

**IN THE ENVIRONMENT COURT
AT CHRISTCHURCH
I TE KŌTI TAIAO O AOTEAROA
KI ŌTAUTAHĪ**

Decision No. [2023] NZEnvC 208

IN THE MATTER of the Resource Management Act 1991

AND an appeal under s120 of the Act

BETWEEN NELSON REGIONAL SEWERAGE
BUSINESS UNIT

(ENV-2023-CHC-33)

Appellant

AND TASMAN DISTRICT COUNCIL

Respondent

Environment Judge J J M Hassan – sitting alone under s279 of the Act

In Chambers at Christchurch

Date of Consent Order: 22 September 2023

CONSENT ORDER

A: Under s279(1)(b) of the RMA,¹ the Environment Court, by consent, orders that:

- (1) the appeal is allowed to the extent that amendments to the conditions of resource consents RM200638, RM200639, RM200640 and RM200641 are granted as set out in Appendix A, attached to and



¹ Resource Management Act 1991.

- forming part of this order;
- (2) the appeal is otherwise dismissed.

B: Under s285 of the RMA, there is no order as to costs.

REASONS

Introduction

[1] This proceeding concerns an appeal by Nelson Regional Sewerage Business Unit (‘the appellant’) against a decision of the Tasman District Council (‘the respondent’) imposing certain conditions of the resource consents associated with the continued operation of the Biosolids Application Facility and the application of biosolids to land at Moturoa/Rabbit Island.

[2] On 14 April 2023, the respondent granted the appellant the following resource consents:

- (a) Discharge Permit RM200638 to discharge biosolids to land;
- (b) Discharge Permit RM200639 to discharge contaminants into air from application of biosolids to land;
- (c) Land Use Consent RM200640 to operate and maintain the Biosolid Application Facility (BAF), and associated activities for the application of biosolids to land;
- (d) Discharge Permit RM200641 to discharge washdown water and stormwater to land from the BAF.

[3] The appellant appealed against the following three conditions of the consents:

- (a) Condition 33:
Condition 33: The Consent Holder shall ensure no vehicles or staff associated with the biosolids application are to enter wāhi tapu sites defined as an exclusion zone including

where forestry roads cross through these areas. Entry may only occur with agreement of iwi representatives through the Annual Hui process detailed in condition 8. Discharge Permit RM200639 to discharge contaminants into air from application of biosolids to land;

(b) Condition 41:

Condition 41: Within two years of the commencement of these consents, the BAF holding tanks shall be enclosed and a biofilter(s) installed to treat and minimise any odour emissions;

(c) Condition 42.

Condition 42: Within one year of the commencement of these consents the manual valves that direct biosolids to the appropriate holding tank at the BAF shall be upgraded to an automated system.

[4] The appellant sought the deletion of Condition 33 in its entirety and the following amendments to Condition 41 and Condition 42:

- (a) Condition 41: Within two years of the commencement of these concepts the BAF holding tanks shall be covered ~~enclosed~~ and a biofilter(s) installed to treat and minimise any odour emissions.
- (b) Condition 42: Within one year of the commencement of these consents the manual valves that direct biosolids to the appropriate holding tank at the BAF shall be upgraded to a remotely actuated ~~automated~~ system.

Agreement reached

[5] I have read and considered the consent memorandum of the parties dated 23 August 2023. It explains the parties engaged in private discussions that resulted in the agreement to resolve the appeal. That is, an order granting amendments to the resource consents conditions as set out in Appendix A to this order.

Other relevant matters

[6] No other person has given notice of an intention to become a party to this appeal under s274 of the Act. No party seeks costs, all parties agreeing that costs should lie where they fall.

Orders

[7] The court makes this order under s279(1) RMA, such order being by consent rather than representing a decision or determination on the merits pursuant to s297. The court understands for the present purposes that:

- (a) all parties to the proceeding have executed the memorandum requesting this order;
- (b) all parties are satisfied that all matters for the court's endorsement fall within the court's jurisdiction and conform to the relevant requirements and objectives of the RMA, including in particular, pt 2.



