HAWKE'S BAY REGIONAL COUNCIL
TE KAUNIHERA Ā-ROHE O TE MATAU-A-MĀUI

RESOURCE CONSENT

Discharge Permits and Land Use Consent

In accordance with the provisions of the Resource Management Act 1991 (RMA), and subject to the attached conditions, the Hawke's Bay Regional Council (the Council) grants a resource consent for a non-complying activity to:

Central Hawke's Bay District Council
PO Box 127
Waipawa 4240

For the following activities:

- AUTH-127077-01 - To discharge treated sewage effluent from the Takapau oxidation pond into or onto land (wetland) in circumstances where contaminants (or any other contaminants emanating as a result of natural processes from those contaminants) may enter water
- AUTH-127078-01 - To discharge treated sewage effluent from the Takapau oxidation pond onto land in circumstances where contaminants (or any other contaminants emanating as a result of natural processes from those contaminants) may enter water
- AUTH-127079-01 - To discharge to air (odour) from the management and discharge of wastewater at the Takapau Wastewater Treatment Plant
- AUTH-127616-01 - To operate a farm not complying with the activity standards of Rule TT1 and TT2

LOCATION

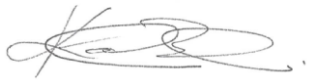
Activity	Legal Description	Map Reference (NZTM)
Site of Oxidation Pond	Lot 1 Deposited Plan 17032	1886621-5565533
Site of Discharge to Water	Lot 3 Deposited Plan 9943 and Lot 1 Deposited Plan 26784	1886760 - 5565709
Site of Discharge to Land	Part Lot 1 Deposited Plan 15623 and Lot 1 Deposited Plan 16445	1886393 - 5565372
Site of Production Land Use	Part Lot 1 Deposited Plan 15623 and Lot 1 Deposited Plan 16445	1886393 - 5565372

CONSENT DURATION

This consent is granted for a period expiring on 31 May expiry 2057.

LAPSING OF CONSENT

This consent shall lapse in accordance with section 125 of the RMA on the 31st May 2027, if it is not exercised before that date



Katrina Brunton
Group Manager, Policy and Regulation
POLICY AND REGULATION GROUP
Under authority delegated by Hawke's Bay Regional Council
4th October 2022

CONDITIONS

General

1. These general conditions apply to Discharge consents AUTH-127077-01 (discharge to water), AUTH-127078-01 (discharge to air), and AUTH-127079-01 (discharge to land), and Production Land Use consent AUTH-127616-01, collectively called 'the Consents'.

2. Except as otherwise required by any other condition of the Resource Consents, the Activities must be carried out in general accordance with the following information provided by the applicant (collectively referred to as 'the Application') where the most recent information takes priority over older information in the event of any conflicts:

   a) Central Hawke's Bay District Council (29 April 2021) Takapau Wastewater Discharge Consent Application [Cover Letter, Form 9, HBRC Form A and Form B]

   b) Central Hawke's Bay District Council (April 2021) Takapau Wastewater Treatment Plant Discharge Resource Consent Application and AEE (document reference: TD.1_Takapau-Application_and_AEE-210428.docx) (updated via email on 30/01/2021) and Appendices A - K

   c) Lowe Environmental Impact (12/2020) Evaluation of Soils to Receive Takapau Wastewater (document reference: T:B.15)

   d) Lowe Environmental Impact (25/03/21) Existing Farming System (document reference: T:B.13)

   e) Lowe Environmental Impact (29/03/21) Existing / Future Farming System and OverseerFM Analysis (document reference: T.C14a)

   f) Lowe Environmental Impact (14/04/21) Drummond Overseer and Planning Assessment (document reference: T.C.14b)

   g) CHBDC (20/08/2021) Request for further information – Takapau Wastewater Discharge APP-126522 and Annexes A.1-G

   h) Lowe Environmental Impact (November 2020) Takapau Wastewater Treatment and Discharge Best Practicable Option. (document reference: T:C.12)

   i) Central Hawke's Bay District Council (24/09/21) Request for Further Information – Takapau Wastewater Discharge APP-126522 – Second Response.

   j) Central Hawke's Bay District Council (22nd December 2021) Takapau Wastewater Discharge Consent Application

   k) Lowe Environmental Impact (31st January 2022) Memorandum Re: Takapau Discharge Property – Nutrient Application and Loss Update (document reference: T:C.14c)

   Advice Note: If any conflict arises between the conditions of consent and the application, the conditions of this consent will prevail.

Operational

3. During Stage 0 and Stage 1 (see Condition 4 for definition of stages), the consent holder must ensure the treated wastewater meets the following standards prior to discharge to the irrigation and High Rate Land Passage (HRLP):

a) The concentration of Carbonaceous five-day Biochemical Oxygen Demand (BOD_5) must not exceed an annual median of 40 g/m^3, or an annual 95th percentile of 70g/m^3;

b) The concentration of Total Suspended Solids (TSS) must not exceed an annual median of 100 g/m^3, or an annual 95th percentile of 155 g/m^3;

c) The concentration of Ammoniacal Nitrogen (NH4-N) must not exceed an annual median of 20 g/m^3, or an annual 95th percentile of 30 g/m^3;

d) The concentration of Dissolved Inorganic Nitrogen (DIN) must not exceed an annual median of 25 g/m^3, or an annual 95th percentile of 35 g/m^3;

e) The concentration of Dissolved Reactive Phosphorus (DRP) must not exceed an annual median of 4 g/m^3, or an annual 95th percentile of 6 g/m^3; and

f) The concentration of *Escherichia coli* (*E. coli*) must not exceed the following:

   i) Stage 0: 20,000 cfu /100 mL for more than 8 out of 12 consecutive monthly samples, or 80,000 cfu/100 mL in more than 2 out of 12 consecutive monthly samples.

   ii) Stage 1 onwards: 2,000 cfu /100 mL for more than 8 out of 12 consecutive monthly samples, or 10,000 cfu/100 mL in more than 2 out of 12 consecutive monthly samples.

