IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application for resource consents by TIGA

MINERALS AND METALS LTD

AND

IN THE MATTER of a submission by the

COAST ROAD RESILIENCE GROUP INC

Lay witness statement of evidence of Suzanne Hills
For COAST ROAD RESILIENCE GROUP INC
Topic Westland petrel

Dated: 31 January 2024

Coast Road Resilience Group Inc

Email: coastroadrg@gmail.com

•

INTRODUCTION

- 1. My full name is Suzanne Denise Hills. I have a B.Tech (Hons) in Biotechnology and Bioprocess Engineering, Massey University, 1992. I had a career in the food industry in New Zealand and the UK in technologist, technical management and auditing roles for 17 years. Before moving to the West Coast I spent 8 years on a life's sailing adventure. I hold current roles of West Coast branch chair of Forest & Bird; chair of Coast Road Dawn Chorus Inc, and trustee of the West Coast Penguin Trust.
- 2. I am a member of the Coast Road Resilience Group Inc. (CRRG). I have been asked by the CRRG to provide lay witness evidence in relation to the Westland petrel. I am not an expert in this matter and this report is not intended as expert evidence. I have prepared this statement of evidence for the CRRGin relation to this application.
- 3. I am familiar with the TIGA application site because I have lived on the Barrytown Flats for 7 years.
- 4. In preparing this statement of evidence, I have reviewed the following documents.
- TiGa RC Application AEE Final and all of the application's attachments; all of the Amendmentto Application documents; and all of the Request for Information documents.
 - Final Terrestrial Ecology Peer Review by Mike Harding
 - Both WGA hydrological and hydrogeological Peer Reviews
 - Statement of evidence of Gary Bramley terrestrial ecology
 - Statement of evidence of Robert Brand
 - Statement of evidence of Kate McKenzie
 - Statement of evidence of Dr Susan Waugh
 - Statement of evidence of Kate Simister
 - Submissions 61, 223, 237, 241, 251, 309
 - GDC and WCRC s42a Officers Reports
 - Grey District Significant Natural Areas Assessment 1 June 2006 [PUN-W034]
 - 5. In addition to providing this statement in support of the CRRG, I also lodged a personal submission in relation to the TIGA Minerals and Metals Ltd application.

SCOPE OF EVIDENCE

6. This evidence focusses on the Westland petrel. Other CRRG members and expert witnesses will be providing evidence on other aspects of the application.

Summary

- 7. There is the potential for the proposal to have cumulative adverse effects on the Westland petrel population. The notably slow reproductive rate means even a few deaths can have a significant effect on the breeding potential of this vulnerable species.
- 8. The proffered conditions, including the proffered change to mining and trucking during daylight only, would likely only achieve partial mitigation of the adverse effects on the population; they do not avoid adverse effects as required by the New Zealand Coastal Policy Statement (NZCPS).
- 9. The proposal would add new carbon emissions, exacerbating the effects of climate breakdown and directly impact the species.
- 10. The Coast Road community has a strong connection to the Westland petrel and the birds form part of the local identity. The community recognises the survival of the Westland petrel depends on all of us and local people and businesses do what they can to avoid and minimise adverse effects.

Specific Concerns

- 11. Westland petrels are nocturnal while ashore and are at risk of being distracted by artificial lights. Once grounded they cannot take off again. They may then be killed by vehicles, predators or die from exhaustion. The highest risk is below and close to their breeding ground (3.6km to the north of the proposed site), however, as evidenced by birds found grounded between Hokitika and Westport, the risk extends well beyond the breeding ground.
- 12. The proposed consent condition 15.1 (Ref: Att P Proposed Conditions of Consent FINAL) for southbound trucking hours of 5am to 10pm include hours of darkness for all months of the year. Trucking at the scale proposed in the hours of darkness would not protect the petrels from road injuries and fatalities as a result of headlight distraction. The majority of the proposed southbound Coast Road route is close to the coastline where vehicle headlights arevisible from seaward. Those petrels following the coastline are at risk of being drawn in by headlights (including the additional light vehicle movements at night), particularly so fledglings in misty/wet conditions given they are taking their maiden flight and are naive about their marine environment.
- 13. I note the proposed conditions of consent were updated on 19 January 2024, with condition 15.1 now stating: *Truck movements associated with removal of heavy mineral concentrate must be limited to 50 per day and 5 per hour (both averaged over a one week period) and must only occur during the hours of daylight. For the purpose of this condition, hours of daylight are considered to be between 30 minutes before sunrise and 30 minutes after sunset.*