J J M Hassan
Environment Judge



Appendix A

Amended consent conditions

Resource consent

Resource consent numbers

RM200638 RM200639 RM200640 RM200641

Under sections 104 and 104B of the Resource Management Act 1991 (the Act), Tasman District Council (the Council) grants resource consent to:

Nelson Regional Sewerage Business Unit

(the Consent Holder)

Activities authorised

RM200638	Discharge permit to discharge biosolids onto land
RM200639	Discharge permit to discharge contaminants into air from application of biosolids to land
RM200640	Land Use Consent to operate and maintain the Biosolids Application Facility (BAF), and associated activities for the application of biosolids to land
RM200641	Discharge permit to discharge washdown water and stormwater to land from the BAF

Location

Site address	Moturoa / Rabbit Island
Legal description	Pt Island 5 Rabbit Waimea East District

conditions

Under sections 108 and 108AA of the Act, this resource consent is issued subject to the following conditions:

General

1. The Consent Holder shall ensure that the activities authorised by these consents are undertaken in general accordance with the information provided with the application entitled "Moturoa / Rabbit Island Biosolids

Reconsenting” prepared by Tonkin + Taylor dated August 2020. In the event there is any conflict between this application and any conditions of these consents, the conditions shall prevail.

2. The Consent Holder shall ensure all persons with responsibilities under these resource consents are provided a copy of the resource consents, and the Biosolids Management Plan in condition 15, and made aware of their responsibilities under these documents. For the avoidance of doubt those persons shall include the Moturoa / Rabbit Island forestry operator and the biosolids application contractor and the Operations and Maintenance contractor for the Bell Island Wastewater Treatment Plant.
3. In the conditions of these consents, “Biosolids Guidelines” means the Guidelines for the Safe Application of Biosolids to Land in New Zealand (August 2003), published by the New Zealand Water & Wastes Association (or subsequent version).
4. Land use consent RM200640 is personal to the consent holder rather than attaching to the land.

Duration of consents

5. The date of expiry of resource consents RM200638, RM200639 and RM200640 is 16 March 2040.
6. The term of resource consent RM200641 is five years from the commencement date.

Review

7. The Council may, in accordance with section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of these consents annually between 1 November and 1 December for any of the following purposes:
 - (a) To deal with any adverse effect on the environment arising from the exercise of these consents which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of review; or

- (b) To require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effect on the environment resulting from the exercise of these consents.
- (c) To deal with any adverse effect on the environment arising from issues identified in:
- (d) An Annual Report prepared under condition 9; or
- (e) A Monitoring and Technology Review Report prepared under condition 11.
- (f) To deal with the effects resulting from climate change and sea level rise.
- (g) To implement applicable wastewater environmental performance standards made under section 138 of the Water Services Act 2021, including any prescribed implementation timeframe.

Advice note:

The Council may, in accordance with section 128 of the Resource Management Act 1991, serve notice on the Consent Holder of its intention to review the conditions of these consents:

- (a) To enable standards set by a new rule(s) in any regional plan that has been made operative since the granting of these consents to be met;
- (b) When relevant national environmental standards have been made; or
- (c) If the information made available to the consent authority by the Consent Holder for the purposes of the application contained inaccuracies which materially influenced the decision on the application and the effects of the exercise of the consent(s) are such that it is necessary to apply more appropriate conditions.

Annual Hui

8. During the month of November each year, the Consent Holder shall arrange a hui for Te Tau Ihu iwi. For the avoidance of doubt this hui may be combined with any hui required under the resource consents for the Bell Island Wastewater Treatment Plant.

Purpose

- (a) The purpose of the hui shall include but is not limited to the following:

- (i) The Consent Holder recognising the role of tangata whenua as kaitiaki and seeking to understand ongoing cultural considerations in relation to the activities subject to these consents;
- (ii) The Consent Holder providing an opportunity for Te Tau Ihu iwi to view the activities subject to these consents including an opportunity to assess sites of cultural significance and confirm that identified archaeological sites are adequately protected;
- (iii) Iwi Representatives to identify or raise cultural matters of concern in relation to the activity for the purpose of informing the Consent Holder and for parties to identify and agree action(s) for resolution including any direct offsets and/or compensation; and
- (iv) The Consent Holder seeking input from Te Tau Ihu iwi into potential works or measures that could be undertaken on Moturoa / Rabbit Island to maintain the natural character and ecological values of Moturoa / Rabbit Island and protect the Mauri of the Waimea Inlet insofar as it relates to the activities subject to these consents.

