

**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:

APPLICANT:

WCRC: RC-2023-0046 GDC: LUN3154/23

TiGa Minerals and Metals Ltd

DESCRIPTION OF PROPOSED ACTIVITY:

a mineral sands mine in an area of approximately 63ha over a 12-year period

LOCATION:

Map reference NTZM: 1460770E, 5082683N

Legal description: Lot 1 DP 412689 and Rural Section 2847

PART B: SUBMITTER DETAILS

Full name/s	Coast Road Resilience Group Inc		
Postal address	[REDACTED]		
I am the owner/occupier (delete one) of the following property:	n/a		
Primary contact person/s	Katherine Crick (Chair)		
Email address	[REDACTED]		
Phone number/s	Home:	[REDACTED]	Business:
	Mobile:	[REDACTED]	Fax:

Signature:

[REDACTED SIGNATURE]

Date:

12 October 2023

Name (BLOCK CAPITALS):

KATHERINE CRICK

*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

My/our submission is that: (state in summary the nature of your submission. Clearly indicate whether you support or oppose the specific proposal, or wish to have amendments made, giving reasons)

See attached

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

See attached

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 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.



THE WEST COAST
REGIONAL COUNCIL

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SUBMISSION OPPOSING AN APPLICATION FOR RESOURCE CONSENT UNDER SECTION 96 OF THE RESOURCE MANAGEMENT ACT 1991

PART A: DESCRIPTION OF APPLICATION

CONSENT NUMBER: WCRC: RC-2023-0046, GDC: LUN3154/23

APPLICANT: TIGA MINERALS AND METALS LTD

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

Name: Coast Road Resilience Group Inc (CRRG)

Postal address: [REDACTED]

Primary contact person: Katherine (Laksmi) Crick

Email: [REDACTED]

Phone: [REDACTED]

Signed:



Name: KATHERINE (LAKSMI) CRICK

Date: 13 October 2023

CRRG **opposes** all the applications for the resource consents relating to this proposal.

CRRG **wishes to be heard** in support of this submission.

CRRG **does not wish to make a joint case** with a similar submission at any hearing.

CRRG **wishes to receive** a copy of the S.42A Officer's Report and a copy of the Decision once it is released by hard (paper) copy and in electronic form.

CRRG **will serve a copy** of our submission on the applicant as soon as possible after sending it to the Council, as per Section 96(6)(b) of the RMA.

CRRG is **not a 'trade competitor'** for the purposes of section 308B of the Resource Management Act 1991.

CRRG requests, pursuant to section 100A of the Act, that Councils delegate functions, powers, and duties to hear and decide the application to **one or more independent hearing commissioners** who are not members of the local authority.

CRRG's submission, reasons and decision sought are set out below.

INTRODUCTION

The primary purpose of the Coast Road Resilience Group is to advocate for the wellbeing of the Coast Road (Westport to Greymouth), community and environment through:

- Raising awareness of issues potentially affecting the Coast Road, community, and environment
- Participating in statutory processes under the Resource Management Act 1991 and other legislation in relation to proposals which may adversely affect the Coast Road community and environment, or members or users of it
- Opposing the mining, processing, and transportation of mineral deposits along the Coast Road where that may adversely affect the Coast Road environment and community, or members or users of it
- Support and advocate for projects that appreciate (rather than depreciate) the natural attributes of the Coast Road environment.

Is the whenua something to be tamed, ploughed, fertilised, and mined to extract maximum production and profit? Or can it be more holistic – seeing land for all its benefits: *“Land as a foodscape, a wildscape, a healthscape, a socialscape. A farm could be all of those things,”* Professor Gregorini, head of Lincoln University’s Centre of Excellence for Designing Future Productive Landscapes.

