

**Otago Regional Council
DIRECTIONS OF THE COMMISSIONER**

- [1] I have received and read the ORC's comprehensive Section 42A Report and its associated appendices comprising the evidence of ORC's technical peer review experts.
- [2] To assist the facilitation of an efficient Hearing, I have compiled the questions that I have for those various authors at this stage based on my reading of their material.
- [3] My questions at this stage are focused on the detail and efficacy of some of the recommended conditions of consent.
- [4] I would appreciate it if the various authors could provide a written response to these questions prior to the commencement of the Hearing scheduled for Tuesday 18 March 2025.
- [5] Shay McDonald is permitted to defer questions posed to her to appropriate technical peer reviewers if the subject of the questions is outside her area of expertise.
- [6] The responses should be in the form of a consolidated WORD document provided to the ORC Hearings Administrator, Tamsin Grigg.



Rob van Voorthuysen
Commissioner
3 March 2025

PARAGRAPH or PAGE or CONDITION	QUESTIONS
James Elliot	
49	<p>You recommend that leachate is transported via “enclosed drains”.</p> <ul style="list-style-type: none"> Are you satisfied with the applicants existing and proposed extension of the Landfill Infiltration Trench or are you suggesting an alternative methodology?
57	<p>You recommend “further assessment”.</p> <ul style="list-style-type: none"> Are you suggesting a further modelling exercise or further groundwater monitoring?
70	<p>You recommend an updated LFGRA.</p> <ul style="list-style-type: none"> Would the completion of an undated LFGRA result in: <ul style="list-style-type: none"> New or different LFG monitoring? New or different LFG gas mitigations? New or amended conditions of consent?
Pages 21 to 26	Have your recommendations been adequately captured in the Appendix C recommended conditions of consent?
Dominic Tranci	
	No questions
Tim Baker	
	<p>In Appendix C, Condition 42, Tables C and D recommend monitoring for a large range of parameters.</p> <ul style="list-style-type: none"> Is it necessary to monitor all of those parameters or is it possible to monitor a smaller range of leachate indicator parameters (including zinc and arsenic that you mention in paragraph 7.13 of your evidence), especially given your statement (paragraph 7.15) that the landfill “<i>will have negligible, and potentially no, effects on neighbouring groundwater users</i>” and Dr Wilson’s comment (paragraph 48) “<i>If leachate is migrating offsite, the volumes are presumably small and will be diffuse rather than a point source discharge into the receiving environment. This would likely make measuring the effects of such leachate migration difficult considering the degraded state of the Kaikorai Stream and Estuary.</i>” What in your opinion would be a suite of ‘essential’ leachate indicator parameters?
	<p>In Appendix C (page 9 of 50), Condition 42, Tables C and D require monitoring in numerous categories of groundwater and surface water locations.</p> <ul style="list-style-type: none"> Is it necessary to monitor all of the listed parameters in all of those locations?
10.7	You are supportive of updating the HHRA after 3 years of monitoring.

