

**FORM 13: SUBMISSION
ON AN APPLICATION FOR RESOURCE CONSENT
UNDER SECTION 96
OF THE RESOURCE MANAGEMENT ACT 1991**

Office
Use Only



PART A: DESCRIPTION OF APPLICATION

CONSENT NUMBER: WCRC: RC-2023-0046 GDC: LUN3154/23	APPLICANT: TIGA MINERALS AND METALS LTD
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DESCRIPTION OF PROPOSED ACTIVITY:
Establish and operate a mineral sands mine, including construction of associated infrastructure.

LOCATION:
Barrytown Flats, west of State Highway 6 (Coast Road), 9km south of Punakaiki township and 36km north of Greymouth.

PART B: SUBMITTER DETAILS

Full name/s	West Coast Penguin Trust		
Postal address	[REDACTED]		
I am the owner/occupier (delete one) of the following property:	NA		
Primary contact person/s	Inger Perkins		
Email address	[REDACTED]		
Phone number/s	Home:	[REDACTED]	Business:
	Mobile:	[REDACTED]	Fax:

Signature of the submitter (or person authorised to sign on behalf of the submitter): 	Date: 6 October 2023
Name (BLOCK CAPITALS): INGER PERKINS	

*If this is a joint submission by 2 or more individuals, each individual's signature is required.
A signature is not required if you make your submission by electronic means.*

- I/we **support** the application numbers indicated by a tick on the back of this form
- I/we **oppose** the application
- I/we **neither support nor oppose** the application

(tick one)

(tick one)

I/we **wish to be heard** in support of my/our submission.

I/we **DO NOT wish to be heard** and hereby make my/our submission in writing only.

If you wish to be heard, and others make a similar submission would you consider making a joint case with them at any hearing

Yes

No

If you indicated you wish to be heard, you will be sent a copy of the S.42A Officer's Report and a copy of the Decision once it is released. Please indicate below which format you would like to receive these documents in:

Electronic (CD) copy

Hard (paper) copy

I/we **have** served a copy of my/our submission on the Applicant as per Section 96(6)(b) of the RMA

Yes

The specific parts of the application that my submission relates to are: *(give details)*

M - Ecological Effects Assessment

M2 - Avian Management Plan

See attached submission

My/our submission is that: *(include whether you support or oppose the application or specific parts of it; whether you are neutral regarding the application or specific parts of it; and the reasons for your views).*

I/we seek the following decision from the Local Authority:(give precise details)

Should the application be approved, we ask that the recommendations presented in our attached submission be used as consent conditions, combined with or adapted by similar recommendations and comments from appropriate authorities such as the Department of Conservation, to ensure that adverse effects on seabirds are avoided.

I am/am not* a trade competitor for the purposes of section 308B of the Resource Management Act 1991.

*Select one.

*I am/am not† directly affected by an effect of the subject matter of the submission that—

(a) adversely affects the environment; and

(b) does not relate to trade competition or the effects of trade competition.

As West Coast Penguin Trust
and advocating for seabirds.

*Delete this paragraph if you are not a trade competitor.

†Select one.

NA I request/do not request*, pursuant to section 100A of the Act, that you delegate your functions, powers, and duties to hear and decide the application to 1 or more hearings commissioners who are not members of the local authority.

*select one.

Important information – Please read carefully.

Public information

The information you provide is public information. It is used to help process a resource consent application and assess the impact of an activity on the environment and other people.

Your information is held and administered by the West Coast Regional Council and Grey District Council in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. This means that your information may be disclosed to other people who request it in accordance with the terms of these Acts. It is therefore important you let us know if your form includes any information you consider should not be disclosed.

West Coast Regional Council 388 Main South Road, Paroa, Greymouth 7805 PO Box 66, Greymouth 7840 Telephone (03) 768 0466 Toll Free 0508 800 118 Facsimile (03) 768 7133 Email info@wcrc.govt.nz Website www.wcrc.govt.nz	Grey District Council 105 Tainui Street PO Box 382 Greymouth, 7840 planning@greydc.govt.nz 03 769 8600
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Note to submitter

If you are making a submission to the Environmental Protection Authority, you should use form 16B.

The closing date for serving submissions on the consent authority is the 20th working day after the date on which public or limited notification is given. If the application is subject to limited notification, the consent authority may adopt an earlier closing date for submissions once the consent authority receives responses from all affected persons.