SUBMISSION

Summary

1. Industrial mining of the scale proposed in a rural residential area would have significant and widely distributed adverse effects on people, the community, and the environment.
2. The claimed economic benefits of the proposal are uncertain. Community wellbeing, health & safety, amenity, and other environmental values should not be compromised in the pursuit of speculative economics.
3. Trucking impacts would be more than minor on the State Highway and on its users, on community wellbeing, and on the Westland petrel /Tāiko.
4. The proposal is contrary to the imperative of rapid decarbonisation and transition to a low emission economy.
5. There is the potential for unacceptable cumulative effects on the Westland petrel / Tāiko population.
6. The proposal undermines the West Coast Regional Council’s award-winning promotion of “Untamed Natural Wilderness” and its support of the region’s nature tourism. Local tourism businesses are likely to be adversely affected by the proposal.

7. The radiation risks from the proposal are unknown, but potentially could be at levels affecting human and environmental health. New Zealand currently has no code of practice for managing radiation safety in the mining industry.

Key Issues

8. This submission addresses the following key issues:
 - a) Social and environmental costs for uncertain economic benefits
 - b) Amenity, social wellbeing, and health & safety adverse effects
 - c) Trucking adverse effects
 - d) Adverse effects on and of climate change
 - e) Nature tourism adverse effects
 - f) Adverse effects on Westland petrel / Tāiko
 - g) Adverse effects on indigenous biodiversity
 - h) Adverse effects on the area's hydrology and waterways
 - i) Potential adverse effects of radiation
 - j) Statutory Framework
 - k) Proposed zone change from rural to mineral extraction for the proposed site
 - l) Proposed consent conditions

Social and environmental costs for uncertain economic benefits

9. We oppose the application due to the social and environmental costs of industrial mining at the scale proposed in a rural residential area. The numerous and widely distributed adverse effects outweigh the uncertain economic benefits.
10. We strongly disagree with any claim that the proposal enables people and communities to provide for their social, economic, and cultural wellbeing, and for their health & safety. It would have the opposite result of degrading values and creating health & safety risks.
11. The assessment of economic wellbeing benefits, including job creation and tax revenue, is speculative due to factors such as fluctuating commodity prices, increasing costs, and a significant level of both capital & operating expenditure required at the early stages of the operation without the benefit of early positive cash flow. Community wellbeing, health & safety, amenity, and other environmental values should not be compromised in the pursuit of uncertain economic benefits.
12. The cost of repairing damage to SH6 from the increase in heavy truck movements could be significantly more than the applicant's contribution to the transport fund. The fund is already under severe pressure, and likely will need to be topped up from general taxation, further reducing the actual economic benefits of the proposal.
13. The claimed economic benefits and employment opportunities are presented as regionally significant by the applicant, while the more significant contribution of tourism to the regional economy and adverse effects on the sector are downplayed or disregarded, e.g. the applicant purports that the

West Coast is “...a region where jobs have been hard to come by in recent years”. This is not reflective of the current situation.

14. The mining proposal has an opportunity cost of transitioning to a sustainable and low emission mixed land use model for the Barrytown Flats - to advance the nature economy and in doing so to support and enhance Te Tai Poutini/the West Coast's greatest asset, the natural environment, whilst offering a longevity of benefits to present and future generations.

Amenity, social wellbeing, and health & safety adverse effects

15. We oppose the application due to adverse effects of the industrial development on amenity values. Current amenity values are high and have drawn many residents to the Barrytown coastal environment.
16. The visual impact of mining, ore stockpiles, the 2636m² 15m high building and associated industrial infrastructure would degrade pleasantness, including calming effect of views from SH6 and local homes of green pasture and remnant indigenous forests out to the Tasman Sea. The intensity of heavy trucking would disturb prolonged periods of quiet on and near the highway.
17. The proposal's significant built infrastructure and mining activity would degrade aesthetic coherence, including visual connectivity between ocean, pasture, forest remnants, and the bush-clad hillside; dark sky; sweeping views and the natural character of the coastal environment.
18. The proposal would degrade cultural attributes, including the social fabric of rural neighbourhoods: SH6 links the community but would become a mine haulage road under this proposal. The positive sense of a growing, environmentally aware community would be replaced by anxiety and stress.
19. The presence of an industrial mine operating approximately 125m above mean high water would degrade recreational values of beach-front and lagoon-side relaxation and exploration.
20. The scale of heavy trucking would degrade social and cultural wellbeing. Community wellbeing to a significant extent is about connectedness, which requires a safe and usable SH6 as the area's only transport route.
21. The applicant may be unable to contain dust (particularly in the area's frequent winds above 20km/h) and noise to below permitted limits within the site, resulting in amenity adverse effects.
22. The proposal has adverse health and safety effects, including: SH6 likely becoming much more dangerous, dust, and sleep loss caused by anxiety, stress, and trucking noise & vibration in the early morning and late evening.
23. As a consequence of degraded amenity and social wellbeing values, there is the likelihood of further anxiety and stress caused by reduced property values and difficulties in selling as potential buyers are dissuaded by proximity to mining and trucking.

