ORC Letter			
Consents Sought		**Response**	**Comment**
	1 Recent discussions with Boffa Miskel staff have identified that several permits to take and use water have been applied for that are more likely to be diversion activities. A number of drilling consents were also applied for and may actually be permitted activities. Please can you provide an updated version of Table 8 of the AEE showing what is being applied for. This should also include the discharge from the stockpile area stormwater system.		The schedule of resource consents required from ORC has been updated in light of the revised design - refer to Section 7.2.2 - Table 8 of the updated AEE. It is accepted that a number of activities that were previously identified in the original application as takes of ground or surface water requring resource consent, are not takes of water. In that regard, the only take of ground water from the landfill groundwater collection system is considered to be a take of water for which resource consent is required as a discretionary activity under rule 12.2.4 of Regional Plan: Water. Furthermore it is accepted that drilling of land for groundwater monitoring bores is a permitted activity under rule 14.2.1.1 of the Regional Plan: Water, and does not require resource consent. Discharges from the site, which includes the stockpile areas are captured in schedule as a discharge of stormwater and contaminants to the Otokia Creek, for which resource consent is required as a discretionary activity under rule 12.B.4.1 of the Regional Plan: Water.
Assessment of Alternatives			
	2 An assessment of alternative locations for creating a landfill was undertaken in the 1990s. Please can you provide details of the criteria that were used in this assessment, what additional matters would be taken into consideration if that assessment had been undertaken in 2020 (e.g. new legislation, urban sprawl etc), and whether the resulting recommendations would have been any different.		Please see the response provided in the attached cover letter to ORC dated 31 May.
Waste Management			
	3 Target 2 of DCC's Waste Minimisation and Management Plan 2020 (WMMP) is to reduce the amount of municipal solid waste disposed to landfill and incineration by at least 50%, and Target 3 is to increase the diversion rate away from landfill and incineration to at least 70% by 2030. Policy 7.4.8 of the RPWaste states, "To promote alternatives to landfills as a means of waste disposal". The explanation of this policy states that landfills should be considered only where other alternatives such as waste minimisation, cleaner production, recycling, or other methods of waste disposal have failed or are impracticable to implement.		This is a statement, no response is required.
	Based on disposal rates of 90,000 tonnes per year, the proposed landfill has an expected life of 55 years. The actual rate of waste disposed will be dependent on both population growth and the effectiveness of waste minimisation initiatives. Nonetheless, the projected rate of waste disposal seems to be at odds with DCC's WMMP targets. Please provide further detail regarding how both of these factors have been considered in the waste disposal rates predicted.		Please see the response provided in the attached cover letter to ORC dated 31 May.
	It may be appropriate to apply an annual limit on the volume of waste that can be received to ensure that the activity is undertaken as described and assessed in the AEE, and that waste minimisation efforts are being implemented as effectively as possible. Please indicate what a suitable annual limit might be based on projected population growth and planned waste minimisation initiatives.		Please see the response provided in the attached cover letter to ORC dated 31 May.
	The WMMP identifies that most of Dunedin's kerbside collection is undertaken by commercial rubbish bin services. Is it proposed that Smooth Hill will be receiving the municipal waste collected by these commercial operators, or is the 90,000 t/yr projection based on the small amount of municipal waste that the DCC currently collects?		Please see the response provided in the attached cover letter to ORC dated 31 May.
	4 Pg 76 of the AEE states, When the future waste and diverted materials system is delivered, there is a risk that landfill revenue will not be maintained which poses flow on effects for DCC"'. Please provide further clarification of what is meant by this statement as it currently suggests that waste minimisation initiatives could be detrimental to DCC's revenue and therefore could be discouraged.		Please see the response provided in the attached cover letter to ORC dated 31 May.
	5 Please provide a copy of the designation for the site that shows the conditions that already apply.		Please see the response provided in the attached cover letter to ORC dated 31 May.
Groundwater and Surface Water			
	6 There will be at least one permit sought to take and use groundwater. Please provide an assessment of this activity and consent term sought against Policy 10A.2.2 of PC7 to the Regional Plan: Water.		An assessment of the application to take and use groundwater from the landfill groundwater collection system has been provided at section 9.1.4 of the updated AEE.