Process and records

- (b) Notification of the hui shall be at least four weeks before the hui date via
 - (i) the Consent Holder's website and
 - (ii) by email or mailed notice to each Iwi Representative.
- (c) Minutes of the annual hui shall be documented and will identify issues discussed at the hui and any actions agreed.
 - (i) The minutes will be distributed to all parties in attendance and the Council's Team Leader - Compliance and Investigation, no more than three weeks after the date of the hui.
 - (ii) Representatives in attendance at the hui shall be given at least three weeks from distribution of the hui minutes to confirm minutes are an accurate record and may identify inaccuracies to be addressed in minutes.

- (iii) Confirmation of the distributed minutes or any inaccuracies identified by the parties shall be recorded by the Consent Holder, and if no response is received from any Iwi Representatives within the three-week period following distribution, the minutes circulated are to be considered accurate.

Advice note:

The notification requirements in this condition will be complied with if the Consent Holder gives four weeks of notice to each iwi representative in accordance with contact details maintained by Tasman District Council.

Annual Report

9. The Consent Holder shall submit an Annual Report and provide it to the Council's Team Leader - Compliance and Investigation by 31 October of each year. The Report shall cover the period from 1 July to 30 June and include, but not necessarily be limited to, the following:
 - (a) Collation, analysis, and interpretation of the monitoring results required by the conditions of these consents. This assessment shall include an analysis of the past five years' monitoring data and identification of any trends in the results;
 - (b) Summary of any non-compliances with the conditions of these consents and any the adequacy and scope of such monitoring and any actions arising;
 - (c) A summary of complaints, if any, received by the Consent Holder and any measures taken in response to those complaints;
 - (d) Details of the date of the hui as required by condition 8 above, numbers in attendance, and a summary of issues discussed and any actions arising, including confirmation of the minutes or any inaccuracies identified in the minutes by the parties; and
 - (e) The record of results from all odour monitoring patrols undertaken in accordance with condition 35 over the previous year.
10. On request of the Council's Team Leader - Compliance and Investigation, the Consent Holder shall provide copies of any raw monitoring data or records required by any conditions of these consents. This information shall be provided within 10 working days of the request.

Six-Yearly Monitoring and Technology Review Report

11. The Consent Holder shall submit a Monitoring and Technology Review Report (**MTRR**) to the Council's Team Leader - Compliance and Investigation by 1 March 2028 and thereafter at six-yearly intervals throughout the term of these consents.

For the avoidance of doubt this report may be combined with the MTRR required under the resource consents for the Bell Island Wastewater Treatment Plant.

The MTRR shall be prepared by a suitably qualified and experienced person(s) and shall include the following:

- (a) Forecast of biosolids quality and quantity throughout the remainder of the consent term as a result of potential future changes to wastewater inputs and/or the wastewater treatment process at the Bell Island Wastewater Treatment Plant;
- (b) An assessment of the implications of climate change (reasonably foreseeable within the term of these consents) on the activities authorised by these resource consents including any future actions which may be required to avoid, remedy or mitigate any adverse effects of those activities which arise due to climate change, including:
 - (i) A climate change adaption plan and to implement measures which anticipate and adapt to climate change before it causes adverse environment impacts, through the establishment of trigger points for preventative action; and
 - (ii) A review of the 50 metre buffer and in the event that the progress of sea level rise causes the 50 metre buffer width to be reasonably foreseen to be inadequate to prevent contaminants and nutrients reaching coastal waters in those places, especially with regard to occasional high tide storms, the width of the coastal buffer shall be increased in specific places, within three months after each six yearly review, in consultation with the Council's Team Leader - Compliance and Investigation.

