

Please confirm whether the proposed bird scaring activities have been included in the noise assessment, and if not, whether it would make any difference to the conclusions of the assessment.

#### Appendix 16 - Acoustics Assessment Report

##### 9.1 Assessment of effects

Unlike some of the other assessment reports, the Applicant's noise assessment does not provide any context as to the status of potentially affected receivers. Although a figure is included showing the site boundary and sensitive receivers (Figure 3) there are no address locations, separation distances to the access route/landfill site boundary and whether the receiver is a dwelling or other noise sensitive receiver such as church, marae, care home or has a commercial use. This information is needed to understand the degree of noise effects.

#### Information sought:

Please identify the noise sensitivity of receivers R1 to R13, including their physical address, distances to the access road, site boundary and the closest point where operational land fill activities will occur.

Addressess included - Section 4.1.2

##### 9.1.1 Vehicles noise

The Applicant's noise assessment in Section 3.2 notes that noise from vehicles on a public road is exempt from Rule 9.3.6. Policy 6.2.1.3 of the Proposed Dunedin Second Generation District Plan (ZGP) requires that new roads or additions or alterations to existing roads should only be allowed where [emphasis added]:

***the road is designed to provide for the needs of all users and to integrate with surrounding land uses as appropriate for the surrounding environment and road classification hierarchy mapped area; and the location and design of the road:***

i. ***minimises, as far as practicable, adverse effects on surrounding residential or other sensitive activities, including severance effects, changes to drainage patterns, and vibration, noise, glare and fumes from vehicle movements; and***

ii. ***maintains or enhances the safety and efficiency of the overall transport network***

Road improvements will be undertaken as part of the proposed landfill:

- Widening of the approaches to and from the junction of SH1 and McLaren Gully Road; and
- Widening and sealing of the McLaren Gully Road carriageway and Big Stone Road.

These improvements allow for the increased vehicle traffic movements accessing the landfill and the larger vehicle types (waste trucks).

#### Information sought:

Please provide an assessment of noise effects from waste vehicles travelling from SH1 to the site entrance on existing noise sensitive locations along the access route to address Policy 6.2.1.3. This assessment should be based on the predicted level of waste vehicle noise expressed as an average LAeq(15min) and representative data for a typical waste vehicle pass-by. This data should then be compared against representative traffic flow data for the current situation, i.e. a comparison of 'with and without development'.

See Section 4.2

##### 9.1.1 Construction noise

Section 4.1 of the Applicant's acoustic assessment assesses construction noise from upgrading the existing public roads.

The assessment assumes that no single receiver will be subject to noise for more than 14 calendar days but, depending upon the construction programme, potentially a receiver could be subject to noise in excess of 14 days, but no more than 20 weeks. The assessment notes in Section 4.1.3 that at the time of preparing the assessment it was unclear as to how much wider McLaren Gully Road would be constructed and whether this widening would bring the upgraded road closer to nearby dwellings. Accordingly, a minimum separation distance of 40 metres has been proposed to achieve compliance with the relevant 20 week construction noise limits of NZS 6803:1999, which are LAeq(15min) 75 dB and LAmax 90 dB.

We understand that a condition has been proposed by the Applicant (condition 16) that addresses construction noise from the road upgrade works and that preparation of a Construction Noise Management Plan (CNMP) is dependent upon whether works occurs within the 40 metre setback. However, condition 17 requires that road upgrade works must be undertaken in accordance with the approved CNMP.

#### Information sought:

Please redraft condition 16 so that a CNMP is prepared regardless of the 40 m trigger to ensure that the Best Practicable Option(s) (BPO) are employed during road improvement works and that any results noise effects are reasonable.

See amended condition (now condition 19).

##### 9.1.1 Operational noise

Section 4.3 of the Applicant's acoustic assessment provides predicted noise levels from landfill activity which is based on all noisy plant operating at one location and at the same time. We consider this to be a worst-case assessment and the assessment demonstrates that the resulting noise levels will be below the daytime noise limit. The Applicant's acoustic assessment assumes that there is one item of plant of each type, which may not occur in practice but the worst-case assessment compensates for any potential minor changes in combinations of plant numbers.

The assessment does not consider that a SAC adjustment of +5 dB is required for operational noise.

Unlike the operational assessment, construction of the landfill (Sections 4.3.4 and 4.3.5) has been undertaken using computer noise modelling using CadnaA software. The assessment correctly identifies that the noise limits of Condition 3 apply to this element of the work rather than the more permissive construction noise limits. The inventory of plant within the acoustics assessment differs to that in the Applicant's integrated transport assessment. There should also be consideration of the need or otherwise of a SAC adjustment to the predicted levels. If a SAC is warranted then receiver R10 would experience noise levels greater than the daytime limit of Condition 3. We consider that a chain saw, vegetation chipper and dozer could qualify for a SAC correction depending upon the model and condition of the equipment.

There is no assessment of the noise generated from the potential LFG electrical generation system, although the assessment report notes that LFG power generation is not part of the application and will be addressed through a separate process. Draft condition 67 includes references to the LFG power generation for the purposes of air quality management.

#### Information sought:

Please provide a separate assessment with SAC from sources such as tonal reversing alarms and banging of tailgates and for the construction of the landfill (from chain saw, vegetation chipper and dozer).

Section 4.3.6

|    |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                             |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| b. | Please include noise management in the proposed Landfill Management Plan (LMP) (draft Condition 67).                                                                                                                                                                | Refer to LMP                                                                                                                                                                                                                                                                                                                                                                                |
| c. | Please justify why there is a difference in the equipment provided in the Transport assessment plant list compared to that in the Acoustic assessment and provide an updated assessment using the landfill's construction plant list from the Transport assessment. | Cross referencing of equipment sound levels between the tables within this report may appear to show discrepancies between the sound levels for the same type of equipment. However, the noise levels provided are specific to the activity being undertaken and the corresponding size and power of the equipment necessary to undertake that activity. No inconsistency therefore exists. |
| d. | Update the noise contour maps with legends so they can be interpreted and identify the noise sensitive receivers and sources of noise.                                                                                                                              | Updated                                                                                                                                                                                                                                                                                                                                                                                     |
| e. | Confirmation is required that LFG power generation does not require further comment in the acoustic assessment or for the purposes of noise management in draft condition 67.                                                                                       | Agreed in discussions that this is outside the scope of the application.                                                                                                                                                                                                                                                                                                                    |