You must serve a copy of your submission on the applicant as soon as is reasonably practicable after you have served your submission on the consent authority.

If you are a trade competitor, your right to make a submission may be limited by the trade competition provisions in Part 11A of the Resource Management Act 1991.

If you make a request under section 100A of the Resource Management Act 1991, you must do so in writing no later than 5 working days after the close of submissions and you may be liable to meet or contribute to the costs of the hearings commissioner or commissioners. You may not make a request under section 100A of the Resource Management Act 1991 in relation to an application for a coastal permit to carry out an activity that a regional coastal plan describes as a restricted coastal activity.

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least 1 of the following applies to the submission (or part of the submission):

- it is frivolous or vexatious;
- it discloses no reasonable or relevant case;
- it would be an abuse of the hearing process to allow the submission (or the part) to be taken further;
- it contains offensive language;
- it is supported only by material that purports to be independent expert evidence, but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.



WCRC: RC-2023-0046

GDC: LUN3154/23

Resource consent application from TIGA Minerals and Metals Ltd in relation to a site located at Barrytown Flats

Submission from the West Coast Penguin Trust

Introduction

The West Coast Penguin Trust was established in 2006.

Vision: Sea and shore birds and their habitat of the West Coast Te Tai Poutini are healthy and thriving

Our Mission is to achieve our Vision through research, education, awareness, advocacy and practical projects, founded on strong science. Penguins and other sea and shore birds are a treasure or taonga, and we strive to protect and conserve them and the wider marine and coastal environment.

Where there is a perceived risk to sea and shorebirds and their habitat, the Trust will advocate to remove that risk. We believe that the proposed operation presents a risk to both Westland petrels / tāiko and little penguins / kororā. We have reviewed the Ecological Effects Assessment and Avian Management Plan provided in support of the resource consent application and have made comments and recommendations below.

We also recommend that ecological guidance be obtained from those working in the area and with the relevant species including ecological consultants and the Department of Conservation (DOC).

We attach copies of the two sets of notes provided by our late Chair and Scientist Kerry-Jayne Wilson MNZM as part of the application by Barrytown JV Ltd in 2021. These emphasise the need to avoid activity during the hours of darkness, as well as restrictions on lighting and noise controls to reduce risk to tāiko.

Ms Wilson was a respected seabird ecologist with many scientific publications to her name including many related to her field work with Westland petrels / tāiko. The Trust no longer has that expertise but continues to advocate for these species and continues to conduct research into little penguins / kororā with the goal of improving conservation outcomes for these species.



Area of focus

M - Ecological Effects Assessment – ecoLogical Solutions

2.0 We believe that the section 'Ecological Setting' would benefit from reference to the climate. Climate change and the recent Tasman Sea marine heatwaves affect the abundance and distribution of food sources for Westland petrels / tāiko and for little penguins / kororā and are highly likely to 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. The mining proposal would add new emissions, contributing to the adverse effects of global warming on the tāiko, kororā and no doubt many other species.

Westland petrels / tāiko

1.2 This section notes extraction activities will occur between 0700 and 2200 hours daily between 1 February and 30 November and between 0630 and 2130 for December and January. They note that the earlier times are to avoid activities during darkness when young tāiko are most at risk of being disoriented by lights.

Once distracted, tāiko can land on the ground where they are unable to take off again. They may be killed by vehicles or predators or die from exhaustion.

Westland petrels or tāiko start fledging in November. For several years, the Trust has alerted the community through media/social media that there is a risk of these birds becoming disoriented from the beginning of November each year.

The Trust encouraged and supported Waka Kotahi / NZTA to turn off streetlights in the Punakaiki area from early November to mid-January, and this is now an annual occurrence.

Although the nesting sites for tāiko are slightly north of the proposed mine site, these birds are found grounded approximately between Hokitika and Westport.

Westport sunrise and sunset times (NZDT) for November are 6.20/5.53am and 8.17/8.53pm.

For December, they are 5.53/6.00am and 8.54/9.15pm.

To reduce risk of lights from extraction activities including vehicle movements causing tāiko to come down, the proposed times need to be different. Adult petrels will be returning to land after dusk, but fledgling birds will be leaving the colony after dusk.