During Stage 2 (see Condition 4 for definition of stages), the Consent Holder must ensure that the treated wastewater meets the following standards prior to discharge to the irrigation and High Rate Land Passage (HRLP):

g) The concentration of Carbonaceous five-day Biochemical Oxygen Demand (BOD_5) must not exceed 40 g/m^3 in more than 8 out of 12 consecutive monthly samples, or 80g/m^3 in more than 2 out of 12 consecutive monthly samples;

h) The concentration of Total Suspended Solids (TSS) must not exceed 100 g/m^3 for more than 8 out of 12 consecutive monthly samples, or 180 g/m^3 in more than 2 out of 12 consecutive monthly samples;

i) The concentration of Ammoniacal Nitrogen (NH4-N) must not exceed 20 g/m^3 for more than 8 out of 12 consecutive monthly samples, or 30 g/m^3 in more than 2 out of 12 consecutive monthly samples;

j) The concentration of Dissolved Inorganic Nitrogen (DIN) must not exceed 25 g/m^3 for more than 8 out of 12 consecutive monthly samples, or 35 g/m^3 in more than 2 out of 12 consecutive monthly samples;

k) The concentration of Dissolved Reactive Phosphorus (DRP) must not exceed 4 g/m^3 for more than 8 out of 12 consecutive monthly samples, or 6 g/m^3 in more than 2 out of 12 consecutive monthly samples; and

l) The concentration of Escherichia coli (E. coli) must not exceed 2,000 cfu /100 mL for more than 8 out of 12 consecutive monthly samples, or 10,000 cfu/100 mL in more than 2 out of 12 consecutive monthly samples.

Advice Note: Compliance will be demonstrated based on the samples required by Condition 40 [monitoring section]. The exceedance frequency allowed for the Treated Wastewater quality values identified above are based on monthly sampling over an annual 12-month monitoring period of 1 July to 30 June each year in accordance with the New Zealand Municipal Wastewater Monitoring Guidelines (NZWERF, Sept 2002) Table 13.2. If the frequency of sampling is more than monthly, the allowed numbers of annual exceedances will need to be amended to remain in line with the New Zealand Municipal Wastewater Monitoring Guidelines (NZWERF, Sept 2002) Table 13.2.

Staging

4. The timing of changes to the treatment and discharge regime shall be as follows:

    a) Stage 0: To have ceased within 3 years of commencement of these consents;

    b) Stage 1: To be operational within 3 years of commencement of these consents; and

    c) Stage 2: To be operational within 5 years of commencement of these consents and then for the duration of this consent.

Filtration and Ultraviolet Treatment

5. Within twelve months of the commencement date of the resource consents, the consent holder shall provide the Council (Compliance Manager) with a detailed UV treatment and filtration design report prepared by a suitably qualified and experienced independent expert for approval. The report shall demonstrate how the UV treatment system ensures the wastewater complies with Condition 3.

    Once the report is approved by the Council (Compliance Manager), the Consent Holder shall install and operate the filtration and UV disinfection treatment system in accordance with the certified design prior to Stage 1 of the consent (Condition 4). Thereafter the UV and filtration system will operate continuously at the time of discharge

Land Based Discharge

6. The discharge of treated wastewater to the land via irrigation shall meet the following criteria:

    a) Stage 0: 0 ha of irrigation;

    b) Stage 1: Not less than 5 ha of irrigation; and

    c) Stage 2: Not less than 20 ha of irrigation.

7. The Consent Holder must ensure the application rate of treated wastewater onto land or into land does not exceed:

    a) 2 mm above field capacity;

    b) 5 mm/h; and

    c) 20 mm in any one application

8. The consent holder shall ensure that the nutrient loading resulting from the discharge of wastewater onto and into land of the Properties does not exceed the following criteria on an annual average. Where the discharge of wastewater does not exceed the cap identified below, the consent holder may apply a fertiliser material to meet the nutrient requirement of the specific crop up to the limit specified in (a) and (b). Where an additional fertiliser material is applied to land, a record must be kept in accordance with Condition 63.

    a) Max N Load 200 kg N/ha/year

    b) Max P Load 65 kg P/ha/year

    The above limits will apply until reviewed under Condition 76.

Advice Note: The above limits are not the overall limits for the whole farm or farming enterprise , only the Properties as defined in the glossary above.

9. Meeting the requirements of Condition 8 shall be determined by calculating the nutrient loading to each block within the properties receiving wastewater. The nutrient loading will be based on the results of monitoring required in accordance with Condition 40, 63 and 64.

10. The Consent Holder must ensure that treated wastewater is not discharged to land closer than:

    a) 20 m from any watercourse, whether flowing continuously or intermittently, including any open drain and wetland;

    b) 20 m from any property boundary where there are no buildings;

    c) 50 m from any bores;

    d) 150 m from any dwelling house, milking shed, public place, amenity area or education facility or other building on any property bordering the land treatment area;

    e) 50m from rare habitats, threatened habitats or at-risk habitats (as identified by HBRC at any time during the term of the resource consent); or,

    f) 50 m separation distance from any sites of cultural significance known to exist at the time of approval for this resource consent, or any sites of cultural significance found to exist at any time following the grant of this resource consent.

11. The Consent Holder must not discharge treated wastewater to land of the Properties:

    a) Within 48 hours after the application of fertiliser;

    b) Within 24 hours after any harvesting activity; or

    c) When 50 mm or more rainfall has occurred in the previous 24 hour period as recorded at the Waipukurau Climate Station [No.31620].

12. The consent holder must not graze animals or harvest any crops on land that has been irrigated with wastewater for at least 48 hours, or while the pasture is wet with irrigated wastewater, whichever is longer.

    Advice Note: The consent holder should ensure they are aware of requirements of other regulatory bodies (for example the Ministry of Primary Industries, Ministry of Health) regarding the use of land irrigated with wastewater for primary produce.

13. In the event that storage has reached 80 % of the relevant volumes specified by Condition 15 of working capacity and river flow conditions as set out in Condition 14 do not permit discharge, irrigation can occur at a rate that exceeds those in Condition 7 but no more than 50 mm in any one application.