Trucking adverse effects

24. We oppose the application due to adverse effects of heavy trucking on the State Highway, on its users, on community wellbeing and on the environment.
25. The Coast Road is unsuitable for heavy trucking on the industrial scale proposed. The road is fragile, vulnerable, and easily damaged; the risk of damage from a significant increase in trucking is high. Waka Kotahi already struggles to maintain the highway, with frequent partial or full road closures.
26. The proposal has adverse safety effects on users of the highway. SH6 is already a dangerous road with truck & trailers needing to cross the centre line to navigate tight, blind, often climbing corners. The heavy truck movements at the scale proposed would add significant added risk to navigating residential driveways; school bus runs between Greymouth and Westport; cyclists, pedestrians, and motorists.
27. The proposal risks reputational damage to the regional tourism industry if a tourist, whether pedestrian, touring cyclist or motorist, is seriously injured or killed on SH6.
28. The proposed trucking would have adverse effects on community well-being and mental health, particularly from disrupted sleep with many people, including children, sleeping after 05.00 and before 22.00. Trucking noise and vibration would create stress for hundreds of households situated within 100m of SH6 – from early hours, all day and after dark, 7 days a week, and without respite on weekends – even Sundays - and public holidays.
29. Recent weather events around the motu have shown livelihoods are affected by safety issues and road damage. The impact of the proposal's heavy vehicles jeopardizes the viability of this highly vulnerable stretch of highway. The likelihood of the significant increase in heavy vehicles contributing to road closures is high, and consequently livelihoods would be impacted.
30. The proposed 50 truck movements per day along the 35km or 65km journey would create significant additional dangers to cyclists and risk creating a Coast Road simply too dangerous for cycling. The loss of cycling's positive benefits would have negative impacts on local people's health and wellbeing, and their emissions reduction. It would also have significant adverse effects on a burgeoning cycle tourism industry. Along the vast majority of the 102km distance between Westport and Greymouth there are no cycleways, leaving cyclists with no alternative but to use SH6.

Adverse effects on and of climate change

31. We oppose the application due to adverse effects both on and of climate change.
32. The proposal is greenhouse gas emission intensive and would have adverse effects on climate change from diesel fuelled trucking and mining machinery, and from likely fly-in fly-out staff.
33. Carbon emissions from the proposal would generate more than minor effects during a government declared climate crisis, contributing to the myriad of adverse effects from global warming.

34. The application lacks an emissions report, and this critical lack of information means the proposal cannot be measured against the climate change provisions of the RMA Amendment Act 2020 and the Climate Change Response [Zero Carbon] Amendment Act.
35. An air discharge consent is being sought which we believe triggers the need to have regard to any greenhouse gas emissions from the activity.
36. The application is in opposition to targets and actions of the statutory Emission Reduction Plan.
37. The proposed mining would reduce the average land elevation by 1.2m, potentially exacerbating climate impacts of coastal erosion and seawater incursion into groundwater from sea level rise and storm surges in a warming climate.