- 14. The updated proposed consent condition 15.1 of trucking 30 minutes before sunrise until 30 minutes after sunset would still leave a half hour of headlight distraction threat post sunset and pre sunrise. Headlight use on this stretch of road is common and necessary, even in clear weather, especially with the proximity of the Paparoa Range blocking morning light, and evening light affected by dark bush-clad surrounds.
- 15. I note condition 15.4 remains in the 19 January 2024 update: *Light vehicle movements* must be limited to 140 light vehicles per day. Light vehicle movements at night would pose a light distraction threat to the Westland petrel.
- 16. The proposed consent condition 12.1 (Ref: Att P Proposed Conditions of Consent FINAL) on hours of operation for mining activities, processing plant activities and heavy mineral concentrate activities include operating in the hours of darkness for all months of the year and presents light distraction threats in an otherwise dark environment. The proposal is to follow the Australian Government's National Light Pollution Guidelines for Wildlife, however, these guidelines are limited in scope regarding non-fixed lighting such as vehicle lights, mine pit lighting and moving machinery. Compliance to health and safety requirements for non-fixed lighting may result in unavoidable light distraction threats to this light sensitive species.
- 17. I note the proposed conditions of consent were updated on 19 January 2024, with condition 12.1 now stating: *Trucking, mining, overburden and topsoil stripping, bund development and any related activities shall not operate during the hours of darkness. For the purpose of this condition, hours of darkness are considered to be between 30 minutes after sunset to 30 minutes before sunrise.*
 - The concern expressed in paragraph 14 above equally applies to lights operating at the mine site 30 minutes before sunrise and 30 minutes after sunset.
- 18. Anecdotal observation by Dr Susan Waugh has revealed the Westland petrel is attracted to the hum of diesel generators. The applicant has not addressed this characteristic. The processing plant is proposed to be run off diesel generators until (no timeframe is supplied by the applicant) line upgrades are made to accommodate 3 phase power. There is a further (and unknown) risk that the noise and vibration of the processing plant itself may also attract tāiko. I note the proposed processing plant does not include sound proofing.
- 19. Despite the updated proposed conditions of consent, the mining, processing, loadout and trucking operations still present light, noise and vibration distraction threats to the Westland petrel. This is inconsistent with the requirement of Policy 11(a) of the New Zealand Coastal Policy Statement (NZCPS) to avoid adverse effects on threatened or atrisk indigenous species and their habitats in the coastal environment. It is also inconsistent with the precautionary principle of the NPS-IB, Policy 3: A precautionary approach is adopted when considering adverse effects on indigenous biodiversity, and 5.7

Precautionary approach (1) Local authorities must adopt a precautionary approach toward proposed activities where: (a) the effects on indigenous biodiversity are uncertain, unknown, or little understood; but (b) those effects could cause significant or irreversible damage to indigenous biodiversity.

- 20. The proposal is emission intensive with all mining, processing, load out and trucking operations diesel fuelled. These new carbon emissions would add to the cumulative effect of climate breakdown and directly impact the Westland petrel. Specifically, Tasman Sea marine heatwaves affect the abundance and distribution of Westland petrel food sources and may impact breeding success. A warming climate also increases the risk of cyclones making landfall on the West Coast. In 2014, Cyclone Ita caused slips and is thought to have destroyed hundreds of petrel burrows. Ref: Storm damage to Westland petrel colonies in 2014 from cyclone Ita, S.M.Waugh et al, Notornis, 2015, Vol. 62: 113-xxx 0029-4470.
- 21. There is a concern regarding section 4.3 *Accidental Discovery* of the Avian Management Plan. Section 4.3.3 of the updated plan states: *In the event of any dead birds (including tāiko) being located within the mining area, the Buller/Kawatiri Department of Conservation office in Westport and Te Rūnanga o Ngāti Waewae will be informed and collection by or delivery to the Department of Conservation will be arranged*. This self-reporting by the very people with least motivation to report petrel deaths is a concern. It is a very similar situation to the marked difference of reported seabird by-catch on fishing vessels depending if a fisheries observer is onboard. There should be some means of independent monitoring.