	7 Was any consideration given to potential permitted activities on Otokia Creek and its tributaries downstream of the proposed landfill site?	**1 - Can be easily addressed**	The applicant has assessed the potential effects on the environment as it is. Given the low level of effects on and beyond the site, it is considered unduly speculative to consider potential permitted activities which may be undertaken on Ōtokia Creek and its tributaries.

8	Please provide a plan showing the location of SW7.		SW7 is offsite at the culvert beneath McLaren Gully Road. The location is now shown on Figure 3 in the Surface Water Report and remains a proposed monitoring location.
Noise			
9	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.	**1 - Can be easily addressed**	Please see the response provided in the attached cover letter to ORC dated 31 May.
Draft Consent Conditions			
10	Condition 4: Please confirm how far in advance of construction commencing the detailed designs will be provided to ORC.		Condition 4 has been amended to require the detailed design of the landfill development works, each stage of the landfill, and road upgrades at least 3 months prior to construction commencing. This is considered sufficient time for ORC review, feedback, and response from the consent holder as required.
11	Condition 9: Will regular inspection and reporting be undertaken to ensure that the infrastructure listed is maintained appropriately?		A new condition 12 has been included requiring the main components of the permanent stormwater system to be inspected and maintained in perpetuity. In addition, the final LMP will include ongoing requirements for inspection and maintenance of the landfill assets, including stormwater systems.
12	Condition 17: Please provide further detail regarding the 18-month baseline groundwater monitoring regime proposed, including frequency of testing and determinants to be tested.		Condition 17 has been amended to require baseline sampling to occur at least every 3 months, with the 3 month frequency aligning with the frequency of monitoring during operation of the landfill under condition 19. Reference has also been included to the parameters to be sampled, which are all those parameters set out in Section 8.6.3, Table 15 of the updated AEE.
13	Condition 18: Monitoring in ephemeral watercourses can be problematic. Please advise what alternative monitoring will be undertaken in the event that surface water bodies are dry during the sampling period. Please can you also confirm what the trigger levels will be, or at least provide further detail of how appropriate trigger levels will be determined. It is not appropriate to simply require that the trigger levels are approved by ORC at a later date.		The timeframe for undertaking baseline monitoring of surface water under condition 17 has been increased from 12 to 36 months in recognition of the difficulties of sampling ephemeral watercourses. The increased timeframe will enable sufficient time to enable the baseline water chemestry to the determined. In regard to surfface water monitoring during construction and operation, while surface water monitoring will be unable to occur when watercourses are dry, there will still be an ongoing requirement under condition 19 to sample groundwater from the groundwater monitoring wells downgradient of the landfill , and also collected by the landill groundwater drainage system. As outlined in the Groundwater Report, groundwater at the site has a connection to baseflows within the downstream Otokia Creek recieving environment, and therefore sampling will provide a basis for determining effects on downstream surface water quality, even when no surface flow is evident at the surface water sampling locations. Development of appropriate trigger levels is dependent on first undertaking the baseline groundwater and surface water monitoring under condition 17 over a suffiicent period of time to understand the exisitng water chemistry, including the typical ranges of results over time for each parameter. Only once the baseline water chemistry is determined over that timespan will it be possible to set appropriate trigger levels for monitoring during construction and operation of the landfill. Condition 18 has been amended to make it clearer that the baseline water chemistry data will be used to establish the trigger values.
14	Condition 19: Groundwater monitoring bores shall be monitored at least every 3 months, and the groundwater collection system and surface monitoring points shall be monitored at least monthly. This means that contamination could be occurring for 29 days (surface water) or 89 days (groundwater) before it is detected.		The 3 month frequency for sampling groundwater from the groundwater monitoring wells during construction and operation aligns with monitoring best practice for landfills as set out in the WasteMINZ guidelines. The 3 month frequency for sampling groundwater from monitoring wells during construction and operation will apply to the proposed full suite of trigger levels establised under condition 18. The groundwater sump (GW7) will be continuously monitored for Electrical conductivity, pH, and ammonia, that are indicative of leachate contamination in the groundwater underdrain system. This will provide early warning of any emerging issues and implementation of the response actions a - e. in condition 19.”
