

RM24.098
21 March 2025

Via email to: carmen@planzconsultants.co.nz, gnel@wastemanagement.co.nz

Kia ora

Request for further information under section 92(1) of the Resource Management Act 1991 (the Act) – Consent Application Numbers RM24.098.

Thank you for your application to replace various consents for the purpose of managing a closed landfill, Fairfield.

An initial assessment of your application has been made by SES Consulting and SLR Limited, who are providing a technical audit of the application. To be able to make a full assessment of the application, I request the following information under section 92(1) of the Resource Management Act (the Act).

s92 Questions Waste Management Limited

The questions below have been separated into general topics in which they relate to.

Ecology:

Ecology Monitoring Program proposed

Q1: Please provide further detail of what the Ecology Monitoring will specifically entail. Your answer should include types of monitoring, locations, and frequencies.

Q2: Please explain how the outcomes of the Ecology Monitoring will be used to inform future management, should adverse impacts be observed in the data. For adaptive management to be appropriate, trigger levels, or observations that would result in actions, need to be set for any monitoring, and the remedial actions that could be taken must be set out. Ultimately, these would need to be included in an updated Aftercare Management Plan, to be required as a condition of consent.

This information is being requested to better understand the proposed management, including adaptive management, of adverse effects during the closure phase, and the remedial actions that are available.

Groundwater, Leachate, and Landfill Design:

Q3: Please provide a consolidated table of monitoring well details, including their screened interval relative to the landfill waste profile i.e., screened within, across, below, or outside of the waste profile.

Q4: Please provide information on the groundwater quality sampling technique and methodology that was followed for the collection of groundwater samples, including the qualifications of the person who collected these samples.

Q5: Please confirm if any of the monitoring wells, surface water locations, or leachate has had Per- and polyfluoroalkyl substances (PFAS) analyses carried out on them? If so, please provide a copy of the results.

Q6: Please provide a current assessment of the cumulative impact of leachate contaminants on the receiving environment

At the time being it is not clear to what degree the adverse effects observable in the degraded receiving environment are attributable to the Fairfield landfill. The above information is requested to minimise the uncertainty in the effects assessment.

Long Term Landfill Management

Q7: Please describe what measures are proposed to reduce and manage leachate generation over time.

Q8: Please confirm the current head of leachate within the waste profile.

Q9: In the event that you cannot measure the leachate head due to insufficient information, please provide a discussion on the risks and benefits of installing additional wells now versus after consent is granted, taking into account available information about the leachate head and the practicability of any actions that could be taken to reduce leachate head.

This information is being requested as long term closed landfill management should seek to reduce leachate generation potential and manage the head of leachate on the base.

Western Landfill

The application notes that there is no stormwater control for the western landfill and that the western landfill has been covered but not formally capped. At this stage there is not sufficient evidence to justify that this is an acceptable long term leachate management approach for the site.

Q10: Please provide confirmation of the depth and type of cover applied to the western landfill.

Q11: In the absence of existing data, please complete a potholing exercise with permeability testing of cover materials.

Q12: Please provide an assessment of changes in leachate volume that would occur if the western landfill was formally capped, and stormwater was cut-off/redirected. This will require the development of a water balance for the site, and a subsequent assessment of potential changes in leachate generation should additional capping of the western landfill be undertaken.

Surface Water:

Long term assessments

Q13: Table H1 presents long term median and 95th percentile water quality data (5 year and 20-year summaries of the four monitoring sites). Please update Table H1 to include sample size.

Q14: Please include a Time Trend analyses (e.g. NIWA Time Trends) to support the findings in the PDP report and to understand the trends over time of this data and discuss whether this analysis supports the broader statements that water quality in the wetland swamp and tributaries, whilst degraded, are relatively stable.

Table H1 data (Reference to PDP technical assessment on groundwater and surface water)

Q15: Referencing Table H1 data, please indicate if the dissolved zinc data was assessed against hardness modified Default Guideline Values.

Q16: Referencing Table H1 data, please confirm if the ammoniacal-nitrogen measurements are pH adjusted assessments.

Cumulative effects

Q17: Please update the PDP *Groundwater, Surface Water, and Ecological Assessment* to include an assessment of actual and potential cumulative effects on surface water which takes into account the stormwater discharges and ongoing landfill closure operations, as well as the leachate discharges. This may require subsequent updates to the ecological assessment.

This information is required to understand the technical information that has been provided to make an assessment on the adverse effects the activity is having on surface water.

Stormwater

Q18: Please provide additional information on where surface water is draining to if it is not draining to the Weighbridge Pond.

- It is noted the PDP report states “A drainage channel was formed in the cap on the southern slope to direct stormwater runoff from the upper section of the landfill towards the ‘Weighbridge Pond’ but to date no water is entering the pond.” From the provided description, it is not clear where the surface water is draining to. Is this a result of infiltration in the pond itself, or through the landfill cap?

Q19: Please provide an assessment of stormwater volume for an annual basis. Please include a description of the capacity for the ponds and whether the current capacity of the ponds will be sufficient to accommodate future climate change effects on rainfall.

Q20: Please provide an assessment of effects on Christies creek and Coal Creek given there is no stormwater control on the Western Landfill area.

This information is required to ensure that stormwater is being adequately managed on site and to ensure that the actual and potential adverse effects are understood.