    The consent holder shall notify the Council within 3 days of exceeding the discharge rates specified by Condition 7 with evidence that storage capacity had reached 80% and that river flows were such that wastewater could not be discharged to the river in accordance with Condition 14.

    Advice Note: Storage capacity is measured on a volume basis and excludes freeboard capacity.

High Rate Land Passage (HRLP)

14. The discharge of treated wastewater to the HRLP which drains to the Makaretu River shall only occur when the field capacity in accordance with Condition 7 has been reached and storage capacity has exceeded 80%.

    Any discharge of treated wastewater to the HRLP shall meet the following criteria:

    a) Stage 0:

        i) The flow rate averaged over the preceding 365 days of the discharge shall not exceed 216 m^3/d.

    b) Stage 1:

        i) When the river flow is below 4,735 L/s (half median) there shall be no discharge to the Makaretu River;

        ii) When the river flow is greater than 4,735 L/s (half median) and less than 9,470 L/s (median), the discharge shall not exceed 200 m^3/d;

        iii) When the river flow is greater than 9,470 L/s (median) and less than 28,410 L/s (3x median), the discharge shall not exceed 750 m^3/d; and

        iv) When the river flow is greater than 28,410 (3x median), the discharge shall not exceed 1,000 m^3/day.

    c) Stage 2:

        i) When the river flow is below 9,470 L/s (median) there shall be no discharge to the Makaretu River;

        ii) When the river flow is greater than 9,470 L/s (median) and less than 28,410 L/s (3x median), the discharge shall not exceed 800 m^3/d; and

        iii) When the river flow is greater than 28,410 (3x median), the discharge shall not exceed 1,100 m^3/day.

    Advice Note: River flow shall be measured for the Tukituki River at Tapairu Road at 9 am and the ability to discharge shall span a period of 24 hr to 9 am the following morning. These flows are considered representative of the Makaretu River, at least for the purposes of managing discharges as part of this consent.

Additional Storage of Wastewater

15. The Consent Holder shall provide the following volume of active storage:

    a) Stage 0: 0 m^3;

    b) Stage 1: Use of the existing treatment pond to provide not less than 2,000 m^3; and

    c) Stage 2: Construction of a new pond with a volume not less than 18,000 m^3 and a freeboard level appropriately in excess of the 1:100 flood level as certified by a Chartered Professional Engineer specialising in civil and flood engineering.

    Advice Note: Stage 1 provides for the use of the existing pond for storage until a new pond is built as required by Stage 2.

Farm Management

16. The Consent Holder shall prioritise using wastewater over the use of ground or surface water to provide for the growth of pasture and crops. The Consent Holder shall ensure that where groundwater or surface water is used to supplement the use of wastewater on site, records shall be made demonstrating that wastewater was not available for use.

    Advice Note: Fertiliser can also be used to supplement nutrient in wastewater up to the limit as noted in Condition 8.

    Advice Note: Clean water is available from a number of sources, including groundwater and surface water. The approval process for obtaining this water is outside this consent process.

17. The Consent Holder shall exclude all stock (other than sheep) from the beds and margins of any lake, wetland and flowing river (whether intermittent or permanent) within 3 months of the grant of this consent.

    Notwithstanding the above, the consent holder can graze permanently fenced riparian margins for weed control purposes providing:

    a) The consent holder shall keep a record of the stocking rate, the date and period in time the riparian margins are grazed;

    b) The total grazing period in any year does not exceed 7 days; and

    c) The fenced riparian margin shall be grazed no more than twice in any year during the period 1 November to 30 April.

    Advice Note: Condition 17 is in addition to stock exclusion required under the Resource Management (Stock Exclusion Regulations) 2020 (Stock Exclusion Regulations). Where the Stock Exclusions Regulations are more stringent than Condition 17, the Stock Exclusion Regulations prevail. Where the requirements of Condition 17 is more stringent than the Stock Exclusion Regulations, requirements of Condition 17 prevail.

18. The Consent Holder shall ensure that:

    a) Records specified within Schedule XXI of the Tukituki Plan Change 6 are retained for each year (1st June to 31st May) enabling a nutrient budget to be prepared; or

    Copies of Nutrient Budget input and output files have been prepared in accordance with an industry programme approved by HBRC.

19. Within 3 months of the commencement of the consent, the Consent Holder shall prepare a Farm Environmental Management Plan in accordance with Schedule XXII of the Tukituki Plan Change 6 (PC6) for properties receiving wastewater. This shall be provided to the Council (Manager Compliance) for approval.

    The FEMP shall be considered approved unless the Council's Regulatory Manager, within 20 working days of receiving the plan, refuses to approve it, and outlines its reasons in writing. If the FEMP is not approved, an amended FEMP must be submitted for approval.

    The Farm Environmental Management Plan shall include:

    a) A Nutrient Budget incorporating the measurement or modelling of whole of property nutrient losses (kg/ha/year) including farm and irrigation system inputs calculated using the annual records specified in Schedule XXI and the Overseer Nutrient Budget model (or an alternative model approved by Hawke's Bay Regional Council);

b) A Phosphorus Management Plan including details specified in Schedule XXII;

c) Alongside all other information relevant to the farm property required for a Farm Environmental Management Plan; and

d) Identifies ways of actively reducing the amount of synthetic fertiliser applied to the irrigated area

Advice Note: Either:

a) One FEMP should be provided for the whole farm property or farming enterprise that the properties wastewater is irrigated to consist of; or,

b) The whole farm enterprise is required to have a FEMP in accordance with Rule TT2 of the RRMP and that aligns with Condition 19 of this consent.

20. The consent holder shall work with the farm manager and the FEMP provider to review the FEMP yearly to understand the management processes being carried out on the farm including the application of synthetic fertiliser and to actively minimise the use of synthetic fertiliser across the farm area.

    This FEMP review shall be provided to the Council (Manager Compliance) yearly.