We recommend that no activities using lights occurs outside of daylight hours (sunrise to sunset), during the high risk months of November to January. This includes truck movements, whether trucks are going north or south, and other vehicles.

This restriction will better meet the requirement of Policy 11(a) of the NZ Coastal Policy Statement to avoid adverse effects on threatened and at-risk species.

However, we also 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.

9.2.2 The proposed limit to mine operations is repeated in this section and we reiterate the need for no activities using lights between dusk and dawn. The proposed times for November to January are not adequate.

The Commonwealth of Australia National Light Pollution Guidelines for Wildlife (Commonwealth of Australia 2020) is referenced in this section. It is a valuable resource, however, although it refers to the risk posed by vehicle headlights and notes that 56 petrel species worldwide are known to be affected by artificial lighting, it is limited in its scope of vehicles to preventing light shining into nocturnal foraging and roost habitat.

Vehicle headlights pose a risk to tāiko. The biggest risk is below and close to the major flyway for these birds between colony and sea. Evidence of grounded birds shows that the risk extends well beyond the flyway. As the Commonwealth of Australia guide notes: “All species active at night are vulnerable as artificial light can disrupt their ability to orient towards the sea.”

We therefore repeat our recommendation that no activities using lights occurs outside of daylight hours (sunrise to sunset), during the high risk months of November to January. This includes truck movements, whether trucks are going north or south, and other vehicles.

Table 22 If the extraction operations including vehicle movements are not restricted to ensure no lights between dusk and dawn for the main risk period of November to January, we believe that the magnitude of effects on tāiko and risk of mortality will be high. Any lights during darkness pose a level of additional risk to these birds, on top of numerous other threats on land and at sea.

Little penguins / kororā

Although the little penguin or kororā is noted in Table 7 as being a bird of conservation interest recorded on eBird within 10km of the proposed site, there is no other mention of these birds in the EEA.

The Trust, in collaboration with DOC, have been recording dead kororā since 2006. Location and likely cause of death if known is added to the database. Dead penguins have been reported just over 1km north of the proposed site and just over 4km south.

In addition, during the Trust’s annual penguin count, a simple walk along the beach, between Razorback Point and 17 Mile Bluff at the north and south ends of the Barrytown flats respectively, and during years 2011-2015, penguin tracks counted by volunteers numbered between 8 and 17.

Kororā are certainly present in this area and there is a chance that they could wander into the proposed mine site.

We recommend that an Avian Management Plan must take kororā into account to ensure that all staff and contractors are aware of appropriate protection measures and what to do should a penguin be found.

M2–Avian Management Plan (AMP) – ecoLogical Solutions

The AMP includes proposed conditions under “18.0 Avian Management”.

We recommend the inclusion of an additional condition such that the Department of Conservation reviews any proposed amendments and then approves any changes to the AMP (18.2).

Westland petrels / tāiko

4.1.3 As noted above, to remove the risk of lights impacting young tāiko, mining operations including all vehicle/truck movements must not occur during darkness.

We recommend that there must be no mining activity between 8pm and 6.30am in November, or between 8.30pm and 6am during December and January.

4.1.4 The two statements beginning “In the event that a taiko collides with a mine related vehicle” should be amended to “In the event that a mine related vehicle strikes a tāiko ...”.

4.2 Mining operation times to be amended as discussed and recommended above.

If possible, we recommend the addition of a phrase to the final sentence in this section: “and the bird encouraged off the road if safe to do so.”

4.3.3 The two final paragraphs refer to a period between 4am and dawn. Most adults will depart pre-dawn during their time at the colony, approximately March/April to December. Adult petrels are occasionally disorientated by lights; this is more likely on wet, still and/or foggy nights. However, fledglings leave the colony throughout the night, approximately November to January. The period of 4am to dawn may therefore be relevant March to October but is irrelevant November to January.

Ideally lights will be avoided during all hours of darkness.

We recommend that these paragraphs are updated to reflect when tāiko could be flying in the area so that they will not be affected by lights associated with the operation, including truck movements.

Little penguins / kororā

2.3.3 Kororā are known to nest along the Barrytown flats coastal area. Dead kororā have been reported not far from the proposed mine site as noted above. They could use the beach in this area at any time of year and adults could be looking for nest sites in late Autumn/early Winter or juveniles could be exploring after fledging around November to January.

