

26 July 2023

Grey District Council
C/- Perspective Consulting Ltd

By email: mark@perspective.net.nz

Dear Mark,

Re: LU3154-23 Request for Further Information

Please see below a response to the Council's request for further information issued on 12 May 2023. Each of your questions are responded to in order below, with attachments enclosed where required.

1. Rule 19.7.5 of the Grey District Plan includes indigenous vegetation clearance rules that stipulate standards for the clearance of indigenous vegetation in proximity to wetlands and rivers. The site layout plan indicates some works in close proximity to wetlands and rivers. Accordingly, please clarify whether it is proposed to clear any indigenous vegetation on the site within:
 - a. 25m of a wetland greater than 0.5 hectare
 - b. 10m of rivers and streams with an average bed width greater than 3m adjacent to the activity.

The site plan and AEE states there is a 20m setback from the coastal lagoon edge and Collins Creek and the northern boundary. The mine boundary avoids any vegetation adjacent to waterbodies. Any vegetation adjacent to these waterbodies is in a tight band of 2-5m width surrounding the waterbodies, and beyond that the site is covered in pasture. No vegetation clearance is proposed within 10m of any stream, or 25m of any wetland.

2. It is expected that signs will be required at the entrance of the site for identification, traffic direction and to meet health and safety requirements. Please confirm if signage is proposed; provide details of the location and dimensions of any signage; assess compliance with the Grey District Plan; and adverse effects of that signage.

Any signs required for traffic direction and health and safety requirements will not be finalised until detailed design (after consent is granted). It is expected that the sign rules in the Grey District Plan will be readily complied with, which allow up to 2m² of signs on any site. Consent is not being sought at this time for signage. Signage will likely be limited to a small sign on the entrance gate inside the site (not at the road boundary) identifying the site, restricting entry and providing contact details for a nominated person on site.

To be defined as a sign under the Grey District Plan the sign must be visible from a public place. Safety signs at the processing plant and mine area will not be visible from any public place.

3. Please confirm whether resource consent is required TTPP rule ASW-R7 in respect of the proposed surface water take.

Any surface water take within the bed of Canoe Creek will not be located on the surface of water. The water take intake structure (if located within the bed) will be a pipe with a filter/fish screen on the end, and will either be positioned in the bed (most likely) or anchored on the bed. It will not be floating and will not be located on the surface of the water. Consent is therefore not required under ASW-R7.

4. Please clarify how Pounamu will be managed on site. There appears to be a inconsistencies between condition 22.1 that states work will cease if pounamu is found and the AEE that states that Pounamu will not be extracted during the mineral sand process, and will be returned to the pit as oversized material and returned directly to the pit.

The AEE has correctly stated that there is no intention to extract pounamu. The extraction method involves passing material through a trommel so that oversized material gets returned directly to the pit. However, it is still deemed appropriate to have an accidental discovery condition, where if Pounamu is identified it is responded to in accordance with standard protocols. Condition 22.1 has been volunteered as a standard West Coast Regional Council condition of consent.

5. Please address how the Pounamu Resource Management Plan addresses the management of Pounamu for mining activities and how the proposal responds to that.

The application site is located in the takiwā of Te Rūnanga o Ngāti Waewae. There is an overarching Ngāi Tahu Pounamu Resource Management Plan dated 2002, and a specific Ngāti Waewae Pounamu Resource Management Plan which sits within this. Only Ngāi Tahu are permitted to extract pounamu, as they retain ownership which was provided under the Pounamu Vesting Act. The Pounamu Resource Management Plan acknowledges that Pounamu discovery during mining operations is managed primarily by the Crown Minerals Act 1991. In addition to the requirements of the Crown Minerals Act, the Pounamu Resource Management Plan requires the use of an accidental discovery protocol. Therefore the application requires the adoption of an accidental discovery protocol whereby if pounamu is discovered it cannot be removed without the approval of the Ngāi Tahu and the relevant Rūnanga. The proposal is consistent with these management plans by volunteering an accidental discovery protocol in relation to Pounamu.

6. Please confirm the location of the proposed 40,000-litre diesel storage tank on the site.

The proposed diesel storage tank is located in the office area adjacent to the plant. Please see the diagram below.