Odour and Aerosols

21. The discharges and activities authorised by this consent shall not result in odour (or spray drift) that is offensive or objectional to the extent that it causes an adverse effect on the environment at or beyond the boundary of the site.

    Advice Note: An odour or spray drift will only be considered offensive or objectionable after a Council enforcement officer has considered the Frequency, Intensity Duration, Offensive and Location of the odour or spray drift (i.e. the FIDOL Factors). The property boundary is defined as the edge of any of the 'properties' defined in this consent, adjacent to property that is not identified in the definition of 'properties' of this consent.

22. Prior to the discharge of treated wastewater to land the Consent Holder must install a weather station on the site to be used for land application of treated wastewater and the weather station shall be maintained at all times to provide data for managing the land application system. At a minimum this must include:

    a) Wind speed and direction at 6 m above the ground ; and

    b) Rainfall at ground level; and

    c) Air temperature at 1.5 m and 6 m above ground; and

    d) Relative humidity

23. The meteorological data collected under Condition 22 shall be:

    a) Collected in general accordance with the Good Practice Guide for Air Quality Monitoring and Data Management, Ministry for the Environment (2009), or superseding document

    b) Continuous for the duration of the consent comprising 1 minute data, collected and averaged to 10 minutes and 1 hour time periods;

    c) At a point that is representative of local weather conditions across the site

d) The wind speed and direction instrumentation shall be able to operate reliably down to a maximum wind speed threshold of 0.1 m/s

e) The consent holder shall provide the Hawke's Bay Regional Council information collected from the weather station required by Condition 22 as soon as possible upon request.

24. The Consent Holder must operate the system such that irrigation of treated wastewater automatically ceases when:

a) the 10 minute average wind speed at the site exceeds 10 m/s; or

b) where the E.coli concentration in treated wastewater for the most recent sample is greater than 10,000 cfu/100 mL and the 10 minute average wind speed at the site exceeds 4 m/s from any wind direction

Advice Note: The purpose of this condition is to avoid adverse health effects where there is the potential for winds to cause spray drift that may contain pathogens to be carried beyond the property boundary upon which the activity is taking place. This condition applies only to the discharge of wastewater – clean water irrigation is not subject to the same shut down requirements.

Signage

25. The Consent Holder shall submit to Council (Manager Compliance) for approval prior to the commencement of any irrigation to land the detailed design, wording and location of signs to be erected on the boundary of the properties (as defined the definitions of this consent) at State Highway 2 and Burnside Road, as well as the true right bank of both upstream and downstream of the Makaretu River bridge. The purpose of the signage will be to inform the public of the activity being carried out on the site and to identify potential risk and hazards that may result from the activity. The wording of the signage shall be large enough to be read by a person with normal eyesight at 20 m and shall advise of the presence of the treated wastewater discharge in the area.

The sign location, design and wording shall be considered approved unless the Council's Regulatory Manager, within 20 working days of receiving the details, refuses to approve it and outlines its reasons in writing. If the signage details are not approved, an amended plan must be submitted for approval.

The consent holder shall erect and maintain these signs in accordance with the plans approved by the Council (Manager Compliance) for the duration of the consent.

Planting

26. The Consent Holder shall plant and maintain for the duration of this consent a vegetation screen along the property boundary (as defined the definitions of this consent) with State Highway 2. The planting shall be double fenced to ensure survival of the plants. Irrigation shall not commence until such planting has been completed.

Representative

27. The consent holder shall nominate a person who is responsible for the maintenance of the wastewater treatment system and the return of information (as required by conditions of this consent). The consent holder shall advise the Council (Manager Compliance) who this person is within one month of the commencement date of this consent and within ten working days of any change occurring.

Sampling Point

28. From the commencement of these Consents, the Consent Holder must install and maintain a sampling port in the pipeline to the land treatment system and the HRLP system. This sampling point shall be in a

location prior to the split of treated effluent between discharge to land, via irrigation, and discharge to water, via the high rate land passage.

Advice Note: At Stage 2, the consent holder may sample treated effluent before being stored in the storage pond or after storage, provided the effluent stream has not split between discharge to land, via irrigation, and discharge to water, via the high rate land passage.

Metering

29. From the commencement of these Consents, the Consent Holder must install and maintain flow meters to measure and record the wastewater volumes discharged:

    a) into and out of the Takapau WWTP;

    b) to the HRLP;

    c) into and out of the storage pond; and

    d) to the land treatment area.

    The measuring device and recording system shall be maintained to continually measure and record the rate and volume of effluent discharged from the oxidation pond. Measuring and recording shall be at intervals not exceeding 30 minutes and to an accuracy of +/- 5%.

30. Within three months following the installation of the flow meter, and every five years thereafter for the duration of Consents, the Consent Holder must have the flow meters, required by Condition 29, verified in accordance with the manufacturer's specifications. The Consent Holder must provide to the Council's Regulatory Manager, an in-situ flow meter verification certificate confirming the validity of the meters within one month of the verification being completed.

31. Within three months of the commencement of these Consents, the Consent Holder must provide the Council's Regulatory Manager with near real-time treated wastewater discharge information recorded and collected from the flow meters referred to in Condition 29. This information must be recorded at 15minute intervals and be provided automatically on a daily basis in a format compatible with the Council's database.

Infrastructure Inspection

32. The Consent Holder must ensure that the physical infrastructure of the pond system is inspected every month. Any damage to pond embankments, or signs of pond seepage must be identified, noted, and fixed as soon as practicably possible.

33. The Consent Holder must ensure that the physical infrastructure of the land treatment system and the land treatment area are inspected every week when operational, and that relevant parts of the systems are also inspected whenever any alarms associated with the systems are activated.

34. The Consent Holder must ensure that the physical infrastructure of the HRLP system is inspected every month and that relevant parts of the systems are also inspected whenever any alarms associated with the systems are activated.

35. If any blockages and/or breaks are identified in an inspection under Condition 32 and 33 or otherwise, the system affected must cease operation until the blockage and/or break is remedied, and the Consent Holder must notify Council's Regulatory Manager within 48 hours of identifying the blockage and/or break.

