beyond restricting activities to times when no lights are required, there are very few options to reduce the possibility of risk to petrels, and if mortalities occur despite restrictions, this will have an adverse effect on the population. Mr Harding noted that the Avian Management Plan does not

provide sufficient assurance that adverse effects on threatened and at-risk species will be avoided, remedied, or mitigated. I agree with his assessment.

14. Further, the Avian Management plan objectives stated in Section 1.3, Goal, scope, objectives are to ensure adverse effects are avoided, however these do not align with the actions proposed within Section 3.2 Discouraging nesting. The breeding detection and disturbance activities proposed in the AMP create an inherent risk of causing distress and harm to threatened and at-risk species and are not consistent with requirements set by the Wildlife Act and Coastal Marine policy.

15. The Avian Management plan states that if a nest of a threatened or at-risk bird species is detected within an area to be mined, it shall be protected by establishing a 50m buffer of no access, with predator control etc, to minimise the risk of abandonment. It does not offer any review of the plan if proposed measures prove to be ineffective, so may not have any protective benefit to some species.

16. If an 'Immediate Review' provision is to be included in the event of the activity grounding Westland petrel, the Avian Management plan is not an appropriate document for such an important provision, as the AMP is a 'living document' under constant review. This provision should be included in the consent conditions.

17. In conclusion, further clarification of key details by the applicant are required in order to assess what level of risk this proposal poses. I'm very happy now to answer any questions you may have.

Kate Simister.