Hazards:

Q21: Please provide a brief qualitative assessment of the cumulative effects associated with natural hazards that could be expected over the 30-year consent term with respect to the application site. Please include:

- Commentary around the likelihood of cumulative hazards occurring.
- What the implications for the closed landfill site might be.
- Any additional hazard mitigation measures that might be warranted.

This information is required to ensure that potential natural hazards have been appropriately accounted for in the long-term management of the landfill.

Air Quality:

To ensure any subsurface migration of landfill gas beyond the site boundary is appropriately monitored and managed, Mr Iseli recommends that two additional landfill gas monitoring wells, screened to at least 3 m deep, are installed along the northern site boundary of the Eastern Landfill, prior to any residential development occurring in this area. Suggested locations are at the site boundary to the north of MW1 and MW3 shown on the plan below, taken from the PDP report.

Q22: Noting that the drilling of contaminated land requires a land use consent under 5.6.1(1) of the Regional Plan: Waste for Otago, please confirm if the Applicant would like to include this drilling as part of this application RM24.098, or whether the Applicant would prefer to apply for these consents separately, should this application RM24.098 be granted. Please note, if a separate application is made and is not granted prior to the decision on RM24.098 then there will be less confidence that landfill gas is being monitored appropriately.

The additional LFG wells would be beneficial to the ongoing monitoring of landfill gas.



Q23: Please confirm if you agree to adopt the proposed condition changes below.

Additions are made in and blue and deletions are struck through in red.

4. The Consent Holder may change to a passive landfill gas management system where the landfill gas at the Eastern Landfill is no longer flared, provided:

- a) *A suitably qualified and experienced person must prepare a report which confirms that the criteria, or trigger levels, specified in the AMP for changing to a passive landfill gas management system are met; and*
- b) *Written notice of the intended change has been given to the Consent Authority in the form of a report, at least one month prior to changing to a passive landfill gas management system; and*
- c) *The Consent Holder has received written confirmation from the Consent Authority certifying that the proposed amended monitoring programme is appropriate.*

6. Within three months of the commencement of this consent, and thereafter following any amendments to the AMP made in accordance with Condition 8(i), the Consent Holder must submit an AMP to the Consent Authority for certification. ~~If the Consent Holder has not received a response from the Consent Authority either certifying the AMP or refusing to certify the AMP within one month from the date of submission of the AMP, the AMP is deemed to be certified.~~

Changes to condition 11: Monitoring wells G35 (cesspit) and G36 (basement) will need to be added to the list, plus the recommended two new monitoring wells along the northern boundary of the Eastern Landfill to complement current monitoring in G34. An updated monitoring location plan will be required from the applicant accordingly, for attachment to the discharge permit.

Q24: Please confirm if you agree to adopt the proposed condition below. Specific wording can be agreed upon at a later stage.

X. The Aftercare Management Plan must be updated within [TIMEFRAME TO BE SPECIFIED], to include follow up actions to remedy observed adverse impacts following ecology monitoring.

This is required to ensure that any observed adverse effects on ecology are being addressed through the Aftercare Management Plan.

Defence Against Water and Diversion of Water

Q25: Please provide modelling of any diverted surface water flows that will occur as a result of the increase in height of the landfill's perimeter access road.

Q26: Please provide an updated assessment of effects using the results of the modelling required by question 25.

Cultural Impacts Assessment:

Q27: Please confirm if any updated solutions will be adopted to improve the existing leachate interception?

- It is noted that the Applicant is proposing 5-yearly reviews of the existing management system. Has such a review of the system been undertaken recently and has it been identified that any improvements could be implemented.

Q28: Has a Restoration Plan for the Kaikarae Estuary, Wetland and tributaries been drafted? And has this been developed in partnership with manawhenua. If not, do you have a time frame for this?

Other

Q29: Given the extended length of time since the lodgement of this application, please send through any additional data that may have been gathered since lodgement.

This is required to ensure that all relevant data is provided to facilitate with the assessment of the proposal.

Q30: Please provide an assessment against the relevant policies and objectives of the New Zealand Coastal Policy Statement

This is required as the Coastal Marine Area is in proximity to the closed landfill, and, it has been assessed that there are downstream adverse effects occurring.

Your application will be placed on hold under section 88C of the Act until the requested information has been received. Unless I hear otherwise from you I will continue to do some minor work on your application so that we can progress it once the application comes 'off hold'.

In accordance with section 92A of the Act, please respond within 15 working days from the date of this letter (**10 April 2025**) with one of the following:

1. The information requested above; or
2. Written advice that you agree to provide the information, and the date by which you intend to provide it; or
3. Written advice that you refuse to provide the requested information.

The Act requires Council to publicly notify your application if you do not provide the requested information before the due date (or an agreed alternative date), or if you refuse to provide the information. It is, therefore, important that you contact us promptly to discuss an alternative timeframe if you are unable to provide the information by the due date.

If the information you provide raises more questions, your application will remain on hold until sufficient information has been provided to enable processing to continue.

If you have any further queries, please contact me on (03) 474 0827 or 0800 474 082.

Information on the current processing costs for your application is included in the email relating to this letter.

Yours sincerely



Brittany Watson
Consents Planner
21 March 2025



Shay McDonald
Senior Consents Planner
21 March 2025