3.1 Kororā could be preparing nests from around May/June with egg laying from July. We believe it is unlikely that they would nest within the open farmland or proposed mine site but could be present at the start of the breeding season when looking for nest sites. We also note that the Tasman Sea has started breaching the lagoon to the north west of the proposed mine site as the shingle bank erodes and the same looks close to occurring at the lagoon to the west. If the coastline moves east with such

erosion and potential loss of lagoon areas, it may be that kororā are more likely to investigate the area for new nest sites.

3.5 New section required.

We recommend the addition of a comprehensive section on reducing the risk of kororā entering the site, on reducing the risk of them being killed or injured on site, what to do should they be found and how that will be communicated to all staff and contractors. Such an addition should be approved by appropriately experienced consultants or organisations with relevant local knowledge.

Conclusion

We have provided recommendations to reduce the risk to seabirds should mining be approved.

We acknowledge the expertise of others who have worked with Westland petrels / tāiko and little penguins / kororā in the region, including ecological consultants and the Department of Conservation, and add our support to any submissions that promote better conservation outcomes for these seabirds.



Westland petrels and the proposed Barrytown J.V. Ltd mine

Notes provided by Kerry-Jayne Wilson, Trust Scientist and seabird ecologist

The Westland petrel only breeds in the Paparoa foothills between the Punakaiki River and Waiwhero Creek.

The species is listed as 'endangered' by Birdlife International (2021) and as 'at risk, naturally uncommon' by the Department of Conservation (Robertson et al (2017)).

The Westland petrel is the 10th most threatened seabird by fisheries bycatch in New Zealand waters. The level of bycatch while in South American waters remains unknown.

The species faces numerous threats both on land and at sea as listed by Waugh and Wilson (2017).

The attraction to artificial lights is rated as a relatively low threat but with high uncertainty around the numbers of individuals affected each year. Most petrels disorientated by lights will be fledglings on their maiden flight and most have been found between 16 November and 15 January (Wilson 2016). However, a few birds are found downed by lights between March and early November and these will be adults or pre-breeding birds (Wilson 2016).

91 of the 141 recorded downed birds were found at or adjacent to Punakaiki with 21 at or near Greymouth and 23 at or near Westport (Wilson 2016). Data on the numbers of Westland petrels found disorientated by lights has not been collected systematically so these numbers cannot necessarily be attributed to such disorientation; however, we are reasonably confident that there is no other reason for these birds to be found in these areas.

The proposed Tai Poutini Resources Ltd plant would be located north of Canoe Creek and west of State Highway 6, by their estimation 3.6km south of the nearest Westland Petrel colony (Barrytown J.V. Ltd 2021). In this report their ecologist concludes that 'Overall, the assessment of effects lighting, and this proposed mine, may or may not cause the Westland petrel are assessed as low.' This conclusion is based on very selective use of the available information (most of which I am either author or co-author) and shows their ecologist to have limited understanding of petrel biology.

The flaws in his argument are;

1. *Petrels will not be attracted to the processing site lights as the site is 3.6 km from the nearest colony.* There is no basis for 3.6 km to be considered safe. The Punakaiki Tavern is about 3.1 km from the main Scotsman Creek flyway and birds do land there. Petrels are occasionally downed by lights as far away as Greymouth and Westport and they have been found in Hokitika.
2. Fledglings leave the colony throughout the night, not during the predawn departure of most adults. Petrels could be disorientated by the lights at the processing site and/or by vehicles working at the site.



3. Adult petrels are occasionally disorientated by lights; this is more likely on wet, still and/or foggy nights.
4. Neither Punakaiki township nor the proposed processing plant are on the flightpath most fledglings are likely to take when leaving the colony. Yet every year petrels are found downed in the village. It is likely that these birds made it to sea before being disorientated by the town lights. Both the lights of the village and the proposed processing plant are/will be visible from the sea. Thus, I consider the distance from the shoreline to be a more critical measure than the distance from the colony. The proposed processing plant would appear to be less than one kilometre from the shore.
5. The report does not consider the threat that truck movements past the colonies during the night could present. Each year, a number of petrels are found on the highway itself which suggests to me that those birds were brought to ground by vehicle lights. With up to four truck and trailer movements per hour during the night, these vehicle movements must add to the existing threat posed by nocturnal traffic.
6. On page 13 of their report, their ecologist concludes that 'No mitigation for Westland petrels is required due to the assessment of effects on Westland petrels,---'. Required mitigation should be determined by the district and regional authorities not by the applicant. In my opinion appropriate mitigation measures should include: (i) light spill seaward from the processing plant and vehicles working at the plant should be kept to very low levels particularly between 16 November and 15 January; (ii) trucks should not be permitted to drive past the Westland petrel colonies during hours of darkness between 16 November and 15 January.

