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Otago Regional Councill c/o Shay McDonald Senior Consents Planner

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Boffa Miskell

Dear Shay

Mt Cooee (RM21.668): Response to Addendum - Proposed Expansion, Mt Cooee Landfill, Balclutha - Landscape Mitigation Concept and Effects Assessment Report

## Introduction

Clutha District Council (CDC) operate the Mt Cooee Landfill on Kaitangata Highway, on the outskirts of Balclutha. It is understood the existing landfill cells are nearing the end of their capacity and therefore CDC are seeking to expand within the existing site. As part of the proposal, areas of existing fill are to be capped and remediated, whilst a new area for landfill activity, a transfer station area, and a resource recovery area (RRC) are to be developed.

As part of the consent application, an assessment of landscape effects was provided by Mike Moore:

 Mike Moore, (27 June 2023) Proposed Expansion Mt Cooee Landfill, Balcultha: Landscape Mitigation Concept and Effects Assessment Report (the 'original Assessment' and accompanying 'Figures 1-14').

This original Assessment considered effects on the basis that the proposal is a continuation of an activity, rating the level of effect of the existing landfill and then, additionally, the level of effect of proposed future effects given this baseline.

My peer-review of the original Assessment misunderstood this methodology, interpreting the effects of the proposal provided, as though they assessed a new activity against the existing environment.

Otago Regional Council have subsequently requested an Addendum that adopts a baseline landscape as that which exists at time of lodgement and includes the existing landfill and consider the changes that the proposal will have on the existing landscape.

The purpose of this memo is to review and respond to the clarifications set out in the Addendum provided by Mr Moore (dated 15 November 2024), outlining the areas of agreement and disagreement with reasons provided. The memo should be considered an update to the original

Peer Review (dated 6<sup>th</sup> December 2023). The ratings undertaken as part of this response to the Addendum have largely remained the same when compared to the original peer review/audit. Where they have changed, this largely reflects the changes in understanding of the methodology used in the Assessment (described below) as well as the reduction in proposed duration of the proposed operation.

# Approaches to assessment process

The nature of effect assesses the outcome of the proposal within the landscape. The nature of effect is considered in terms of whether effects are positive (beneficial) or negative (adverse) in the context within which they occur. Neutral effects may also occur where landscape or visual change is benign.

The new effects ratings provided in the Addendum are all either neutral or positive, differing from the 'future effects' ratings of the proposal provided in the original Assessment. The conclusions set out in the Addendum appear to be a type of 'sum' of the two ratings that were provided in that original report. I note that best practice guidance (TTATM) warns against treating landscape effects as though they can be practically measured as a type of mathematical function.

However, this peer review has put aside those observations and read and responds to the findings provided on the basis stated in the Addendum:

'This addendum report will clarify my assessment of the nature and degree of effects of the proposed activity on the landscape values on the basis that:

- The baseline landscape is that which existed at the time of lodgement of the consent application i.e. includes the existing landfill.
- The activity is the proposed expansion (including mitigation measures) but also includes completion of the remaining section of the existing landfill and rehabilitation of the existing landfill.'

## **Landscape Context**

The Site is the Mt Cooee Landfill, located on Kaitangata Highway, on the north bank of the Clutha River / Mata-au River on the outskirts of the township of Balclutha in South Otago. I agree with Mr Moore's identification of the landscape context, including a section of the Clutha River /Mata-Au.

## **Landscape Values**

I broadly accept Mr Moore's identification of existing landscape values at the site and wider landscape. Where Mr Moore notes that, 'The natural character of the Clutha River / Mata-Au is also highly modified in this area but it has associative cultural landscape values to tangata whenua', I would add that the Clutha River /Mata-Au between Balclutha and the sea is identified in the Schedules of the Otago Regional Plan: Water for Otago as having natural ecosystem values and Kai Tahu values and (as previously identified in the original Assessment), has notable physical, associative and perceptual values and is a natural feature of major significance, this lower section of the river having been identified as having moderate natural character.

# **Proposal**

Mr Moore provides a brief summary of the key aspects of the proposed development that will change the existing landscape.

I also consider it relevant to note that the operation of the landfill will involve activity from truck movements and operating machinery, and that the final height of the proposed landfill will be some 7.5m higher than the current high point.

## **Landscape Effects**

#### Physical effects

The Addendum finds there will be a **Positive / Low** level of physical effect during operation and a **Positive / Low-moderate** level of physical effect following final rehabilitation.

I disagree with these assessment ratings.

I accept that the physical changes as a result of the proposal will occur where there is a high existing level of modification at the site and that, overall, the proposal will 'progressively change the expansion area from a pit to a new hill form'. However, I note that the proposal involves an extension to the excavation of land, followed by the fill and a new landfill form that is within the landfill site but is outside the existing landfill boundary.

I also note that the progressive change will involve a level of activity including disturbance to the landform over a 25 year (reduced from the 35 years originally proposed) operational period. The volume, contours and form of the landfill will shift and change as refuse is continuously deposited, moved, exposed and covered. I accept that for general members of the public, the proposed activity may appear as a continuation of the existing landfill however, as I understand it, the proposal is for a new activity.