a)	Please explain why the adverse effects of this have not been assessed, and how much groundwater contamination is likely to occur before it is detected (given that dilution is being relied upon as a solution in terms of passive leachate contamination of groundwater).		The revised approach to monitoring above will provide early warning of any significant breach of the liner and leachate contamination in the groundwater underdrains. However, it is noted that groundwater movement in the shallow groundwater system is extremely slow. The proposed monitoring regime will provide sufficient time to identify and respond to any contamination in the shallow groundwater system
b)	Please explain whether there would be any meaningful reduction in risk by monitoring more frequently.		See above

c)	Please provide timeframes for the various actions listed under a-d, and also provide further information regarding how significant leachate discharges will be remedied.	Condition 19 has been amended to include timeframes for each of the contingency actions where any exceedance of the trigger levels occur.
15	Condition 37: Please can you also confirm what the trigger levels will be, or at least provide further detail of how appropriate trigger levels will be determined. It is not appropriate to simply require that the trigger levels are approved by ORC at a later date.	Development of appropriate trigger levels is dependent on first undertaking the baseline ground gas emissions under condition 39 (previously numbered condition 37) over a suffiicent period of time to understand the exisiting gas chemistry, including the typical ranges of results over time for each determinand. Only once the baseline gas chemistry is determined over that timespan will it be possible to set appropriate trigger levels for monitoring during construction and operation of the landfill. Condition 18 has been amended to make it clearer that baseline gas data will be used to establish the trigger values.
16	Condition 43: This condition requires that there is no clearance of indigenous vegetation from West Gully 2 & 3. Why are West Gully 1 and the East Gully not included in this condition?	The revised design has moved the footprint further away from West Gully 2 and 3 such there is negligible risk of clearance occuring in this area. Condition 45 (previously numbered condition 43) has however been amended to include West Gullies 1 and 2.
17	Conditions 45 - 50: The letter from T&T attached explains the need for management plans to be provided in advance. There is currently little detail regarding target levels, how exactly they will be achieved, timelines, reporting, or review if management strategies are ineffective. Please take this into consideration when preparing the management plans.	This point is noted. Draft versions of the Falcon Management Plan, Lizard Management Plan, Vegetation Restoration Management Plan, and Bird Management Plan have been provided as part of the draft LMP attached to the updated application. The draft versions of these plans have addressed these matters. Note that plant and animal pest control measures are outlined in the draft LMP, but a specific Plant and Animal Pest Control Programme will be developed as part of the final LMP which will incorporate effective contempoary pest control measures available at that time.
18	Condition 47: The consent condition require that there is no net loss of 'significant' wetland habitat (as per PO-RPS and 2GP), but the new NES indicates that loss of any natural wetland should be avoided. Is it appropriate to focus on mitigating effects on 'significant' wetland only? Or should 'all natural inland wetlands' be considered?	Condition 49 (previously numbered condition 47) has been amended to make it clear that the Vegetation Restoration Management Plan will ensure that there is 'no net loss' of natural inland wetland habitat to align with the NES Freshwater.
19	Condition 50: There is no discussion of potential effects on neighbouring covenants from the influx of pests. Please take this into consideration when preparing the management plan.	This point is noted. As outlined above plant and animal pest control measures are outlined in the draft LMP, and which takes into account effects on neighbouring areas. A specific Plant and Animal Pest Control Programme will be developed as part of the final LMP which will incorporate effective contemporary pest control measures available at that time.
20	Condition 51: Should this condition be expanded to include works within the designation area too?	These conditions (now conditions 52-55) have been amended to refer to construction of the landfill as well. As outlined at section 8.10 of the updated AEE, measures will be later incorporated in the outline plan of works application to avoid, remedy, and mitigate the adverse effects of the landfill construction and operational activities within the existing designation on archaeological values, and in particular for sites 145/71 amd 145/72.
21	Condition 60: Does there need to be a condition limiting the amount of green waste accepted and / or forbidding onsite composting to manage odour (as per pg. 110 of AEE)?	A new condition 28 has been added which states that no composting activity shall occur on site. As outlined in section 5.2 of the AEE, generally organic bulk waste will be diverted from the waste stream, however it is expected that some organic green waste will be intermingled with other waste and be deposited in the landfill. Given the intermingled nature of green waste with other waste, a condition limiting the amount of green waste accepted would not be not be practicable, particularly in terms of the ability to accurately monitor and report compliance with any permitted threshold established.