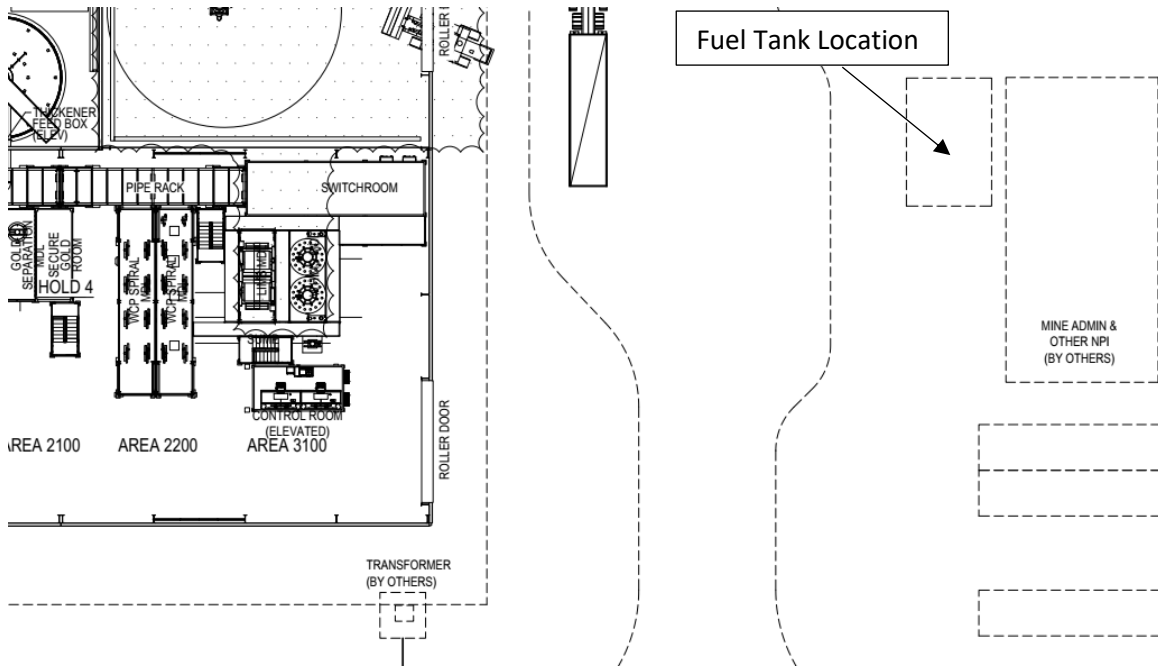


Figure 1: Fuel Tank Location

7. Paragraph 5.35 of the AEE of volunteers a condition requiring a pre-mining survey to be carried out on the two nearest properties. However, that condition is not evident in Appendix P (proposed consent conditions). Please clarify if that condition is proposed.

Paragraph 5.35 was included in error, and the applicant does not propose to include a pre-mining survey. Initially, the applicant was proposing to mine closer to the State Highway, and at this point it was deemed sensible to include a pre-mining survey to ensure that there was no differential settlement identified on neighbouring properties. As a result of the inland extent of the mine being reduced, there is no longer considered a need for a pre-mining survey.

8. There is uncertainty as to number and location of lights and illumination levels, particularly given the need to comply with health and safety requirements. Accordingly, given the sensitivity of the environment and the 24 hour a day operation of the proposal please:

- a. Describe what non-fixed lighting is proposed and if it will comply with the Australian Government's National Light Pollution Guidelines for Wildlife.
- b. Provide a lighting plan for the site including the location of lights, the area of illumination and intensity.
- c. Provide evidence from a lighting expert that the proposed lighting will:
 - i. Comply with health and safety requirements.
 - ii. Will comply with the Australian Government's National Light Pollution Guidelines for Wildlife.
 - iii. Will not exceed rule 19.7.9 of the Grey District Plan.

The Australian Government's National Light Pollution Guidelines for Wildlife are focused on fixed lighting at a site. The only non-fixed lighting will relate to vehicles and moving machinery, which will be lit as required to operate and as per the machinery design. When the machinery is not operating it will be turned off, and it is noted that mining will not occur beyond 10pm at night. In addition to bunding around the plant and the mining occurring within a pit, we consider that the non-fixed machinery and vehicle lighting will comply with the principles of the guidelines.