- (c) An assessment of the ability of the activities subject to these consents to continue complying with the conditions of these consents for the remainder of the consent term, particularly in relation to:
 - (i) The assessment in (a) and (b) above;
 - (ii) Monitoring or other relevant data gathered under these resource consents;
 - (iii) Any reported non-compliance with consent conditions in the prior reporting period;
 - (d) An assessment of the activities subject to these consents against:
 - (i) The Biosolids Guidelines including any subsequent update;
 - (ii) Any applicable wastewater environmental performance standards made under section 138 of the Water Services Act 2021, including any prescribed implementation timeframe.
 - (e) A summary of significant technological changes and advances in relation to biosolids production, treatment, application and end use that could be of relevance to the activities authorised by these consents; and
 - (f) A general assessment of whether any newly available technology options or combination of options identified through (e) above is likely to represent the Best Practicable Option (BPO) to minimise the potential and actual adverse effects of biosolids application on Moturoa / Rabbit Island.
12. The Consent Holder shall make available to the public via its website any Monitoring and Technology Review Report produced under condition 11.
 13. The Consent Holder shall consider the assessment completed in condition 11(f) and advise the Consent Authority whether it intends to adopt any options or incorporate such technologies as BPO.
 14. The equipment required by these consents shall be maintained in a good and sound condition, and any repairs that are necessary shall be made as soon as reasonably practicable.

Biosolids Management Plan

15. A Biosolids Management Plan shall be prepared within three months of the commencement of this consent, and maintained and reviewed annually and include details of:
- (a) Roles, responsibilities, and training requirements of organisations and staff responsible for the activities subject to these consents, including the chain of command;
 - (b) Procedures to be followed to ensure all relevant conditions under these consents are fully complied with, including independent sections to address:
 - (i) Biosolids application limits;
 - (ii) Exclusion zones and buffer areas;
 - (iii) Odour management and minimisation, including:
 - A detailed description of the biosolid storage and application activities that may give rise to odour emissions, including identification of odour sources (as a result of normal and abnormal operations) discussion of the individual processes, equipment or plant elements and their function;
 - Management procedures relevant to odour control, including equipment maintenance and operation to minimise odour; and procedures for transport and application of biosolids;
 - On-site odour monitoring requirements and odour patrol surveys in accordance with condition 35;
 - Contingency measures to deal with plant malfunctions and maintenance requirements including redundancy and spares held on site for critical parts; and
 - An odour complaints response procedure, including actions on receipt of complaints and associated reporting requirements.
 - (iv) Health and safety of the biosolids application contractor and the general public accessing Moturoa / Rabbit Island;
 - (v) Monitoring required under these resource consents; and

- (vi) Complaints.
 - (c) How records will be kept including time of application, weather conditions, quantities applied, location of application, any other operational parameters;
 - (d) Areas to be used for biosolids application in the following year;
 - (e) Incident and accident response procedures, including in relation to equipment failures and accidental spillage of biosolids; and
 - (f) Methodology for annual review of the plan.
16. A copy of the Biosolids Management Plan in condition 15 shall be made available to the Council's Team Leader - Compliance and Investigation upon request.

Complaints and notifications

17. The Consent Holder shall maintain a Complaints Register for the purpose of recording and dealing with any complaints that are received by the Consent Holder in relation to the exercise of these resource consents.

All complaints received by the Consent Holder in relation to the activities authorised by these consents shall be logged immediately in the Complaints Register. The Complaints Register shall record:

- (a) The date, time, location, duration, and nature of the alleged event / incident;
- (b) Name, phone number and address of the complainant unless the complainant wishes to remain anonymous;
- (c) Any remedial action taken by the Consent Holder in response to the complaint and when it was undertaken;
- (d) The possible cause of the relevant event / incident that led to the complaint;
- (e) The weather conditions at the time of the relevant event / incident including estimates of wind direction, wind strength, temperature and cloud cover; and
- (f) The date and name of the person making the entry.

18. Details of any complaints received that may indicate non-compliance with the conditions of these consents shall be provided to the Council's Team Leader - Compliance and Investigation by the next working day following receipt of the complaint by the Consent Holder.