In conclusion, the Barrytown J.V. Ltd ecologist's report deliberately plays down any threat the proposed operation will present to Westland petrels. In my view the threat posed by this operation is likely to be significantly greater than that suggested by their ecologist. Unfortunately, it is impossible to quantify the additional threat that lights at the processing plant and vehicle lights will pose to the petrels. This threat will be additional to the many threats already faced by these birds. With ongoing losses due to bycatch, the loss of breeding habitat caused by recent storms, destruction of burrows by goats, the major potential threats due to pigs or dogs entering the colonies as well as the multitude of other threats faced by the species, it would be irresponsible for the Grey District Council or the West Coast Regional Council to permit an activity that will add to the existing threats faced by this endemic species. I strongly recommend that Barrytown J.V. Ltd's proposal to mine the Barrytown Flats not be approved.

References

Barrytown J.V. Ltd. 2021. Barrytown JV Ltd Desktop Ecological Impact Assessment Barrytown Mineral Sand Mine Barrytown Flats. Published by Tai Poutini Resources.

BirdLife International (2021) Species factsheet: *Procellaria westlandica*. Downloaded from <http://www.birdlife.org> on 29/05/2021. Recommended citation for factsheets for more than one species: BirdLife International (2021) IUCN Red List for birds. Downloaded from <http://www.birdlife.org> on 29/05/2021.



Robertson, H.A.; Baird, K.; Dowding, J.E.; Elliott, G.P.; Hitchmough, R.A.; Miskelly, C.M.; McArthur, N.; O'Donnell, C.F.J.; Sagar, P.M.; Scofield, R.P.; Taylor, G.A. 2017: Conservation status of New Zealand birds, 2016. New Zealand Threat Classification Series 19. Department of Conservation, Wellington.

Waugh, S.M.; Wilson, K-J. 2017. Threats and threat status of the Westland petrel *Procellaria westlandica*. Marine Ornithology 45; 195-205.

<https://www.westcoastpenguintrust.org.nz/research/?search=&bird%5B%5D=westland-petrel-taiko-bird#>

Wilson, K-J. 2016. A review of the biology and ecology and an evaluation of threats to the Westland petrel *Procellaria westlandica*. West Coast Penguin Trust, 46 pp.

<https://www.westcoastpenguintrust.org.nz/research/?search=&bird%5B%5D=westland-petrel-taiko-bird#>

Kerry-Jayne Wilson

[Redacted]
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Phone [Redacted]
[Redacted]



Westland petrels and the proposed Barrytown J.V. Ltd mine

Additional comment to the notes provided by Kerry-Jayne Wilson, Trust Scientist and seabird ecologist.

My previous notes concerning the risk posed to Westland petrels by the proposed Barrytown J.V. Ltd mine were based on the information available to me at the time, indicating that operations would be restricted to mining and associated activities over approximately 115 hectares of privately owned farmland near Barrytown. This proposed mine location is Lot I DP412689, Rural Section 2847, Section 5 Block 5 Waiwhero Survey District.

Yesterday it came to my attention that Barrytown J.V. Ltd were seeking a mining permit that would cover the area between Canoe Creek and approximately McMillan Road.

If correct this would greatly increase the potential risk to Westland petrels as it would include the land beneath the major flyway at Scotsman's Creek in addition to all but one (Punakaiki River) flyway used when birds traverse between the sea and their colonies.

Any lights directly beneath, or close to, flyways pose significantly greater threats to the petrels than would the proposed facility at the original site.

If mining is permitted north of the original site, a total reassessment of the risks posed to Westland petrels would be necessary.

Actions to reduce risk may include:

- No mining activities during the hours of darkness
- Noise controls
- Further restrictions on lighting.

Kerry-Jayne Wilson

[Redacted]
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[Redacted]
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[Redacted]

