

22 December 2020



Pattle Delamore Partners Ltd
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Kia ora Mike,

Request for Further Information

Response required by: 29 January 2021

Record Number/s: CRC204106, CRC204107, CRC204143 and CRC211629

Applicant Name: Taggart Earthmoving Limited

Activity Description: various consents to establish and operate a quarry

Overview

As you are aware, Adele Dawson been processing your consent application. So we can progress your application, we are asking for some further information under Section 92 of the Resource Management Act 1991 (RMA).

As this is a second request for further information, the time period for responding to this request is not excluded from the statutory timeframe.¹ Options available to you are detailed below under **Response Options**. Please complete one of these options by 29 January 2020.

We need this information so we can clarify and better understand any potential effects from your applications.

Information requested

Adele Dawson identified the following information which we need to understand your proposal fully.

1. Managing 1m separation to groundwater during excavation

The application describes that it is proposed to maintain at least 1m separation from the quarry pit floor and groundwater. To achieve this, the application and consent conditions

¹ In accordance with Section 88C(1) of the RMA.

describe proposed monitoring of groundwater levels to trigger backfilling of VENM if there is less than 1m separation to groundwater.

Data from Environment Canterbury monitoring wells in the area (M35/17986 and M35/2679) suggests that groundwater levels can increase by more than 0.5 to 1m within 24 hours. It is not clear based on the maximum extraction area proposed, if there will be sufficient VENM available on site at all times to enable an immediate backfilling response as proposed.

Please demonstrate how backfilling will occur in response to increased groundwater levels while operating within the other constraints proposed on the activity, for example limiting disturbed land to no greater than 2ha. The assessment should take into account the level of fluctuation of groundwater levels and how quickly they may rise and the available material from Stockpile B.

2. Backfilling with VENM

The application describes that VENM will be used to backfill the excavated quarry pit and backfill material may be placed below the highest groundwater level. It is estimated that no more than 87,969 cubic metres of material will be required for each 2ha stage to allow for backfilling back to the original ground level. VENM will meet the WasteMINZ Class 5 criteria which the application acknowledges has a limited source. The backfilling of the excavation is fundamental to providing long-term protection of groundwater by increasing the separation to groundwater.

Prior to moving onto a subsequent stage, the application states that full rehabilitation may not occur depending on demand for aggregate.

Based on the proposed depth of excavation and excavation area, a large quantity of material is required for site rehabilitation. Given the importance of maintaining separation between ground level and highest groundwater level it is critical that at least 1m of separation is maintained. It is currently unclear if there will be sufficient material to provide this long-term protection and how the staging will be managed to ensure that rehabilitated stages (even if partially backfilled) will ensure that groundwater does not rise above the ground surface.

- (a) Please provide further information to demonstrate that sufficient, appropriate backfill material will be available for site rehabilitation.
- (b) Please provide further details regarding how staging will be managed if backfilling does not occur back to the original ground level prior to moving onto a subsequent stage, for example, is it proposed to backfill to a minimum level within each stage?

3. Hazardous Substances and Refuelling

The application states that no routine maintenance of machinery will occur on site, refuelling will occur outside of the extraction pit through the use of a mobile tanker and a spill kit will be maintained on site. Additionally, there is some conflicting information between the proposed conditions and the application and draft quarry and backfill management plan regarding the storage of hazardous substances on site.

Please confirm:

- If any hazardous substances will be stored on site and if so, the quantity and type of hazardous substances to be stored on site
- If any hazardous substances are stored and used onsite, what measures or controls will be used to protect exposed surfaces from potential spills or leaks such as storage on sealed surfaces or within buildings.
- The location outside of the excavation pit where refuelling will occur;
- Methods that will be used when refuelling to avoid spills and manage spills in the event leaks occur.

4. Water demand from quarrying

The air quality assessment appended to the application as Appendix D provides an assessment of the water demand for dust suppression to confirm there is sufficient water available for use authorised by the existing resource consent CRC160231. The assessment refers to the multiple onsite uses for dust suppression over the quarry area, racetrack and access road but does not consider any other onsite water use.