Community commitment to the Westland petrel

- 22. The Coast Road community has a strong connection to the Westland petrel and the birds form part of the local identity. The community recognises the survival of the Westland petrel depends on all of us and local people and businesses do what they can to avoid and minimise adverse effects. This includes actions such as closing curtains/blinds at night; avoiding outside lights, or if they are absolutely necessary on timed motion sensors/downward facing/shielded; avoiding driving at night during the fledging season and if unavoidable driving slowly and keeping a close lookout for downed birds on or at the side of the road; advocating for the Punakaiki street lights to be turned off; advocating for better light protection measures in Te Tai Poutini Plan; advocating for and achieving good light protection measures for the new Dolomite Point Visitor Centre; and advocating for rapid emission reduction.
- 23. I note many community members voiced their concerns regarding the potential adverse effects on the Westland petrel in their individual submissions.
- 24. The commitment to helping the petrels is such that there have been several community-led initiatives over the past decade.

25. The TāikoFestival ran from 2015 to 2021 and celebrated the return of the Westland petrel in the early autumn. It was a music festival with educational and awareness elements. The late seabird scientist Kerry-Jayne Wilson ran a dusk beach tour and the West Coast Penguin Trust and KCC (the children's club of Forest & Bird) ran educational activities.



Figure 1 - Taiko Festival 2021 Poster



Figure 2 - Kerry-Jayne's dusk beach tour 2021

26. The Punakaiki street lights have been turned off in the fledgling season since 2020. https://www.theguardian.com/world/2020/dec/22/new-zealand-village-turns-off-street-lights-to-stop-birds-crash-landing-on-to-roads The darkness of the Barrytown Flats and Punakaiki communities during the fledgling season is evident to anyone going outside at night at this time of year.

27. Students at the local Barrytown Primary school have a close association with the Westland petrel, and a proud historical connection through discovery by earlier pupils of the nearby colony in the 1940s:

https://www.rnz.co.nz/national/programmes/ourchangingworld/audio/201781440/west-coast-black-petrels

Petrels feature prominently on today's school logo and entrance sign in Cargill Road, and their lifecycle is reflected in the localised curriculum terms for student progress in learning and achievement: Hatching, Fledgling and Soaring.



Figure 3 -Barrytown School Logo



Figure 4 -Barrytown School Sign

28. Westland petrel community event: in October 2023 a collaborative event was held by DOC, Westland Petrel Conservation Trust, West Coast Penguin Trust and Forest & Bird's KCC. The purpose of the event was to raise awareness of the land-based threats to the species and how people can help individually and as a community. A lifecycle and migration game was run for children to connect with and learn about the species. The event was attended by approximately 50 local people and the community petrel patrol was initiated following this event.



Figure 5 - Community Event Poster Oct 2023

- 29. Community Petrel Patrol: starting in November 2023 a roster of local people checks the high risk section of State Highway 6 every night after about 10.30pm for downed birds. Prior to 2023, the patrol was undertaken by the Westland Petrel Conservation Trust, a long-standing trust protecting sub-colonies on private land, involvement in petrel rescue, research and providing petrel tours to advocate and raise awareness of the species. The petrel patrol was twice featured recently on RNZ.

 <a href="https://www.rnz.co.nz/national/programmes/morningreport/audio/2018922644/westlan-d-locals-patrol-for-downed-petrels-https://www.rnz.co.nz/news/national/506582/the-punakaiki-petrel-patrol-helping-an-endangered-bird
- 30. Forest & Bird owns the 27-hectare Dick Jackson Reserve, which contains Westland petrel breeding colonies. Lynette Hartley and Richard Pamatatau were commissioned to produce an artwork, poem and essay as part of Forest & Bird's centennial artists and writers' project. Trevor Hayes, a local poet,has recited the poem at a Pancake Rocks Cafe music night, and afterwards reminded people of the need to drive slowly at night and look out for the birds. There are plans for the artworks to be displayed locally in 2024.



Figure 6 - Forest & Bird magazine article, summer 2023 edition [note: writer's surname was published in error; it should read Richard Pamatatau]

31. An article on the mine threat to the Westland petrel written by the West Coast branch Forest & Bird chairperson [also the writer of this report] was published in the spring edition of the Forest & Bird magazine:



Figure 7 - Forest & Bird magazine article, spring 2023 edition

The applicant's angry reply to the article is shown below in Figure 8.



Figure 8 - Westport News article, 15/9/23

32. In 2020 a seabird sand-castling event was held at Carters Beach where local people created a life sized Westland petrel. The article below was published in the Westport News in January 2020.