36. Records of the inspections made in accordance with Condition 32, 33 and 34, and any resulting system maintenance, must be kept and made available to the Council on request and a copy be provided within the Annual Report required under Condition 67.

Monitoring - General

37. The Consent Holder must ensure that all sampling equipment, including meters and field measurement devices, are maintained in good working order by suitably qualified persons in accordance with the manufacturer's instructions and industry best practice guidelines. Records of calibration shall be kept and made available to the Council upon request.

38. In respect of monitoring required by the Consents, the following apply:

    a) All monitoring and sampling techniques employed in respect of the conditions of the Resource Consents must be carried out by suitably experienced and qualified persons;

    b) All analytical testing other than on-site measurements, undertaken in connection with these Resource Consents must be performed by a laboratory that is IANZ accredited for the analytical tests or any other method approved in advance in writing by the Council Manager;

    c) All water sample analyses must be undertaken in accordance with the methods detailed in the "Standard Methods For The Examination Of Water And Waste Water, 2017" 23rd edition by A.W.W.A., A.P.H.A. and W.E.F., or any other method approved in advance in writing by the Council Manager; and

    d) If any monitoring sites are identified as unsuitable, alternative monitoring sites must be identified and developed within a reasonable time after consultation with the Council Manager.

39. Results of monitoring collected in accordance with Conditions 40 to 56 below must be transferred within 10 working days of their receipt to the Council in a format compatible with Council systems.

Monitoring – Wastewater

40. From the commencement of these Consents, the Consent Holder must take samples of treated wastewater from the sampling port(s) (installed in accordance with Condition 28), once per month in any month that a discharge to the land treatment area or the HRLP system occurs, and while the discharge is occurring. The sample must be analysed for:

    a) pH

    b) ScBOD5;

    c) Total Suspended Solids;

    d) Total Nitrogen;

    e) Nitrate Nitrogen (NO3-N);

    f) Ammoniacal-Nitrogen (NH4-N);

    g) Nitrite Nitrogen (NO2-N);

    h) Total Phosphorus;

    i) Dissolved Reactive Phosphorus (DRP);

j) Sodium (Na);

k) Potassium (K);

l) Magnesium (Mg);

m) Calcium (Ca); and

n) Escherichia coli (E. coli).

41. From the commencement of these Consents, the Consent Holder must take a sample of treated wastewater from the sampling port(s) (installed in accordance with Condition 28), once per year in any month that a discharge to the land treatment area occurs, and while the discharge is occurring. The sample must be analysed for helminth eggs.

Monitoring – Soils

42. The Consent Holder must take annual composite soil samples from areas that align with blocks detailed in nutrient budget reporting and have received treated wastewater within the previous 12 month period (starting 1 October and ending 30 September) for the duration of this Discharge Consent. A minimum of ten 75 mm depth composite samples must be obtained from each paddock, and must be analysed for the following:

a) pH;

b) Exchangeable Sodium (Na);

c) Exchangeable Sodium percentage (Na);

d) Exchangeable Potassium (K);

e) Exchangeable Magnesium (Mg);

f) Exchangeable Calcium (Ca);

g) Phosphorus (Olsen);

h) Total Phosphorus

i) Sulphate-S;

j) Total Nitrogen (TN); and

k) Cation Exchange Capacity.

43. The Consent Holder must take composite soil samples every five years from areas that align with blocks detailed in nutrient budget reporting and have received treated wastewater within the previous five year period (starting 1 October and ending 30 September) for the duration of this Discharge Consent. A minimum of ten 75 mm depth composite samples must be obtained from each paddock, and must be analysed for the following:

a) Total Arsenic

b) Total Cadmium

c) Total Chromium

d) Total Copper

e) Total Lead

f) Total Mercury

g) Total Nickel

h) Total Zinc

44. The consent holder shall install and maintain telemetered soil moisture measuring equipment (Aquaflex or similar) in each block detailed in the nutrient budget reporting. The location and installation details of any relocated or new soil moisture measuring equipment to be installed shall be agreed upon with the Council (Manager Compliance), prior to its installation.

    Records of the soil moisture in each block detailed in the nutrient budget shall be kept and provided to the Council (Manager Compliance) upon request.

45. The soil moisture monitoring equipment (required by Condition 44) shall be calibrated in accordance with the manufacturers/installer's recommendations, and regularly maintained to ensure that it operates correctly. Records of both calibration and maintenance shall be kept and provided to the Council (Manager Compliance) upon request.

Monitoring - Groundwater

46. The Consent Holder shall monitor groundwater quality quarterly at the wells identified on the Plan shown in Appendix 1 and at the wells specified below:

    a) Well 17053

    b) Well 17054

    c) Well 17124

    d) Well 17125

    e) Well 17126

    The monitoring shall be undertaken in accordance with the MfE Groundwater sampling protocols (2006) or any subsequent updated document.

47. The Consent Holder must measure and record the static water level of all bores identified in Condition 46 prior to purging and sampling. Samples collected from the bores and shall be analysed for the following parameters:

    a) Temperature (field measurement);

    b) pH (field measurement);

    c) Electrical Conductivity (EC);

    d) Chloride (Cl);

    e) Nitrate-Nitrogen (NO3);

    f) Ammoniacal-Nitrogen (NH4N);

g) Nitrite-Nitrogen (NO2);

h) Dissolved Reactive Phosphorus (DRP);

i) Escherichia coli (E. coli); and

j) Sodium (Na).

Monitoring – Surface Water Chemistry

48. Within 3 months of the commencement of these consents, the consent holder shall provide a plan to the Council (Manager Compliance) for approval showing the surface water monitoring points located:

    a) 50 m upstream of the discharge location;

    b) 50 m downstream of the discharge location; and

    c) 400 m downstream of the discharge location.

    The surface water monitoring points plan shall be considered approved unless the Council's Regulatory Manager, within 20 working days of receiving the plan, refuses to approve it, and outlines its reasons in writing. If the plan is not approved, an amended plan must be submitted for approval.