Biosolids volume and quality

19. The daily volume of biosolids transferred between the Bell Island Wastewater Treatment Plant and Moturoa / Rabbit Island shall be recorded.
- (a) For this purpose a flowmeter of an accuracy to within $\pm 5\%$ shall be maintained between the pumps at the Bell Island Wastewater Treatment Plant and the Biosolids Application Facility on Moturoa / Rabbit Island.
 - (b) This flow meter shall be calibrated every five years by an appropriately qualified and experienced person and calibration shall be supplied to the Council's Team Leader - Compliance and Investigation.
20. Material being processed to biosolids shall be held at 50°C or higher for a minimum duration as determined by the following equation:

$$\text{Minimum duration} = 50,070,000 / 10^{(0.14t)}$$

where t is temperature in °C and is greater than 50°C

A continuous record of the temperature of material being processed to biosolids shall be made and recorded for the duration of the consent and plotted on a continuous record to enable compliance to be readily visible.

Product verification

21. Upon commencement of these consents, the Consent Holder shall take no less than seven grab samples of biosolids per month which shall be analysed for *E. coli*, Campylobacter, Salmonella and enteric viruses.

Once there are no more than three non-compliances against the limits specified in the Biosolid Guidelines for any three-month period, sampling may proceed to that specified in condition 22.

During this sampling period, the Consent Holder shall demonstrate that the temperature in the second tank of each operating Autothermal Thermophilic Aerobic Digestion (**ATAD**) train was maintained at or above 55°C for at least four hours between sludge fill and withdrawal events.

Routine sampling

22. At no less than weekly intervals a grab sample of biosolids shall be analysed for *E. coli* and volatile solids vector attraction reduction.
23. Vector attraction reduction (**VAR**) shall be demonstrated using one of the methods identified in the Biosolids Guidelines. If a sample fails to meet the Biosolids Guidelines requirements for *E. coli*, and VAR then:
 - (a) The Consent Holder shall increase sampling to no less than 7 samples per month over a three-month period and samples shall be analysed for *E. coli*, *Campylobacter*, *Salmonella*, enteric viruses and helminth ova; and
 - (b) If there are more than three non-complying samples in the three-month period, the Consent Holder shall notify the Council's Team Leader - Compliance and Investigation in writing within five working days of gaining the lab results of the fourth sample. Written notification shall include the actions the Consent Holder will undertake to ensure the Biosolids Guidelines requirements for *E. coli* and VAR are met as soon as reasonably practicable.
 - (c) Increased sampling shall continue until lab results demonstrate no more than three non-compliances in any three-month period against the limits specified in the Biosolids Guidelines. Compliance with helminth ova inactivation requirements is to be confirmed by demonstrating that, during the sampling period, the temperature in the second tank of each operating ATAD train was maintained at or above 55°C for at least four hours between sludge fill and withdrawal events.
24. All grab samples required in conditions 21, 22 and 23 shall be taken directly from the treatment processing unit.
25. At three-monthly intervals the biosolids shall be measured, on a milligrams per kilogram (mg / kg) dry weight basis, for the following metals / metalloids:
 - arsenic,
 - cadmium,
 - chromium,
 - copper,
 - lead,

- mercury,
- nickel, and
- zinc.

If the concentrations exceed the 'Grade b' maximum concentration limits in the Biosolids Guidelines:

- (a) the Consent Holder shall increase sampling to weekly to demonstrate that the biosolids contaminant grade is appropriate for application onto land; and
 - (b) if there are more than six consecutive weekly samples that exceed Grade b limits, the Consent Holder shall notify the Council's Team Leader - Compliance and Investigation in writing within five working days of gaining the laboratory results of the seventh sample. Written notification shall include the laboratory results and identify actions the Consent Holder will undertake to ensure Grade b maximum concentration limits in the Biosolids Guidelines are met as soon as reasonably practicable.
26. Increased sampling shall continue until laboratory results demonstrate there are four consecutive samples below the Grade b maximum concentration limits in the Biosolids Guidelines. Each year, a composite sample shall be monitored for the following organic compounds:
- Total polychlorinated biphenyls (PCBs);
 - nonyl phenol and ethoxylates (NP/NPE);
 - phthalate (DEHP);
 - linear alkydbenzene sulphonates (LAS);
 - Tonalide and
 - Galaxolid.