Nature tourism adverse effects

38. We oppose the application due to adverse effects of the industrial development on the value of West Coast nature tourism, and its marketing.
39. Industrial mining on the scale proposed would both contradict, and jeopardize, the West Coast Regional Council's own "Untamed Natural Wilderness" strategy, which promotes the West Coast's most valuable asset: its natural environment. Natural resources and attractions are increasingly important worldwide and a permanent investment. The West Coast is cited as one of world's Top 10 regions to visit, with the Coast Road singled out in Lonely Planet.
40. The proposal undermines the government's \$41m investment in the Dolomite Point Redevelopment Project at Punakaiki. Frequent mining trucks would discourage visitors from staying longer and would certainly not 'enhance the visitor experience' as the project aims to do.
41. Local nature tourism operators are likely to be adversely affected by the proposal, both by SH6 use as a mine haulage route and by subsequent reputational damage.
42. Accommodation businesses along SH6, most of which are small, low-key, and locally owned and operated, would suffer from the increased heavy traffic movements, and associated noise.
43. The proposed significant increase in trucking would create serious safety issues for travellers, especially in peak holiday times, when the highway is often already busy.
44. Currently tourism provides ample employment opportunities and is essential to the flourishing economy of the West Coast. Continued support of nature tourism, in conjunction with innovative low emission business development, offers the most sustainable future for the West Coast.

Adverse effects on Westland petrel / Tāiko

45. We oppose the application due to the potential for unacceptable cumulative 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.
46. 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 be killed by vehicles, predators or die from exhaustion. The highest risk is below and close to their flight paths (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.
47. The 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.
48. The proposed northbound trucking hours of 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.
49. The proposed site operation of mining, loadout, and 24/7 processing includes 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.
50. The proposed night time mining, loadout and trucking operations present light 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 at-risk indigenous species and their habitats in the coastal environment.
51. Climate change and the recent 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. The proposal would add new emissions, contributing to the adverse effects of global warming on the Westland petrel.

Adverse effects on indigenous biodiversity

52. We oppose the application due to adverse effects on indigenous flora and fauna and their habitats in the coastal environment. Mining is proposed up to 20m from wetlands and coastal lagoons, including

a SNA, all of which are important habitats for threatened and at-risk indigenous species. Avifauna would be affected by noise, lighting, vibration, human activities and vehicle movements near their habitats, particularly during the breeding season. The proposed management activities and the 20m buffer are not sufficient to avoid adverse effects. An example is the threatened matuku/Australasian bittern which can be expected to seek to avoid noise.

53. The proposal is inconsistent with the requirement of Policy 11(a) of the New Zealand Coastal Policy Statement (NZCPS) to avoid adverse effects on threatened or at-risk indigenous species and their habitats.
54. The mining proposal has an opportunity cost of coastal lowland restoration to achieve urgent climate, biodiversity, and freshwater goals.
55. We wish to note that the Council-commissioned ecology peer review was not completed and available during the notification period. This has put our submission at a disadvantage, as the peer review may contain critical information which is key to our understanding of the effects. This hinders our ability to submit on all the facts.

Adverse effects on the area's hydrology and waterways

56. We oppose the application due to adverse effects on the area's hydrology and waterways. Given the complexity of the area's hydrology and the applicant's highly technical water management systems, as a community group without specialist hydrology expertise we are only able to outline three specific concerns.
57. The proposed mining may result in heavy metals being leached from the disturbed sub-soils, mineral sands and mine waste backfill on exposure to rainwater and air, and cause heavy metal contamination of the coastal lagoons, wetlands, and freshwater springs. A Toxicant Management Plan is proposed to be developed only in response to a threshold level exceedance. The proposed actions to be taken include offsetting or compensating for more than minor effects. This plan should have been developed at the resource consent application stage and should detail actions according to the effects hierarchy of avoid, remedy, and mitigate. Offset and compensate actions for more than minor toxicity effects, such as from heavy metals, are entirely inappropriate and unacceptable.
58. Technical concerns remain from the Council-commissioned peer review hydrogeologist that the significant amount of mine water management infrastructure needed to be installed within 20m of the mine pit wall may lead to pit wall instability.
59. The proposal risks the excavated mine pit causing or exacerbating erosion/dewatering of the coastal lagoon and other adjacent wetlands following a catastrophic earthquake or coastal-inundation event. Scientific research indicates that while we can't predict earthquakes, there is a 75% probability of an alpine fault earthquake occurring in the next 50 years, with a 4 out of 5 chance it will be a magnitude 8+ event. Over the 12-year consent term, this is an approximate 18% probability and cannot be

defined as a “very low likelihood of a catastrophic event” as claimed in the applicant’s geotechnical report.

