

## Acoustic review

Date:	19 January 2024
From:	Jamie Exeter
То:	Olivia Stirling
Application reference:	RC220325
Applicant:	Hawkeswood Mining Limited
Application details:	Update to application to establish and operate an alluvial gold mining operation
Location:	1346-1536 Teviot Road, Millers Flat
Zoning:	Rural Resource Area and Rural Residential
Activity status:	Discretionary

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#### 1.0 Introduction

Central Otago District Council (**CODC**) has engaged Styles Group to review the updates to the application with respect to potential noise effects.

This review is an addendum to our review of the original application (1346-1536 Teviot Rd-Acoustic Review 20230526). We have disregarded potential noise and vibration effects at any notional boundary within the application site and/or where written approval has been obtained.

# 2.0 Updates to the application

We understand that the updated application proposes larger working areas than were previously assessed, and an increase in the total duration from five years to ten years including rehabilitation.

The nature of the activities, the proposed hours of operation, and the number of staff on site have not been updated.

We understand that further written approvals to the application have been obtained. The nearest sites with notional boundaries where written approvals have not been provided by the owners / occupiers are 1334 and 1403 Teviot Road, and 5280 and 5330 Ettrick-Raes Junction.



### 3.0 Review of potential noise emissions and effects

The information available to us suggests that noise generating activities could now take place nearer to the surrounding notional boundaries than has been assessed. For example, the expanded mining area appears to have moved closer to 5280 and 5330 Ettrick-Raes Junction. However, we were unable to clarify this through our requests for further information.

Figure 1 illustrates the locations of the nearest noise generating activities to 5280 and 5330 Ettrick-Raes Junction. The location used in the noise modelling is labelled "3". The activities in this area are screened by an earth bund. The location labelled "x" is within the expanded mining area under the updated proposal. There is no noise bund between this location and the notional boundaries at 5280 and 5330 Ettrick-Raes Junction.



Figure 1: Locations of activities near to 5280 and 5330 Ettrick-Raes Junction

The noise level predictions do not include mining activities taking place at location "x". There is a risk of the permitted noise limits being infringed at 5280 and 5330 Ettrick-Raes Junction if heavy plant is used in this area without screening.

The updated application does not identify the location of the proposed dredging path. It is unknown whether this has moved nearer to the notional boundaries to the west.

We are not able to verify whether the proposed activities will consistently comply with the permitted noise limits until further information is provided on the proposed activities nearest to 5280 and 5330 Ettrick-Raes Junction and the location of the dredging path.

If the proposal can be designed to consistently comply with the permitted noise limits, as previously assessed, the updated application will generate the same noise effects on the nearest receivers identified in Section 3.5 of our previous review, but over a longer period of ten years instead of five.

We will need to update our assessment of potential noise effects if it is identified that the updated proposal will generate noise levels that infringe the permitted noise limits.



#### 4.0 Recommendations

We recommend that the proposed activities and machinery that may be used at location "x" illustrated in Figure 1 and the dredging path are confirmed and that the details of any further noise modelling and mitigation are provided.

The recommended conditions in our previous review will require minor adjustments to align with the updated application (e.g. references to plans) if the proposed activity is confirmed to comply with the permitted noise limits. Our assessment of effects and recommended conditions will require updating if any infringement of the permitted noise limits is proposed.

We also recommend an update to include references to 5280 and 5330 Ettrick-Raes Junction in the noise monitoring condition (as below) if there will be mining activities at location "x".

7. Noise monitoring must be undertaken by a suitably qualified person on behalf of the consent holder when excavation initially advances to within 350 m of the notional boundaries of 1535A Teviot Road and 5280 or 5330 Ettrick-Raes Junction. The monitoring must include daytime noise readings representative of the worst-case noise emissions during excavation. A monitoring report must be provided to Central Otago District Council within two weeks of the monitoring being completed. The report must include a comparison between the results and the consented noise levels, and any further mitigation that will be required for compliance when the works are in the area of the site nearest to these notional boundaries.

## 5.0 Summary

Styles Group has reviewed the updates to the application with respect to potential noise effects. This review is an addendum to our review of the original application.

The updated application includes further written approvals and proposes larger working areas than were previously assessed, and an increase in the total duration from five years to ten years including rehabilitation. The nature of the activities, the proposed hours of operation, and the number of staff on site have not been updated.

The information available to us suggests that noise generating activities could now take place nearer to the neighbouring notional boundaries than has been assessed and there is a risk of the permitted noise limits being infringed at 5280 and 5330 Ettrick-Raes Junction. The updated application does not identify the activities in the extended mining area near to these properties or show the location of the proposed dredging path. We are not able to verify whether the proposed activities will consistently comply with the permitted noise limits until further information on these activities is available.

The recommended conditions in our previous review will require minor adjustments to align with the updated application if the proposed activity is confirmed to comply with the permitted noise limits. However, we recommend that references to 5280 and 5330 Ettrick-Raes Junction are included in the noise monitoring condition.



If the proposal can be designed to consistently comply with the permitted noise limits, as previously assessed, the updated application will generate the same noise effects on the nearest receivers identified in Section 3.5 of our previous review, but over a longer period of ten years instead of five.

We will need to update our assessment of potential noise effects and recommended conditions if it is identified that the updated proposal will generate noise levels that infringe the permitted noise limits.