Biosolids application limits

27. Biosolids shall be applied at an average depth of no greater than 40 millimetres (**mm**) per application.

Advice note:

40 mm per application is equal to 40 litre per square metre (l/m²)

28. Biosolids shall not be applied:

- (a) within 24 hours of a 10 mm rainfall event occurring in a 24-hour period;
or
 - (b) if a rainfall event of more than 50 mm is forecast within 24 hours by a recognised meteorological forecasting service.
- 29. Biosolids application to any given forestry block shall be limited to the following:
 - (a) During the time period from the last prior-to-harvest biosolid application to 12 years after replanting, biosolids shall be discharged at an average rate of no more than 150 kilograms of nitrogen per hectare per year, calculated using a three-year rolling average, and no single discharge shall exceed 450 kilograms nitrogen per hectare per application year;
 - (b) During the time period from 12 years following replanting to the last prior-to-harvest biosolid application, biosolids shall be discharged at an average rate of no more than 100 kilograms of nitrogen per hectare per year, calculated using a three-year rolling average, and no single discharge shall exceed 300 kilograms nitrogen per hectare per application year; and
 - (c) No more than one application of biosolids shall occur to any given forestry block during the period following harvest and prior to replanting.

Exclusion zones and buffer areas

- 30. No biosolids shall be applied at any time in the exclusion zones shown on the approved Plan A of consents RM200638 and others, dated 14 April 2023.
- 31. No biosolids shall be applied in the following buffer areas:
 - (a) Around the entire coastal edge of Moturoa / Rabbit Island with a buffer area of 50 metres inland from mean high water springs;
 - (b) From the outer edge of the plantation forest with an inward buffer area of 15 metres;
 - (c) Around the perimeter of the "Rabbit Island Old Domain" area shown on the approved Plan A of consents 200638 and others, dated 14 April 2023, with a buffer area of:

- (i) 30 metres during the months of April to October inclusive; and
 - (ii) 100 metres in the months of November to March inclusive.
- 32. The Consent Holder shall ensure there is no spray drift beyond the property boundary.
- 33. The Consent Holder shall ensure that the biosolids irrigator shall not enter the cultural and archeological exclusion zones as identified on Plan A – exclusion zones, unless there is no other practical vehicle access through the site to areas that are outside of the exclusion zone. no vehicles or staff associated with the biosolids application are to enter wāhi tapu sites defined as an exclusion zone including where forestry roads cross through these areas. Entry may only occur with agreement of iwi representatives through the Annual Hui process detailed in condition 8.

Odour

- 34. There shall be no discharges into air from the biosolids application activity or the BAF that results in an adverse effect that is offensive or objectionable beyond the line of mean high water springs around the perimeter of Moturoa / Rabbit Island, and the public reserve on the front of Moturoa or in the "Rabbit Island Old Domain" area shown on the approved Plan A of consents 200638 and others, dated 14 April 2023.

Advice note:

Non-compliance with condition 34 shall be determined by a suitably qualified person having regard to the Frequency, Intensity, Duration, Offensiveness and Location (i.e. the FIDOL factors) of the odour discharge and any previous validated odour complaints relating to the same site and the same activity.

- 35. The Consent Holder shall appoint a suitable independent person to the role of odour patroller and shall comply with the following odour patrol protocol:
 - (a) The odour patroller shall visit Moturoa / Rabbit Island at least once per month and record observations of odour at locations around the perimeter of the Island and on the shoreline of Best Island facing Moturoa / Rabbit Island and at any other position(s) that may be impacted by odour that could have an adverse effect beyond the line of mean high water springs around the perimeter of Moturoa / Rabbit Island;

- (b) The odour patroller shall also undertake a visit to Moturoa / Rabbit Island in response to any odour complaint in circumstances where the initial investigation by the Consent Holder indicates that the reported odour event may have been caused by the biosolids application activity on Moturoa / Rabbit Island;
- (c) Odour patrols shall record the locations at which odour observations are made and the numerical scale of the offensive or objectionable nature of the odour which the odour patroller adopts to record the observations, and whether or not biosolids were being applied at the time of the patrol;
- (d) Where practicable, the odour patroller shall record locations where biosolid is being applied in relation to the observation locations;
- (e) The Consent Holder shall inform the biosolids application contractor of the outcomes of the odour patrol and any necessary interventions or inputs shall be made to the application location or method to mitigate the odours observed;
- (f) In addition to the monthly odour patrols, the odour patroller may, at their discretion, visit Moturoa / Rabbit Island at any time to make observations of odour; this may, but will not necessarily be, in response to complaints received;
- (g) The Consent Holder shall provide the contact details of the odour patroller to the Council's Team Leader - Compliance and Investigation. If this odour patroller changes the contact details shall be updated with Council's Team Leader - Compliance and Investigation; and
- (h) The record of results from all odour monitoring patrols shall be retained and provided to the Council on request.