At this point in time, there is only high level information available about the proposed fixed lighting at the site, but this is guided by the Australian guidelines, and the site specific Avian Management Plan which covers the requirements for fixed lighting, pit lighting, and vehicle headlights both arriving and leaving the site and travelling within the site. Lighting has been considered in the development of the proposal, In particular the processing plant does not include any windows which would allow light to spill and night movements would be directed south to avoid directly passing the tāiko colony. The key risk identified in relation to artificial lighting is in relation to tāiko becoming disoriented by lighting on the site. There are requirements within the Avian Management Plan which cover a scenario where a Tāiko is grounded on the site, which includes a lighting audit. Exterior lighting will be motion sensitive and limited to areas traversed by personnel, such as doorway entries and pedestrian paths between buildings. External doors have been oriented away from the coastline to avoid illumination in this direction. All lights will be shielded, pointed downward and have blue light filtered to reduce light in the blue wavelength. The proposed conditions will require this to occur, in addition to not exceeding 2.0 lux spill which is more stringent than rule 19.7.9 of the Grey District Plan, and is in line with the proposed Te Tai o Poutini Plan light spill requirements.

The applicant proposes to develop a full lighting plan at the detailed design stage of the project, and lighting will be adapted on site following commencement of operations as health and safety requirements arise. To this end, the applicant is prepared to volunteer additional conditions of consent requiring a lighting plan to be developed, certified as complying with the conditions relating to light spill limits and adherence to the Australian guidelines, and a lighting audit to be carried out by a suitably qualified person to confirm compliance. These conditions are as follows:

“16.3 The Consent Holder must provide a detailed lighting plan to the Consent Authority at least 20 working days prior to the commissioning of the processing plant, with an accompanying design statement, prepared by a suitably qualified lighting professional, confirming compliance with conditions 16.1 and 16.2.

16.4 Within 20 working days of the processing plant being commissioned, the Consent Holder must engage a suitably qualified lighting professional to carry out a lighting audit, to confirm that the lighting has been installed as per the detailed lighting plan required by Condition 16.3. The results and confirmation of compliance with conditions 15.1 and 15.2 must be submitted to the Consent Authority within 10 working days of receipt of the audit.

16.5 If the lighting audit establishes compliance with conditions 16.1 and 15.2 is not achieved, the Consent Holder must investigate and implement additional mitigation required to achieve compliance. The Consent Holder must submit a report to Consent Authority within 10 working days of the audit detailing the mitigation measures that

will be implemented and must undertake a further compliance monitoring report within 10 working days of any mitigation measure being implemented to demonstrate the effectiveness of that mitigation.”

9. Please provide the Dust Management Plan refer to in the AEE as Attachment K.

The Dust Management Plan has been uploaded to the dropbox link provided at the time the original application was lodged. We apologise for this oversight.

10. The Ministry for the Environment’s Good Practice Guide for Assessing and Managing Dust states that the deposited dust trigger level may not be appropriate in all circumstances. Accordingly, please clarify if there any characteristics of the dust, such as colour, radiation or other that may mean that a lower dust trigger level is appropriate.

As noted in the Radiation memorandum provided in Attachment T to the AEE, the material found at the site, both in situ and once concentrated into Heavy Mineral Concentrate is not deemed to be radioactive in terms of the Radiation Safety Act 2016. There are no unique characteristics of any potential dust generated by the activity which would mean that a lower dust trigger level would be appropriate.

11. Please detail the methodology used to calculate the proposed \$160,000 bond and how it relates to the proposed development and the conditions of consent.

The methodology used to calculate the proposed bond is based on the proposed maximum disturbed area, and using the West Coast Regional Council’s bond calculation, which recommends setting a bond for mining at \$20,000 per hectare, where mining is at a depth greater than 10m. In this instance the maximum depth of mining is actually less than 10m. Based on 8ha disturbed, an appropriate bond sum has been determined to be \$160,000. This methodology was the subject of questioning at a resource consent hearing for mineral sand mining, and was deemed adequate to achieve site remediation in that instance. This could be confirmed with the West Coast Regional Council who have considerable experience in administering bonds on mining operations on the West Coast and the cost of remediation.