    The Consent Holder shall monitor surface water quality in location approved by the Council (Manager Compliance) the months of November, March and July in the locations.

    Advice Note: The exact location of the monitoring sites shall be confirmed in consultation with the Council's Regulatory Manager. Should the monitoring locations become unsuitable or inaccessible for sampling due to reasons beyond the consent holder's control during the term of the consent, the consent holder shall identify new monitoring locations, in consultation with the Council's Regulatory Manager.

49. [Left intentionally blank]

50. The Consent Holder must monitor the following parameters at the sites identified in Condition 48:

    a) pH (field measurement);

    b) Temperature (field measurement);

    c) Dissolved oxygen (field measurement);

    d) Total Suspended Solids (TSS);

    e) scBOD5 (Dissolved carbonaceous biochemical oxygen demand being material passed through a GF/C filter);

    f) Total Nitrogen (TN);

    g) Nitrate Nitrogen (NO3);

    h) Ammoniacal Nitrogen (NH4N);

    i) Nitrite-Nitrogen (NO2);

    j) Dissolved Reactive Phosphorus (DRP);

    k) Total Phosphorus (TP); and

l) Escherichia coli (E. coli).

Monitoring – Macroinvertebrate Sampling

51. The Consent Holder must have a suitably qualified and experienced freshwater ecologist undertake macroinvertebrate sampling in the Makaretu River once between January and April within the first year of the commencement of this consent, once between January and April in the fourth year after the commencement of this consent and thereafter between January and April every five years. The macroinvertebrate assessment must be undertaken following a period of at least three weeks without a flood event and during a period of stable flow. The timing of the monitoring must be confirmed by Council's Regulatory Manager prior to the commencement of the monitoring.

    The locations of the assessments and sampling shall be a collection of at least 5 replicate 0.1 m2 surber samples from at least three upstream and three downstream sampling sites, pooled to give multiple composite upstream and downstream samples.

    Advice Note: A flood event is considered to be when the Makaretu River is at and above 28,410 L/s (3x median flow) as measured for the Tukituki River at Tapairu Road.

    Advice note: the ecological reporting shall be undertaken in the fourth year of the consent and then every five years afterwards to allow the results to feed into the system review report, required by Condition 68, below.

52. The Consent Holder must ensure that the macroinvertebrate sampling referred to in Condition 51 above follows Protocols C3 (Hard-bottomed quantitative), P3 (full count with subsampling option) and QC3 (Quality control for full count with subsampling option) from the Ministry for the Environment's "protocols for sampling macroinvertebrates in wade-able streams" (Stark et al. 2001). This shall involve:

    a) Collection of five replicate 0.1 m2 surber samples at random within a 20 m section of riffle habitat at each sampling site;

    b) Full count of the macroinvertebrate taxa within each replicate sample to the taxonomic resolution level specified for use of the Macroinvertebrate Community Index (MCI); and

    c) Enumeration of the results as taxa richness, MCI, QMCI, % EPT taxa and % EPT individuals.

Chlorophyll a Monitoring

53. The Consent Holder shall have an appropriately experienced and qualified freshwater ecologist undertake assessments in the Makaretu River once between January and April at the commencement of the consent, once within the fourth year after the commencement of the consent and thereafter every five years. This assessment shall include the percentage cover, biomass, chlorophyll a, AFDW and community composition of periphyton, filamentous algae and cyanobacterial mats in run habitat, as close as possible to the sites selected for macroinvertebrate sampling above. The periphyton and algae assessment is to include:

    a) A visual assessment of the percentage cover of both filamentous algae and algal mats (to the nearest 5%) at 5 points across four transects encompassing run habitat and extending across the width of the river at each sampling site. The visual monitoring methods shall follow the protocols outlined in Appendix 2 of 'A periphyton monitoring plan for the Manawatu-Wanganui Region' (Kilroy et al 2008). Reported estimates shall include:

        i) Percentage cover of visible stream or river bed by bacterial and/or fungal growths (sewage fungus) visible to the naked eye;

        ii) Percentage cover of visible stream or river bed by filamentous algae more than 2 cm long;

iii) Percentage cover of visible stream or river bed by diatoms or cyanobacteria mats more than 0.3 cm thick;

iv) Percentage cover of visible stream or river bed by diatoms less than 0.3 cm thick; and

v) Percentage cover of visible stream or river bed that is clean.

The collection of a periphyton sample at the same established monitoring sites and transects, using method QM-1b from the Stream Periphyton Monitoring Manual (Biggs & Kilroy 2000). Analysis of periphyton samples shall follow the Biggs and Kilroy (2000) guidelines for chlorophyll a analysis.

Advice note: the ecological reporting shall be undertaken in the fourth year of the consent and then every five years afterwards to allow the results to feed into the system review report, required by Condition 68, below.

Cultural Health Index Monitoring

54. Within two years of the commencement of this consent, the Consent Holder must invite a suitable expert in tikanga and mauri of freshwater bodies representing the interests of the Mana whenua of Takapau to undertake Cultural Health Monitoring according to their respective tikanga.

    If the engagement is accepted, the Consent Holder must commission the suitable expert in tikanga and mauri of freshwater bodies representing the Mana whenua of Takapau or nominees (as advised) to undertake Cultural Health Monitoring in compliance with the Cultural Health Monitoring protocol prepared in accordance with Condition 55.

    If engagement is not accepted, the consent holder must continue to invite a suitable expert in tikanga and mauri of freshwater bodies representing the interests of the Mana whenua of Takapau to undertake Cultural Health Monitoring to their respective tikanga every two years.

    The consent holder shall keep records of engagement and consultation with the Mana whenua of Takapau and provide this to the Council on request.