Advice note:

Where practicable the odour patroller under these consents shall be the same as the odour patroller engaged under the consents for the Bell Island Wastewater Treatment Plant

Groundwater

36. The eleven existing shallow piezometers on Moturoa / Rabbit Island, as shown on the approved Plan B of consents 200638 and others, dated 14 April 2023, shall be maintained and monitored as follows:
- (a) At three-month intervals groundwater levels shall be measured and recorded at all eleven piezometers;
 - (b) At three-month intervals representative samples shall be taken from all eleven piezometers for pH, conductivity, nitrate-nitrogen, ammonium-nitrogen, phosphorus and chloride;
 - (c) At three-month intervals representative samples shall be taken from at least two piezometers for faecal indicator bacteria; and
 - (d) Each year a representative sample shall be taken from all eleven piezometers, filtered and analysed for the following heavy metals / metalloids: arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, aluminium.

Soil

37. At a minimum of three-year intervals, two soil samples shall be undertaken within the topsoil (0 to 20 centimetres) and subsoil (20 to 40 centimetres) layers every 10 hectares in areas where biosolids have been applied. Samples from each soil layer shall be combined to form a composite sample. At each sample location, the GPS coordinates shall be recorded.
- (a) Each composite sample shall be measured for pH, organic matter, total nitrogen, available phosphorous, potassium, calcium, magnesium, sodium and the following metals / metalloids: arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc;
 - (b) Each composite sample shall not exceed the heavy metal maximum soil concentration limits in Table 1 below:

Heavy metals	Maximum Soil Concentrations (mg/kg dry weight)
Arsenic (As)	20
Cadmium (Cd)	1
Chromium (Cr)	600

Heavy metals	Maximum Soil Concentrations (mg/kg dry weight)
Copper (Cu)	100
Lead (Pb)	300
Mercury (Hg)	1
Nickel (Ni)	60
Zinc (Zn)	300

Table 1: Maximum heavy metal concentrations in soil

- (c) If a composite soil sample undertaken in accordance with the above subclauses exceeds the heavy metal maximum soil concentration limits within Table 1, then the Consent Holder shall:
- (i) Prepare a report to investigate whether the exceedance(s) was as a result of natural influences, one off event, or in whole or part associated with the activities authorised by these consents;
 - (ii) Comment on whether the exceedance measured is likely to continue;
 - (iii) Recommend whether any further action needs to be taken by the Consent Holder, including, but not limited to, setting environmental trigger limits, or suspending biosolid application on the relevant forestry block until soil samples achieve compliance with Table 1 above; and
 - (iv) A copy of this report shall be provided to the Council's Team Leader - Compliance and Investigation within five working days of the report being finalised.

Advice note:

For each 10-hectare area there shall be two composite samples. One composite sample for each of the topsoil and subsoil layers.

Coastal

38. Every six years transect surveys along the foreshore shall be undertaken. The survey is to include sediment profile descriptions, sediment nutrient assessment, habitat classification, and benthic micro and macro algal cover. The transect locations shall at minimum include the locations shown on the approved Plan B of consents 200638 and others, dated 14 April 2023. In the

event a transect location becomes unviable (for example, following erosion), this may be substituted with another equivalent transect location as deemed by a suitably qualified person.

39. Visual checks along the Moturoa / Rabbit Island foreshore within Waimea Inlet shall be undertaken by a suitably qualified person at three-year intervals for the duration of this consent.
- (a) Visual checks shall include, at minimum, the transect locations referred to in condition 38 and photographic records taken at each check;
 - (b) Should any visual check indicate any adverse effects on the foreshore, further analysis and tests are to be undertaken at the discretion of the Council's Team Leader - Compliance and Investigation; and
 - (c) Four weeks prior to undertaking the visual check, the Consent Holder shall extend an invitation to Te Tau Ihu iwi to attend and observe the visual checks being undertaken.