CRC160231 authorises the use of water for dust suppression and irrigation. The assessment of available water under CRC160231 does not consider the demand for irrigation by the racecourse or any water required by the applicant to establish or maintain vegetation cover.

Please provide a revised assessment of water demand for all water uses on site to demonstrate there is sufficient water available under CRC160231.

5. Groundwater level estimates

The groundwater assessment of effects describes the anticipated groundwater levels across the site. An onsite survey was undertaken to identify and measure groundwater levels in bores within the quarry site. Table 2 summarises the depth to groundwater in the bores that remain.

Please confirm if the elevation at each site and the location of the well has been re-surveyed as well. What is the quality of this survey (i.e the level of accuracy) and can the new co-ordinates of the well be provided?

6. Groundwater levels and monitoring

The proposed conditions in Appendix H to the application are unclear if they are referring to actual groundwater levels or the highest groundwater level. As currently drafted, the

conditions seem to limit excavation to no deeper than 1m above the highest groundwater level but we understand that it is proposed to maintain at least 1m separation to the actual groundwater level.

Please review the proposed conditions and revise as necessary.

7. Ponded water

The assessment of effects on groundwater appended to the application as Appendix E states that ponding in open excavations is only likely to occur infrequently and will be for short time prior to the area being backfilled with VENM.

Are any specific actions proposed to address any ponded water within the quarry pit? If so, please describe these actions.

8. Effects of dust discharges on Rangiora Airshed

The site is located in close proximity to the gazetted Rangiora Airshed which is classified as a polluted airshed under the Resource Management (National Environmental Standards for Air Quality) Regulations 2004. The Air Quality Assessment provides a brief assessment of the potential effects of dust discharges of PM₁₀ comparing the site with the monitoring undertaken in Yaldhurst.

Please provide a more detailed cumulative effects assessment which supports why the findings of the Yaldhurst study are applicable to this site, including any limitations of the study. This should include consideration of PM₁₀, PM_{2.5} and respirable crystalline silica.

9. Cumulative effects of dust discharges

The site is adjacent to the Ashley River which is likely to be a natural source of dust emissions. Please provide an assessment of the potential cumulative effects of dust discharges from the Ashley River and the site on neighbouring properties and the Rangiora Airshed.

10. Dust discharge monitoring

Given there is potentially multiple dust sources in the area, how is it proposed to monitor dust from the site? For example, is it intended to isolate dust discharges from the site from other potential sources? Or will the proposed dust triggers apply to the cumulative dust discharges occurring from the site and elsewhere?

11. Dust management plan

Due to the proximity of the site to sensitive receptors, it is critical that effective dust mitigation is undertaken to reduce the potential for dust discharges. The application and air quality assessment describe the type of mitigation measures that may be used to control dust and it is proposed that during operation, all works will occur in accordance with a dust management plan. However further details of the procedures for responding

to dust and standard operating practices would be beneficial to provide a more comprehensive description of the proposed dust mitigation.

Please provide a draft dust management plan that sets out how the proposed dust mitigation measures will be used on site to control dust discharges. The dust management plan should be prepared in accordance with the Ministry for the Environment Good Practice Guide for Assessing and Managing Dust, Appendix 4 and Schedule 2 of the Canterbury Air Regional Plan.

Response options

The options available to you are set in Section 92A(1) of the RMA. You must choose one of the following options.

A. Supply the requested information by 29 January 2021.

If the information can be easily collated and supplied by this date, please provide it in writing (via email is fine) to Adele Dawson.

B. Agree in a written notice by 29 January 2021 to supply the information requested.

Sometimes technical information will take some time to collate or key contacts may not be immediately available. If you need a longer period of time to supply the information requested, please contact Adele Dawson to advise when you can provide the information. You can do this via email or letter. If further time is required, you may request to suspend the processing of the application in accordance with s91A.

C. Refuse in a written notice by 29 January 2021 to supply the requested information.

If you chose not to respond to this letter, then the process for Option C. applies.

If you would like to discuss this request in more detail, please don't hesitate to contact Adele Dawson at adele@incite.co.nz or 027 861 8846.

Ngā mihi

Richard Purdon



Principal Consent Planner