

Your comment on the Barrytown Minerals Project

Please include all the contact details listed below with your comments and indicate whether you can receive further communications from us by email to substantive@fasttrack.govt.nz.

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)			
First name	Michael		
Last name	Hill		
Postal address	[REDACTED]		
Home phone / Mobile phone	[REDACTED]	Work phone	
Email (a valid email address enables us to communicate efficiently with you)	[REDACTED]		

2. We will email you draft conditions of consent for your comment			
☒	I can receive emails and my email address is correct	☐	I cannot receive emails and my postal address is correct

Please provide your comments below, include additional pages as needed.

Background

1. I am grateful to be given this opportunity to comment on the Fast Track Barrytown Sand Mine proposal. I have been living at this address since July 2020. While conducting due diligence for its purchase I came across industry and popular articles forewarning me that the Barrytown Flats was of interest to miners for the extraction of mineral sands. I did not have to wait long before this became a reality.

2. As a newcomer to the Coast where mining is evidently woven into the fabric of many communities, and having been forewarned of the possibility of a sand mine on adjacent land, it would be hubristic of me to be anti-mining. I am not. But I am a believer in the approach espoused by Sefton Darby in his short book "The Ground Between" (Bridget Williams books) which examines the relationship between companies in extractive industries and local communities. The clue is in the title – the way forward to resolving conflicts of interest should be through respectful and open dialogue. And a willingness to listen. Mr Darby, who has represented both sides of the argument, concludes that it is often the case that both parties adopt defensive postures. However in an environment where there is often a strong imbalance of power and resources, mining companies

are frequently obstructive, withhold and manipulate information and are not totally transparent and open with the communities they are affecting.

3. Sefton Darby's research on how to build trust between communities and mining companies has found that the two main contributing factors are whether stakeholders felt heard and respected, and the instigation of high quality regulations holding companies to account.

4. On the former factor, Taiko Critical Minerals/TiGa Metals and Materials/Barrytown JV fails in my opinion. I feel neither heard nor respected by Taiko/TiGa/BJV.

5. I learned that I was able to comment to the Fast Track Panel not from Taiko or the council or indeed the Fast Track secretariat, but from the Coast Road Resilience Group team. I have not been contacted by the mining company about this application.

6. My property is adjacent to the Barrytown Farms proposed Southern Block mine, separated only by SH6. My property is approximately 250m east from the edge of the 'Southern Block' and 600m east from the 'mining area' (measured on Google Earth using their software). The site for the wet separation plant is approximately 900m south-west of my property.

Interactions with the company

7. In September last year, having missed a community meeting organised by Taiko in the Barrytown Community Hall, I phoned Mike Meehan, Taiko project manager, to ask if I could come to Taiko's office in Greymouth to learn about the new 'Southern Block' proposal. He was very welcoming, explained the project and showed me maps and plans. He told me that they were '99% sure' that they would be applying for consent through a standard RMA application and not the Fast Track. He deflected my questions regarding public notification saying that was a decision for the councils.

8. Mr Meehan commented that all of the conditions from the already consented "Middle block" would be transferred to the "Southern Block" application. This is incorrect. The company has been selective in the conditions it has chosen to include in the application. Notably absent is the avian management plan – an important set of conditions aimed at protecting the westland petrel.

Radiation

9. Mr Meehan said that radiation in minerals from the sand was not an issue, and that it would only be at 'background' levels. He offered no further explanation. He said that the company was only interested in extracting ilmenite, garnet and gold. He did not explain that the company was also interested in removing 'rare earth element minerals' as indicated a few months later on their website and in press releases. Neither did he mention that a 'pre-feasibility study' report received by the company in June 2023 and posted on the investor section of the Taiko website in 2026 contains results from a trial mineral magnetic separation¹ showing estimated levels of radioactivity in the 'non-magnetic concentrate' (~13Bq/g) that exceeds the threshold for radioactive material in the NZ Radiation Safety Act and would require licensing by the Office of Radiation Safety. Under the current proposal, this 'waste' material will be returned to the mine site for backfilling. This needs to be carefully planned and executed to avoid the creation of radiation 'hot spots' as has occurred in sand mines in Australia, where sand mines similar to this have been in operation for many decades.

¹Palaris 2023 Draft Barrytown Sands Feasibility Study, Table 13.7, p127. From Taiko website Investor section, 'Technical Studies' folder.

10. One of the positive aspects to emerge from the community's challenging of the company has been the discovery that the Barrytown Flats vent significant amounts of radon. It is a product of the natural radioactive decay of uranium and thorium in the sands. This radioactive, colourless, odourless inert gas is the second highest cause of lung cancer after smoking². Its abundance in the atmosphere above fractions of Barrytown mineral sand has recently been demonstrated in an academic paper³. I have a radon meter in my house and levels regularly exceed the accepted WHO/NZ Ministry of Health guidelines mean safe limit (100 Bq/m³). While there is no regulation setting an acceptable safe limit for radon in NZ legislation, the recommendation on the Ministry of Health website is to keep levels as low as possible as any quantity of inhaled radon can be harmful. Radon levels fluctuate with atmospheric conditions but they can often be managed with good ventilation – opening windows.

11. I understand that the mining of mineral sands on the Flats will likely vent significant quantities of radon into the atmosphere³. I do not want the mining activity to elevate the natural radon levels in my house any further.