12. Approximately 110 conditions are proposed to manage the actual and potential effects of the proposal with many more sub-conditions and also requirements to comply with management plans. This will create a very large and complex operation to manage from a compliance perspective, both for the consent holder and the local authorities. Accordingly, please explain:
 - a. How the applicant intends to manage these compliance requirements.
 - b. Whether the local authorities have the existing resources to manage the compliance requirements.

Complex consent conditions are not unusual in a mining context. The applicant intends to employ an Environmental Superintendent to oversee the implementation of a compliance and monitoring regime that will ensure that mitigation requirements are put in place, and that conditions of consent and management plans are adhered to.

The applicant is unable to comment on the local authorities' resource levels to manage compliance requirements. The Council has a statutory responsibility to administer the relevant plans and undertake compliance and enforcement of resource consents it issues, and will need to determine how to resource this. However, it is noted that the West Coast Regional Council have an extensive compliance team, and one option may be for the Grey District Council to consider delegating its compliance responsibilities to the West Coast Regional Council if it feels it is not capable of adequately resourcing its statutory responsibilities.

Landscape

13. Please identify or provide an elevation plan (or Digital Elevation Model) which confirms the existing and proposed site levels relating to the proposed mining activity.

Please see the enclosed a report from Palaris which explains how the rehabilitated final landform has been calculated, including a (**Attachment A**). GIS files are also enclosed (**Attachment B**).

Please refer to the attached landscape memorandum in **Attachment C** setting out the responses to questions 14-21, with accompanying revised Landscape Assessment and Graphic Supplement. The memorandum also addresses further questions received from the Council's landscape peer reviewer received after the further information request was issued by Council.

22. If landowner permission cannot be obtained in relation to item 21, Council may be able to obtain landowner permission to make that assessment. In that case, please agree to the commissioning of a report in relation to those matters under section 92(2) of the RMA.

The applicant has assessed the potential visual effects of the proposal from various locations around the site, and was granted access to a number of neighbouring properties on 24 May 2023. Where property access has not been provided, Glasson Huxtable have relied on photographs previously obtained, and those obtained by the Council's landscape consultant.

It is not considered necessary for the Council's landscape consultant to prepare a report on the matters outlined in question 21 because Glasson Huxtable have now been granted access to the site. Accordingly, the applicant does not agree to the commissioning of a report under section 92(2) of the RMA.

In relation to the properties identified in question 21, the applicant has sought and obtained the following written approvals which are enclosed as **Attachment D** to this letter.

- 3261 State Highway 6 (Lot 2 DP 412689) – owned and occupied by Bryan John O'Neill, Jaylene Ann Costello
- RS 6674 – owned by Christopher John Cowan (no occupier)

Ecology

Please refer to the attached ecological memorandum (**Attachment E**) setting out the responses to questions 23 and 24.

25. The information required under items 23 and 24 may require your ecologist to visit neighbouring properties. However, you may not be able to obtain landowner permission to visit those properties. Council may be able to obtain landowner permission to make that assessment. In that case, please agree to the commissioning of a report in relation to those matters under section 92(2) of the RMA.

The ecological memorandum states the following:

“In preparing the assessment of ecological effects which accompanied the application we have been conservative in our assumptions, including that wetlands are present adjoining the site and that bird species may be using the adjoining areas. This conservatism is appropriate and also means that we do not need to visit neighbouring properties because we have assumed the areas have ecological values which need protecting and provided for that protection as part of our recommended management actions.”

The ecological assessment is predicated on the lack of hydrological change proposed through the hydrological assessment and water management regime for the proposed activity. Since the Council has requested agreement to commissioning a report, the West Coast Regional Council has received a peer review of the hydrological assessment and water management concept. The peer reviewer largely agrees with the hydrologist engaged by the applicant, that the hydrological assessment is robust and defensible. As noted by the ecologist, it has been assumed in the absence of a site walkover that there are ecological values worthy of protection within the adjoining wetland, and that avoiding hydrological effects will protect these values. In addition, the Avian Management Plan provides for the protection of all avifauna that may be present within and surrounding the site.

Ecological Solutions have provided further detail of the likely plant species expected to be present within the wetland areas adjacent to the site.