55. If the engagement is accepted to undertake Mauri Cultural Health Monitoring as set out in Condition 54, the Consent Holder must commission the person or body identified in Condition 54 to prepare a Cultural Health Monitoring protocol that as a minimum, must:

    a) Describe the relationship of tangata whenua to the discharge area and the sites of interest in or near the locations to which these Permits apply;

    b) Describe the tikanga relevant to the proposed cultural monitoring (including kaitiakitanga, mauri of awa, whenua, tangata, whanaungatanga and te ha tawhirimatea), the activities, and the site(s);

    c) Identify and map (with map references) the site(s) to be monitored;

    d) Set out the frequency of monitoring;

    e) Describe the procedures required to access the application site for the monitoring (in particular health and safety requirements);

    f) Identify the parameters and methods used for the monitoring and assessments of effects on cultural health;

    g) Set out the matters to be included in the Cultural Health Monitoring Report and the frequency of the reporting obligations; and

h) Set out the procedures for amendments to the Cultural Health Monitoring protocols.

Advice Note: There are multiple tools for assessing cultural health, including the Mauri Compass. The selection of the methodology is up to the body representing Māori interests.

56. The Consent Holder must provide a copy of the Cultural Health Monitoring protocol, or any amended version, and any subsequent Cultural Health Monitoring Reports to the Council Manager within 1 month of receiving it.

Advice Note: These documents are the intellectual property of the Māori cultural health experts and are not subject to certification or review by the Consent Holder or Council.

Operational, Monitoring and Management Plans

57. No later than six months after the commencement of this Consent, the consent holder shall submit to Council's Regulatory Manager for certification, a Monitoring Plan (MP), completed by a suitably qualified and experienced person. The MP shall be designed to monitor any effects of the irrigation system, storage of wastewater in the oxidation pond (e.g. though leakage), impacts on groundwater impacts on surface water. The MP shall include, but not be limited to:

a) Details of the type, frequency, location, methodologies and procedures to carry out the monitoring required by Conditions 37-56 hereon.

b) Recommendations of proposed survey dates, for existing and proposed monitoring.

c) Identification of any best practise guidelines that should be followed.

d) Identification of how the Monitoring Plan may be reviewed as a result of ongoing monitoring or recommendations made in reports on ongoing monitoring submitted pursuant to Conditions 37-56 hereon, system review report pursuant to Condition 68 hereon, or review Conditions 75 and 76.

The MP shall be considered certified unless the Council's (Manager Compliance), within 20 working days of receiving the MP, refuses to certify it, and outlines its reasons in writing for not certifying the MP. If the MP is not certified, an amended MP must be submitted. Once certified by the Council (Manager Compliance), the MP shall be implemented within three months.

58. No later than six months after the commencement of this Consent, the Consent Holder must submit to the Council (Manager Compliance) for technical certification an Operation and Management Plan (OMP) detailing (but not limited to) the following items:

a) A description of the treatment plant, storage, land application system and the HRLP system, including a site map indicating the location of discharge infrastructure, the land treatment area, and monitoring sites;

b) Intended operation and maintenance procedures for the land treatment system and the HRLP system, including the reduction of pathogens and how the systems will be operated and maintained to comply with these Conditions and the Conditions of Discharge Consents AUTH-127078-01, AUTH-127079-01 and AUTH-127077-01;

c) A methodology statement and summary setting out recent and proposed infiltration management. This should include forward work to reduced infiltration into the reticulated wastewater system, and a timeline for carrying out these works.

d) The procedures to be implemented to ensure that, where practicable, treated wastewater is discharged as a priority to land in accordance with the general conditions, including record-keeping procedures to demonstrate that the prioritisation has occurred;

e) A procedure to utilise the irrigation system to discharge at a higher application rate when storage is full and river flow conditions do not allow for the use of the HRLP system;

f) The measures to be implemented to control, regulate and record irrigation application, including application depths and details about how the management blocks within the land treatment area will be managed;

g) Cropping, pasture, grazing and harvesting management and maintenance procedures;

h) The frequency of flushing of the irrigation pipes and the circumstances under which pipe flushing will occur and the location flushing will occur to reduce any effect on nearby residential receptors;

i) Measures to ensure the treated wastewater irrigated remains aerobic;

j) On-site responsibilities, including operation and maintenance of the wastewater treatment facilities and pipelines to the river and land discharge points;

k) Key operational matters, including daily, weekly and monthly maintenance checks, and the keeping of a maintenance register to record the details of all maintenance events and any system malfunctions;

l) Monitoring and reporting procedures required to demonstrate compliance with these conditions (to water, to land, to air and to groundwater);

m) A description of any other on-farm operations affecting nutrient loading or leaching within the land treatment area (e.g. grazing, crops, fertiliser application);

n) A risk assessment plan and contingency plans in the event of system malfunctions or breakdowns;

o) Procedures for receiving, recording and responding to all complaints in accordance with Conditions 70 and 71;

p) A protocol for managing accidental discovery of artefacts of historic, archaeological or cultural significance during construction;

q) Mitigation and contingency measures for controlling odour (including the flushing of lines with freshwater), aerosols, ponding and run-off in and from the land treatment area, wastewater treatment and maintenance activities;

r) Procedures for the wind speed shut-down required by Condition 24;

s) Procedures for the rainfall induced shut-down required by Condition 11; and

t) Details of how changes in wastewater composition and volume are to be managed and measures to ensure ongoing compliance with conditions.

Advice note: Any freshwater required to be used on site will require consent where it cannot meet the relevant permitted activity standards of the plan or the conditions / description of existing water take consents.

59. The Consent Holder must review the OMP required by Condition 58 by 31 July of each year, following commencement of the consent. This review shall incorporate any proposed changes to the management of the activities. Following each review, the OMP, including any proposed changes must be submitted to the Council (Manager Compliance) for technical re-certification before 30 November of the same year.

60. The Consent Holder must undertake the activities in accordance with the OMP that is most recently certified pursuant to Condition 58.

Education Plan

61. Within 12 months of the commencement date of this consent, the Consent Holder must prepare and implement a Wastewater Education Plan (WEP) detailing a multi-faceted programme designed to increase the public's understanding and awareness of how their [the public's] actions/activities can influence wastewater volumes, and the ways in which the public can reduce water use. Within six months after submitting the WEP to the Council Manager, the Consent Holder shall commence delivery of the WEP.