Advice note:

The notification requirements in this condition will be complied with if the Consent Holder gives four weeks' notice to each iwi representative in accordance with contact details maintained by Tasman District Council.

Biosolids Application Facility

40. Within three years of commencement of these consents, all stormwater and washdown water at the BAF shall be captured and discharged into the BAF holding tanks.
41. Within two years of the commencement of these consents, the BAF holding tanks shall be ~~enclosed~~ covered and a biofilter(s) installed to treat and minimise any odour emissions.
42. Within one year of the commencement of these consents the manual valves that direct biosolids to the appropriate holding tank at the BAF shall be upgraded to ~~an automated~~ remotely acutated system.
43. In the event that any upgrade or maintenance work at the BAF leads to the discovery of archaeological material:
- (a) The Consent Holder shall immediately:

- (i) Cease earthmoving operations in the affected area and mark off the affected area;
 - (ii) Advise the Tasman District Council of the disturbance; and
 - (iii) Advise Heritage New Zealand Pouhere Taonga of the disturbance.
- (b) If the archaeological material is determined to be Kōiwi Tangata (human bones) or taonga (treasured artefacts) by Heritage New Zealand Pouhere Taonga, the Consent Holder shall immediately advise the office of the appropriate rūnanga (office contact information can be obtained from the Tasman District Council) of the discovery;
- (c) If the archaeological material is determined to be Kōiwi Tangata (human bones) by Heritage New Zealand Pouhere Taonga, the Consent Holder shall immediately advise the New Zealand Police of the disturbance; and
- (d) Work may recommence if Heritage New Zealand Pouhere Taonga Trust (following consultation with rūnanga if the site is of Māori origin) provides a statement in writing to the Tasman District Council, Attention: Regional Leader - Monitoring and Compliance that appropriate action has been undertaken in relation to the archaeological material discovered. The Tasman District Council shall advise the Consent Holder on written receipt from Heritage New Zealand Pouhere Taonga that work can recommence.

Advice note:

This may be in addition to any agreements that are in place between the Consent Holder and the Papatipu Rūnanga. (Cultural Site Accidental Discovery Protocol).

Under the Heritage New Zealand Pouhere Taonga Act 2014 an archaeological site is defined as any place associated with pre-1900 human activity, where there is material evidence relating to the history of New Zealand. For sites solely of Māori origin, this evidence may be in the form of accumulations of shell, bone, charcoal, burnt stones, etc. In later sites, artefacts such as bottles or broken glass, ceramics, metals, etc. may be found or evidence of old foundations, wells, drains, tailings, races or other structures. Human remains / kōiwi may date to any historic period.

It is unlawful for any person to destroy, damage, or modify the whole or any part of an archaeological site without the prior authority of Heritage New Zealand

Pouhere Taonga. This is the case regardless of the legal status of the land on which the site is located, whether the activity is permitted under the District or Regional Plan or whether a resource or building consent has been granted. The Heritage New Zealand Pouhere Taonga Act 2014 provides for substantial penalties for unauthorised damage or destruction.

Advice notes

1. This resource consent only authorises the activity described. Any matters or activities not referred to in this consent or covered by the conditions must either:
 - (a) comply with all the criteria of a relevant permitted activity rule in the Tasman Resource Management Plan (TRMP) or relevant national environmental standard;
 - (b) be allowed by the Resource Management Act 1991; or
 - (c) be authorised by a separate resource consent.
2. [Section 125](#) of the Resource Management Act 1991 states that a consent shall lapse where it is not given effect to within five years of its granting.
3. Access by the Council or its officers to the land subject to this resource consent is reserved under [section 332](#) of the Resource Management Act 1991.
4. [Section 36](#) of the Resource Management Act 1991 provides for the Council to charge Consent Holders for the undertaking of functions related to the administration, monitoring and supervision of resource consents; as well as charges relating to the review of consent conditions.