PARAGRAPH or PAGE or CONDITION	QUESTIONS
	<ul style="list-style-type: none"> ▪ What is the benefit of an updated HHERA in 3 years' time given your paragraph 7.15 statement about the lack of effects on groundwater users, Dr Wilson's statement on measuring the effects of leachate, Dr Wilson's observation (his paragraph 35) that <i>"the Kaikorai Stream has notably elevated E.coli concentrations, which would likely have made the water unsuitable for swimming based on those results"</i>, and Elizabeth Morrison's statement (her paragraph 46) that <i>"the harvesting of mahinga kai and fish, which is currently not possible due to the poor water quality of the lagoon and contributing catchment."</i>? ▪ Would the completion of an undated HHERA be likely to result in: <ul style="list-style-type: none"> ○ New of different groundwater or surface water monitoring? ○ New or different leachate or stormwater mitigations? ○ New or amended conditions of consent?
Peter Wilson	
50	<p>The Resource Management (Freshwater and Other Matters) Amendment Act 2024 that came into force on 25 October 2024 excludes consideration of the hierarchy of obligations contained in clauses 1.3(5) and 2.1 of the NPS-FM from resource consent applications, and from resource consent decisions.</p> <ul style="list-style-type: none"> ▪ Does this alter any of your conclusions or recommendations?
	Can you please also answer the questions posed to Tim Baker from your perspective.
	<p>Recommended Attachment B to the consent conditions (page 18 of 50) contains eight columns.</p> <ul style="list-style-type: none"> ▪ Would it be sufficient to include only the first, second and eight columns, namely "Frequency of Monitoring", "Measurement / Analyte" and "Recommended Trigger"?
Elizabeth Morrison	
18	What are the effects-based rationale for requiring the VMRP to remove existing exotic trees?
34	<p>You state (paragraph 30) <i>"that it is unlikely that the health of the significant areas will be adversely impacted with any potential contamination likely to be low and diffuse"</i>.</p> <ul style="list-style-type: none"> ▪ On that basis what would be the purpose of undertaking <i>"new, novel and costly"</i> ecotoxicity testing? ▪ Would ecotoxicity testing be likely to result in: <ul style="list-style-type: none"> ○ New of different groundwater or surface water monitoring? ○ New or different leachate or stormwater mitigations?

PARAGRAPH or PAGE or CONDITION	QUESTIONS
	○ New or amended conditions of consent?
Tracey Freeman	
	Can you please answer the questions posed to Geoff Elliot regarding his paragraph 70 from your perspective.
Rachael Annan	
	No questions
Shay McDonald	
Page 23 of 68	<p>You recommend a Landfill Fire Risk Assessment (LFRA) and recommended condition 43(a) (page 28 of 50) refers to the LFRA.</p> <ul style="list-style-type: none"> ▪ Who would prepare the LFRA? ▪ Would it be subject to ORC certification? ▪ Which condition addresses recertification of any subsequent amendments to the Fire Management Plan?
Page 29 of 68	<p>You observe <i>“Dr Wilson notes that the diffuse nature of the leachate discharge and the degraded state of the stream and estuary would likely make measuring the effects of leachate migration difficult in surface water”</i>.</p> <ul style="list-style-type: none"> ▪ Given that, what in your opinion is the benefit of the monitoring recommended in C and D of Table 1 in Condition 42 (page 9 of 50 in Appendix C).
Page 30 of 68	<p>You observe <i>“the overarching recommendation from Dr Wilson is that it would be beneficial to reduce the inputs of these where possible.”</i></p> <ul style="list-style-type: none"> ▪ What is your understanding of how that might be achieved?
	Would it be useful to have a condition that lists all of the management plans that are to be prepared for ORC certification?
Schedule 1 – General Conditions	
Conditions 5 to 11	Given there are only two neutral submissions from lay persons, what in your view is the benefit of a CLG?
Condition 50	Is it technically possible to prevent further exceedances of the trigger levels?
Condition 52	<p>Your recommended amendments are incomplete, apart from a reference to “sheet piling”. What did you envisage here?</p> <p>Is it technically possible to mitigate these effects?</p>
Condition 53	<p>Clause (a). Is it technically possible to identify where leachate is likely to be entering surface water?</p> <p>Clause (c). What thresholds or guidelines are you contemplating apart from those listed in Attachment B to the conditions?</p>
Condition 55	What is your understanding of the benefit of the updated HHERA?
Attachment C	The Attachment relating to a BOND is empty. What do you envisage here?

PARAGRAPH or PAGE or CONDITION	QUESTIONS
Discharge Permit RM23.185.06	
Condition 3	Is it technically possible to <u>avoid</u> adverse effects resulting from discharges to air or can those effects only be minimised to the extent practicable?
Condition 30	What remedial actions are envisaged to reduce methane gas emissions?