Potential adverse effects of radiation

60. We oppose the application due to the potential adverse effects of radiation on human health and the environment.
61. The TiGa radiation assessment report consists of an analysis of only two samples, one of which is 20 years old with no chain of custody. Thus, there is no way of knowing if it comes from the proposed mine site. This is an inadequate basis from which to make a decision on the radiation content of the heavy mineral concentrate coming from the proposed mine.
62. New Zealand does not yet have a code of practice for managing radiation safety in the mining industry. TiGa proposes to use the Australian Code of Practice and safety guide published by the Australian Radiation Protection and Nuclear Safety Agency. Thus, TiGa acknowledges managing radiation risk may be a significant issue. Australian standards are inappropriate for NZ where environmental conditions and neighbouring community densities are quite different from those in the sparsely populated arid regions of Australia where much of their mining occurs.

Statutory Framework

63. The proposal is contrary to s6(a) of the RMA and policies 13-15 of the NZCPS. It does not provide for the preservation of the natural character of the coastal environment, wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use and development. Natural character values include the Outstanding Natural Landscapes of Paparoa Ranges West (ONL42 & ONL44), Outstanding Coastal Natural Character of the Paparoa Foothills (NCA40) and High Coastal Natural Character of Pakiroa Beach (NCA41) in the proposed district plan, all of which fall entirely or partly within the plan’s delineated coastal environment.
64. The proposal is contrary to the Resource Management (National Environmental Standards for Freshwater) Regulations 2020. The proposal is to mine within 100m of wetlands. There is not a functional need to mine in the proposed location, nor will the extraction of minerals provide significant national or regional benefits. Therefore, under 45D(6) of the National Environmental Standards for Freshwater, consent cannot be granted.

Proposed zone change from rural to mineral extraction for the proposed site

65. The proposed site is located in the Rural Environment Area in the Grey District Plan, but the proposed Te Tai o Poutini Plan proposes to change the zoning to Mineral Extraction Zone. Many of our members have submitted in opposition to the Mineral Extraction Zone and the Council has yet to hear submissions on the zoning and release decisions. This zone change has no status given the early stage of the proposed plan and the lack of certainty that this zone will remain following Council’s

decision and the appeal process. It should also be given no weight as it goes against professional planning advice, does not meet the proposed plan's own criteria for a mineral extraction zone (of a currently authorised resource consent), and the creation of the new mineral extraction zone clearly fails the test set out under the National Planning Framework¹.

Proposed consent conditions

66. Grey District Council raised concerns with the applicant over the approximately 110 consent conditions proposed to manage the actual and potential effects, with many more sub-conditions and also requirements to comply with management plans. Council noted this will create an exceptionally large and complex operation to manage from a compliance perspective, and questioned whether the local authorities have the existing resources to manage the compliance requirements.
67. This Council acknowledgement highlights both the risk of multiple non-compliance from the proposed operation, and the potential for the burden of complaint to fall on the community.

Relief sought

68. For the reasons set out in this submission and which will be expanded on at the hearing, the Coast Road Resilience Group:
 - (a) considers that:
 - (i) The proposal will have significant adverse effects on the environment which cannot be adequately avoided, remedied, or mitigated
 - (ii) The proposal is not consistent with the Resource Management Act, and many national, regional and district level objectives and policies designed to protect the environment; and
 - (b) seeks that all resource consent applications for the proposed establishment and operation of a mineral sands mine, including construction of associated infrastructure, on the Barrytown Flats are refused.

Thank you for the opportunity to submit.

Signed:



Name: KATHERINE (LAKSMI) CRICK on behalf of CRRG Inc.

Date: 13 October 2023

1. Guidance on Zone Framework and District Spatial Layers Standards (environment.govt.nz). Additional special purpose zones, p7