I also note that while Mr Moore describes the development of the Resource Recovery Area (RRA) as a 'tidy up', the proposal will require earthworks and introduce a new built compound in an area that is currently relatively open, modified, hummocky ground.

There is also a wider landscape context in which the site is located including residential suburban land-use and a golf course. The ongoing physical change to the Site during the operational stages is consistent with the underlying designation including the existing and anticipated land-use for the Site but contrasts with surrounding land-use.

I agree that the rehabilitation of the existing area of landfill is a positive effect and I consider that the proposed mitigation measures will contribute some positive effects to landcover. However, I disagree that the proposed planting will enhance the landscape such that the overall level of physical effect on the existing landscape as a result of the proposed landfill is positive.

I note that Mr Moore wraps up consideration of effects on rural landscape character when addressing visual effects however I address them here as follows:

Overall, I consider that there will be physical effects on the landscape but these will occur within an area that has already been disturbed. The character of the site will not change in terms of the nature of the land use but comprises an increase in prominence of built form and activity and as such, an intensification of the existing character as a modified landfill. Once works are completed, the form and finishing treatment of the landform, including the wider areas of proposed vegetation

will mean the Site is more consistent with a rural landscape however the landform will be a permanent, manmade feature.

## Peer Review Effects Rating

I consider that physical effects on the landscape (landform and landcover) during operation will be adverse and **Low-Moderate** (minor) overall and following closure will be **Low** (less than minor) due to the proposal involving permanent changes to the existing landform.

I consider effects on the existing rural landscape character to be adverse and will be up to **Low-moderate** (minor) during operation, reducing to **Low** (less than minor) following closure and rehabilitation.

#### Visual Effects

#### Kaitangata Highway

The Addendum finds there will be a **Positive / Low** visual effect from Kaitangata Highway in the short – medium term; a **Neutral** effect in the medium – long term, and a **Positive / Low** level of effect following final rehabilitation.

I disagree with these assessment ratings.

The landfill site is directly adjacent to Kaitangata Highway, forming the foreground to views from the road over a length of approximately 700m.

I agree with the original Assessment that landfill elements are already visible from the northern end of this stretch, but views to the site at the southern end of this frontage have a predominantly open, rural character with landform mostly screening the landfill activities further back. Therefore, I consider there is some sensitivity to the proposed activity.

I agree that the landfill activity will become increasingly visible from the highway at the later stages of the activity as it extends above the existing crest of the intervening ridge, with adverse effects on visual amenity currently experienced in these views. I accept that the proposed progressive landform screening will assist in screening activity however the screening itself is a noticeable change to the landscape that will appear as raw, evolving, earthworked slopes at times with potential for higher visual effects at these times.

I note that these effects will not be continuous and that the audience will be transitory, travelling at speed, and views will be available for a short duration.

It is my view that proposed planting will reduce potential visual effects of the RRA over time but not to the degree that the introduction of the proposal as a whole, including the extension of landfill activity, can be considered a beneficial effect on the existing environment.

When the final landform is rehabilitated and put into tussock, it will visually integrate somewhat with the existing setting however the uniform slope of the embankments may contrast with the naturally undulating hill slopes in the wider landscape.

## Peer Review Effects Rating

I consider that effects on views from Kaitangata Highway in the short – medium term will be adverse and **Very Low** (less than minor); in the medium – long term will be adverse and **Low** (less than minor) and following closure will be adverse and **Very Low** (less than minor).

## More distant viewpoints across the Clutha River / Mata-Au

The Addendum finds there will be a **Positive / Low** visual effect from across the Clutha River / Mata-Au in the short – medium term; a **Neutral** effect in the medium – long term, and a **Positive / Low** level of effect following final rehabilitation.

I disagree with these ratings.

I agree that visibility of the proposal will generally be limited from these viewpoints and seen with a backdrop of vegetation and topography and that the context of the existing landfill activity reduces the level of change and contrast that will be experienced in these views.

While rehabilitation of the existing landfill will reduce visual effects to that part of the site in the short term, the new landfill activity will become increasingly visible from the highway at the later stages of the activity.

I accept that the proposed progressive landform screening will assist in screening activity however the screening itself is a noticeable change to the landscape that will appear as raw, earthworked slopes at times.

The RRA will introduce a new, built compound into the site that has potential to be visible in these views. The screen / amenity planting proposed will assist with screening and softening these views once they are established but not to the degree that the introduction of the proposal as a whole, including the extension of landfill activity, can be considered a beneficial effect on the existing environment.

## Peer Review Effects Rating

I consider that effects on views from more distant viewpoints across the Clutha River / Mata-Au in the short – medium term will be adverse and **Very Low**; in the medium – long term will be **Low** and following closure will be **Very Low**.