The applicant has requested access to both adjoining properties both in person and in writing on a number of occasions. It is also noted that the adjoining landowners refused access to the ecologist engaged by the applicant when a site visit was conducted by Council engaged consultants on 24 May 2023. The applicant remains happy to carry out on-site surveys of the adjacent wetlands if its ecologist is granted access, however does not agree to the commissioning of a report by the Council's ecologist without also having the opportunity to visit the site as well.

It is our view that it is unnecessary to carry out a detailed study of the vegetation present on site, and the seasonal surveys undertaken included recording devices which would have detected secretive bird species. As the proposed study would take a significant amount of time and would

add little value to the assessment of effects, we do not agree to the Council commissioning a report under section 92(2) of the RMA in relation to questions 23 and 24.

26. Please provide an assessment of the risk of the excavated mine pit causing or exacerbating erosion/dewatering of the coastal lagoon and other adjacent lagoons/wetlands following a catastrophic earthquake or coastal-inundation event.

The Geotechnical Report in Attachment S to the AEE states the following:

“The open pit is expected to be stable for the proposed configuration with no substantial ground displacement due to instability expected > 5m from the pit crest based on this study. The coastal lagoon, Collins Creek, Northern Drain and property boundaries are at low to very low risk of being adversely affected due to mining during operations and for the finished landform.”

As the mining is proposed to be setback 20m from the coastal lagoon, the pit itself will not contribute to erosion of the coastal lagoon or other lagoons because the land stability will not be affected beyond 5m from the pit crest. The stability of the mine pit has been considered including significant seismic loads and associated liquefaction potential, and assesses both the coastal interaction and tsunami risk to the site as being low.

The author of the geotechnical report also advises:

“The pit will be only open at the mining front and gets backfilled as the mining voids advances. The void (that facilitates lateral spread) is exposed for a very short duration. Combined with the very low likelihood of a “catastrophic” event, the potential for extensive damage away from the pit is intuitively Very Low.”

27. Please confirm there is a potable water supply for the site that has capacity to serve the demand created by people using the site.

There is no reticulated potable water supply to the site. The applicant intends to use rainwater collection from roof stormwater to provide for a potable water supply.

28. Please confirm there will be a wastewater treatment system on the site. Please describe the location of the waste water treatment system, and the adequacy of the system to treat the volume of wastewater needed.

There will be no waste water treatment system on site. The applicant intends to capture sewage in a holding tank which will be regularly emptied and disposed of at an authorised facility.

Consultation Update

While the application continues to be processed, the applicant has been engaging with the community and neighbours to the application site, as well as Waka Kotahi and Te Runanga o Ngati Waewae.

As noted above, written approvals have been obtained from two of the closest neighbours. These are enclosed in **Attachment D**.

A site visit occurred on 24 May with Council and applicant engaged experts. As a result of this site visit, and discussions with the immediate neighbours, the applicant proposes to amend the location of the site access, to move it further away from the neighbours to the south. A revised site plan is enclosed in **Attachment F** showing the location of the revised access, and a revised access design and transport assessment is provided in **Attachment G**.

The proposed revision to the site access will improve sight distance, and avoid the need to trim/remove vegetation on the road reserve to the south of the site. The applicant has liaised with Waka Kotahi, who are comfortable with the entranceway location, but have indicated that as it is to be a public process they will wait for public notification and may make a neutral submission to preserve their position.

The applicant continues to engage with Te Runanga o Ngati Waewae, and has not to date received any technical feedback on the resource consent application. The applicant remains willing to consider any feedback received.

Acoustic Peer Review

The Council decided to commission a report regarding the acoustic assessment provided as part of the application. The peer reviewer has recommended a number of changes to the conditions of consent, which the applicant agrees to. A revised set of volunteered conditions of consent are enclosed in **Attachment H**.

I trust this answers your questions, and we look forward to confirmation that processing of the application will now continue.

Yours Sincerely,



Kate McKenzie
Principal Planner
Tai Poutini Resources Ltd

Attachment A: Palaris Final Landform Report

Attachment B: GIS files of post mining contours

Attachment C: Landscape Memorandum and Revised Landscape Assessment – Glasson Huxtable

Attachment D: Affected Party Approvals

Attachment E: Ecology Memorandum – EcoLogical Solutions

Attachment F: Revised Site Plan

Attachment G: Revised Transport Assessment and Access Design

Attachment H: Revised Volunteered Conditions of Consent