12. While it is now well established that these mineral sands contain low levels of radioactive material and that the extraction and mineral separation processes will concentrate this radioactive material, the problem of dust becomes a concern. The accumulation of dust containing radioactive material over the decades-long life of the mine poses an additional threat of radiation exposure to the community. There is evidence of this from the Australian sand mining industry. For example, the regulations governing naturally occurring radioactive material (NORM) in Western Australia points out that *"in the heavy mineral sands industry the mineral monazite is softer and finer than the other processed minerals, which typically results in the concentration of this mineral in airborne dust being up to 30 times higher than in the bulk concentrate that is being processed"*⁴. Monazite contains uranium and thorium. Management of dust over the lifetime of the project will be critical for minimising exposure to radiation and other potential harmful effects of dust inhalation.

13. I think it is a reasonable request to ask that in the event that the mine is consented, the mine company (whatever their future name may be) is required to install radon and radiation measuring devices at my property and to have them inspected, serviced and results interpreted at regular intervals by qualified professionals.

14. I also suspect that there are many other dwellings on the Barrytown Flats that are in a similar or worse position than myself regarding risk from radon gas and radiation from dust particles. Consent conditions should in my opinion request that the mining company, in consultation with appropriate qualified experts (e.g. health physicist and geophysicist), develop a monitoring programme for all dwellings on the Barrytown Flats that are potentially at risk from elevated radon and/or radiation (and dust) levels as a result of mining activities.

Hours of operation

²<https://www.healthnz.govt.nz/health-topics/keeping-healthy/healthy-homes-environments/hazardous-substances/radon>

³Bradley, JP, Smith C, Chouinard, J (2026) Radiological properties of heavy minerals in the beach sand placer at Barrytown, New Zealand. NZ Journal of Geology and Geophysics 69: <https://doi.org/10.1002/jgo2.70050>

⁴ Western Australian Government Department of Mines, Industry Regulation and Safety document "Managing naturally occurring radioactive material (NORM) in mining and mineral processing – Guide NORM-V Dose assessment. Section 7.8.2, p14.

15. I note in the substantive application that the mine will operate from dawn to dusk excepting several properties along Cargill Road, Warren Road and Lot 2 DP2178 (#6.114, p45 in the substantive proposal) where mining shall not occur between 0600 and 0700 within 500m of the dwellings. As stated above, my property is 250m from the 'southern block'. In my discussion with Mr Meehan (see above) he said that the company plans to use the ground material opposite Prospector Place (I live [REDACTED]) to back-fill the mined areas nearer the coast. Although he said that it was not certain that this would be required.

16. I therefore request that in the event that consent is granted, my property be added to those listed in section 6.114 of the substantive application requiring the company not to undertake any activities adjacent to the property between 0600 and 0700. I also request that the 500m limit for this restriction of operating hours be increased to 1 km.

Consultation/engagement/community representation

17. As mentioned above, Sefton Darby notes that one of the key factors in effective company-community interaction is open and respectful dialogue between the parties. A key part of this will be effective ongoing communication between the parties through formal and informal dialogue.

18. The establishment of a community liaison group and provision for that community group to have a voice for key decision-making during consent condition implementation should be a part of the conditions. Community-company liaison meetings should be independently chaired.

19. Interactions between community and company would be facilitated by having a community website. I request that as a condition of consent, the company be asked to pay for the development and upkeep of a community website which would act as a forum for community issues relating to the mine and have independent editorial oversight. Correctly done, this would greatly facilitate dialogue within the community and between the community and the company.

Financial considerations

20. I note that the Fast Track process has been developed on a cost-recovery financial model. I also note that the Government has closed the MFE Environmental Legal Assistance Fund in 2025. This makes it more difficult for communities to be effectively represented at hearings. If it is within the panel's power, they may wish to consider requesting MFE to make a contribution from the application fee towards legal and other costs imposed on the community group. The panel may wish to recommend to the Government reinstatement of the fund for assisting fast track hearings.

Summary list of requested conditions in the event that the consent is granted

- (a) I support all of the comments and suggested conditions in the Coast Road Resilience Group Comment on the application.
- (b) The fast track panel should consider the findings of Sefton Darby in 'The Ground Between', when making consenting decisions or setting consent conditions - that building trust between communities and mining companies is fundamentally based on whether stakeholders feel heard and respected, and that high quality regulations/conditions are imposed to hold companies to account.
- (c) The mining company, with assistance from suitably qualified independent experts, develop and implement a plan for monitoring radon and ionising radiation at properties adjacent to the 'Southern Block' during mining operations. This would need to include dust monitoring. If the monitoring shows elevated levels, then the company needs to instigate remedial actions at the affected properties.

- (d) The mining company pay for the development and maintenance of a community website, operated by the community, as a primary means of information exchange, communication and discussion regarding mining operations and community engagement.
- (e) Regular meetings to be held between the company and a community liaison group that is independently chaired. The company to pay for secretarial costs if any.
- (f) Add my property to a list of those on the substantive application that are close to the mine site and for which hours of operation of mining activities are amended when the activities are adjacent to the property (6.114 in the substantive application).
- (g) The company to pay for sound-proofing (e.g. double glazing) to windows at my property that face west towards the mine site.
- (h) The fast track panel make representations to MFE managers to reinstate the Environmental Legal Assistance Fund to assist community groups who wish to make legal representations to future fast track panels.

Thank you for your comments