## Viewpoints to the north

The Addendum finds there will be **Adverse / Very low - Neutral** visual effects from viewpoints to the north in the short – medium term; **Positive / Low** effects in the medium – long term; and a **Positive / Moderate** level of effect following final rehabilitation.

I disagree with these ratings.

Based on the site visit to publicly accessible locations in the vicinity of the private properties to the north, I agree that the existing landfill is likely to be a feature in existing views from these dwellings and is closer than the proposed area of landfill activity. Under the proposal, the existing landfill will be rehabilitated and will be seen in the foreground with the new landfill activity commencing immediately to the south. I note that the proposed RRA and transfer area are also likely to be visible.

Given the elevated views possible, I consider the effectiveness of the progressive reinstatement of the outer slopes of the proposed landfill as visual mitigation will be limited from these locations.

While I broadly agree that once the final landform is rehabilitated and put into tussock it will visually integrate somewhat with the existing setting, the new landfill form will be noticeably higher and the uniform slope of the embankments (as shown in Figure 12a-c of the original supporting graphics) may contrast with the naturally undulating hill slopes in the wider landscape.

Overall, while the existing, closer landfill activity will stop and be rehabilitated, the proposal will result in further visible landfill activity for the 25 year duration of the operation.

I consider that residents at 1, 5, 7, 9 and 15 Arthur Terrace and 36 Golfers Drive may be adversely impacted due to their proximity and potential for elevated views over the Site, taking into consideration the existing landfill activity on the Site.

#### Peer Review Effects Rating

I consider that effects on views from viewpoints to the north (1, 5, 7, 9 and 15 Arthur Terrace and 36 Golfers Drive) in the short – medium term will be adverse and **Moderate** (more than minor); in the medium – long term will be **Low-Moderate** (minor) and following closure will be **Low** (less than minor).

## **Natural Character Effects**

The Addendum considers that in terms of RMA Section 6(a), the Site is not within the margin of the Clutha River / Mata-Au and that the proposed landfill is not within 100m of the wetland within the site and avoids any effects on it and therefore there are no relevant natural character effects.

Regarding the wetland on the Site, I accept the findings of the Terrestrial Wetland and Waterway Assessment referenced previously by Mr Moore, that describe the ecological values of the identified natural wetland as likely to be low and fauna values appearing low.

In considering effects on the biotic and abiotic natural character values of the river, I accept that the 4Sight Assessment of effects on Clutha River water quality v1 (14 April, 2023) finds the effects of the leachate on the Clutha River water quality of the existing landfill is negligible, and, at worst, less than minor.

However, I consider that there is potential for experiential effects on natural character as a result of the duration of additional landfill activity and introduction of built form at the RRA area, given the Site's proximity to the margins of the river.

In response to this view, the Addendum finds that the natural character of both the river and the wetland is significantly modified and, 'the landscape has low sensitivity to the proposed activity and that any adverse experiential natural character effects, affecting the context to the waterbodies, will be very low at most.'

I agree that natural character values associated with the Site are modified by the presence of the existing landfill. I note that the natural character of this section of the Clutha River / Mata-au is also modified but has been identified as 'moderate' and therefore would not describe the natural character of the river as 'significantly' modified.

## Peer Review Effects Rating

I consider that there is potential for up to low-moderate effects on the experiential aspects of natural character of the river at times during the operational stages, and low effects on the natural character of the degraded wetland on the Site. Overall, natural character effects are assessed as **Low** during the operational stages, reducing to **Very Low** following rehabilitation.

# **Summary Effects Table (Addendum and Response to Addendum)**

Effects Assessment	Mike Moore (Addendum) Identified Level and Nature of Effects				Boffa Miskell (Response to Addendum) Identified Level and Nature of Effects			
	During Operation		Post		During		Post	
			Rehabiliation		Operation		Rehabiliation	
Landscape effects								
Physical	sical Positive / Low		Positive / Low-		Adverse / Low-		Adverse / Low	
			moderate		Moderate			
Landscape Character	andscape Character N/A (part of visual)		N/A (part of		Adverse / Low-		Adverse / Low	
			visu	ıal)	Moderate			
Visual effects								
	Short -	Med-	Post		Short -	Med -		Post
	Med	long		Rehab	Med	Lo	ng	Rehab
Kaitangata Highway	Positive /	Neutral		Positive /	Adverse /	Adverse /		Adverse /
Low				Low	Very Low	Lov	W	Very Low
More distant viewpoints	Positive /	Neutral		Positive /	Adverse /	Adverse /		Adverse /
across the Clutha River /	Low			Low	Very Low	Low		Very Low
Mata au								
Viewpoints to the north	Adverse /	Positive /		Positive /	Adverse /	Adverse /		Adverse /
(including res. properties	Very low	Low		Moderate	Moderate	Low -		Low
at 1,5,7 and 9 Arthur	- Neutral					Moderate		
Terrace)								
Natural Character effects								
Natural Character overall	N/A		N/A		Adverse / Low		Adverse / Vey	
							Low	

Yours sincerely

BOFFA MISKELL LTD

Sue McManaway

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