Figure 9 - Westport News article, Jan 2020

Submissions and peer reviews

- 33. I endorse Mike Harding's terrestrial ecology peer review with regard to the points made on the Westland petrel. In particular, paragraphs 97 and 98:
 - 97. I proposed in my Review (para 59, above) that the risk to tāiko could be reduced by restricting mining operations and vehicle movements to daylight hours during November to January (inclusive). Further research in response to the information presented by submitters, leads me to conclude that it would be prudent to further reduce the risk of light disturbance to tāiko by ensuring all activities associated with the mine operation (including vehicle movements) are restricted to the hours and weather conditions during which no lights of any form are required.
 - 98. If a restriction such as that outlined above does not eliminate the risk of tāiko mortality, there is no certainty that the activity will avoid adverse effects on tāiko. The precarious state of the tāiko population means that the loss of any individual from the population should be considered an adverse effect. Avoidance of such an adverse effect is required by the NZCPS.
- 34. I agree with Mr Harding's final sentence above. Avoidance of adverse effects on avifauna should be driven by their behaviour, not by varying definitions of night-time. Additionally, timing of the use of lights depends on weather conditions.
- 35. I endorse Dr Susan Waugh's submission (101) and her subsequent expert witness statement. I agree with Mike Harding's paragraph 86 that Dr Susan Waugh has undertaken extensive research on tāiko, and should be considered an expert on this species.

- 36. I endorse the West Coast Penguin Trust submission (61) and note that the trust states: However, we support submissions and advice from the Department of Conservation and their experts who will have more data to support appropriate restrictions, should they vary from our recommendations. Note the trust has attached to its submission important notes from the late seabird ecologist (and Westland petrel expert), Kerry-Jayne Wilson.
- 37. I endorse Bruce Stuart-Menteath and Denise Howard's submission (67). Bruce should be considered a lay expert on the Westland petrel given his decades of dedication to helping and studying the petrel sub colonies on their property.
- 38. I endorse the Forest & Bird submission (237) and acknowledge the Society's particular interest in the species given its ownership of the Dick Jackson Memorial Reserve containing Westland petrel sub colonies.
- 39. I endorse the QEII Trust submission (251) and share the Trust's concerns. Note there are three QEII covenants within 4km of the proposed site, one being an 80-hectare open space covenant, some of which forms part of the only known breeding colony for the tāiko.
- 40. I endorse the Department of Conservation submission (241) regarding the points on the Westland petrel. The concluding paragraph 24 states: *The Director-General submits that the nighttime mining and truck movements will have adverse effects on Westland Petrel that have not been adequately avoided, remedied or mitigated.*

Comment on s42a Officers Report for GDC

- 41. I note Mr Harding made further and modified recommendations on analysis of ecological issues raised by submitters, including from experts of Dr Susan Waugh and Bruce Stuart-Menteath. The modified recommendations do not appear to be reflected in the s42a report, in particular Mr Harding's important paragraph 97 [quoted para 33 above].
- 42. I agree with the critical point made in paragraph 239: Given that the proposal (at this stage) fails to meet Policy 11 of the NZCPS, a precautionary approach as advised by Mr. Harding should be applied. Ideally, this would involve obtaining more information before determining this consent so that any actual and potential effects can be closely considered. If consent was granted without this information, Mr. Harding suggests that the mine should not operate during darkness to avoid effects on Taiko and be setback 100m from adjacent indigenous vegetation and habitat to avoid/mitigate adverse effects on flora and fauna.

Conclusion

- 43. There is the potential for the proposal to have cumulative adverse effects on the Westland petrel population. The notably slow reproductive rate means even a few deaths can have a significant effect on the breeding potential of this vulnerable species.
- 44. The proffered conditions, including the proffered change to mining and trucking during daylight only, would likely only achieve partial mitigation of the adverse effects on the population; they do not avoid adverse effects as required by the New Zealand Coastal Policy Statement (NZCPS).
- 45. The proposal would add new carbon emissions, exacerbating the effects of climate breakdown and directly impact the species.
- 46. The Coast Road community has a strong connection to the Westland petrel and the birds form part of the local identity. The community recognises the survival of the Westland petrel depends on all of us and local people and businesses do what they can to avoid and minimise adverse effects.

'The tāiko is our treasure, not garnets and gold' - Coast Road Resilience Group.