    The Plan shall be reviewed and updated annually.

Record Keeping Requirements

62. Records of the inspections carried out in accordance with Conditions 32, 33 and 34 and any resulting system modifications must be recorded in the Annual Monitoring Report as required by Condition 67.

63. The Consent Holder must maintain a record of all irrigation activities authorised by this resource consent that occur within the land treatment area. This record must include but not be limited to:

    a) The date, time, location and volume of each irrigation (both of wastewater and water);

    b) The date, time, location, mass (kg) and rate (kg/N/ha or kg/P/ha) of any nitrogenous and phosphorus material applied;

    c) The total cumulative nitrogen applied from all sources to each irrigation run over the period 1 July each year to 30 June the following year;

    d) The hydraulic loading (application depth in mm) for each application of wastewater to each irrigation run;

    e) The volume (m^3) of wastewater applied to each irrigation run for each application;

    f) The area of pasture or crop that were irrigated in each block, and for crops, the type of crop irrigated, and;

    g) The date and time of pipeline flushes when they occur.

    Records shall be reported included in the Annual Monitoring Report as required by Condition 67.

64. The mass and rate of total nitrogen applied to each irrigation run or irrigation area during each application of wastewater, as specified in Condition 63 of this consent, shall be calculated as follows:

    a) The average monthly total nitrogen concentration (g/m^3) shall be calculated by averaging the last wastewater sample from the previous month and the wastewater sample in the month to be calculated. These samples shall be taken in accordance with Condition 40 of this consent.

    b) The average monthly total nitrogen concentration for each month shall then be multiplied by the volume (m^3) of wastewater applied to each irrigation run or area, in order to calculate the mass of total nitrogen applied (kg) per application to each irrigation run or area.

    c) The mass of total nitrogen applied (kg) per application shall then be divided by the area (ha) of each irrigation run or irrigation area to calculate the rate (kg N/ha) of nitrogen loading per application per irrigation run/area.

d) The area (ha) irrigated during each application of wastewater shall be calculated by multiplying the distance the travelling irrigator travelled by the irrigation run/area width, or the segment/area irrigated by each centre pivot.

65. The Consent Holder must maintain a record of all HRLP discharges authorised by this resource consent. This record must include but not be limited to:

    a) The date, time, location and volume of each discharge; and

    b) The river flow at the time of the discharge as measured at the Tukituki River at Tapairu Road

    Records shall be reported included in the Annual Monitoring Report as required by Condition 67.

    Advice note: In accordance with Condition 14, River flow shall be measured for the Tukituki River at Tapairu Road at 9 am and the ability to discharge shall span a period of 24 hr to 9 am the following morning.

66. The Consent Holder must notify the Council Manager as soon as practicable and no later than within two working days of 24 hours from the identification of any actual or potential non-compliance or when it becomes evident that a breach of consent conditions is about to occur. For conditions requiring compliance with a particular water quality standard, notification to the Council Manager is required within two working days 24 hours of receipt of the water quality analysis result from the Laboratory of the non-compliance.

Annual Monitoring Report

67. By 31 September of each year (commencing 31 July 2023) the Consent Holder must provide the Council's Regulatory Manager an annual monitoring report for the 12 month period ending the previous 30 June. The annual monitoring report must include (but not be limited to):

    a) A summary of all irrigation activities required by Condition 63

    b) A summary of the nutrient budget and phosphorus management plan and summary of the FEMP review undertaken in accordance with Condition 19 and 20.

    c) Results of sampling and a summary and interpretation of analyses and records collected in accordance with these conditions;

    d) Testing to ensure irrigation infrastructure is operating efficiently including a summary of any upgrades or repair that has been carried out.

    e) Comment on compliance with each of these conditions, including the effluent standards;

    f) A summary of inspections made on the physical infrastructure in accordance with Conditions 32, 33 and 34;

    g) Results of soil sampling required by Condition 42 and 43, and an analysis to determine whether any material change in soil quality has occurred and actions taken to remedy any nutrient deficiency or excess;

    h) Results of groundwater monitoring required by Conditions 46 and 47, including an assessment of whether there has been a decline in groundwater quality due to the activities;

    i) Results of soil moisture monitoring required by Conditions 44 and 45 including graphs of soil moisture content against key soil moisture reference points including saturation point, wilting point, field capacity and any defined irrigation trigger points.

j) Results of surface water monitoring required by Conditions 48 and 50, including an assessment of whether there has been a decline in surface water quality due to the activities;

k) General comment on any non-compliances and operational problems;

l) Details of any works undertaken or proposed to improve the performance of the treatment system; and

m) A copy of the complaints register required by Condition 71.

System Review Report

68. Within five years of the commencement date of this consent, and there after every 5 years, the Consent Holder must prepare a 'System Review Report' including but not limited to summaries of:

a) the volume applied to land and discharged to the HRLP;

b) when the HRLP was used and the river flow conditions at the time;

c) changes that have been made to the wastewater treatment plant and details of changes proposed;

d) opportunities to improve the treatment plant performance, and discharge standards, to reflect the requirements for the land application system, noting that this may see the effluent standards relaxed to allow higher wastewater loads and less synthetic fertiliser;

e) all monitoring undertaken as required by this consent, including, but limited to, Mauri monitoring required by Conditions 54, 55 and 56, macroinvertebrate monitoring required by Condition 51, chlorophyll a monitoring required by Condition 53 and may include additional monitoring undertaken by the Consent Holder;

f) Undertake assessment of the appropriateness of flows of the Tukituki gauging site as a predictor of median flows in Condition 14;

g) Undertake assessment of application rate regime and potential adjustments to loading rates in Conditions 7 and 8 to optimise overall nitrogen and phosphorus contribution to ground and surface water. Changes shall be consistent with FEMP updates as required by AUTH-127616 (production land use consent); and,

h) storage utilisation and opportunities to better utilise it to avoid the use of the HRLP.

Further, management of the system can be updated, with proposed changes to be made as necessary to the Operation and Management Plan after an annual review by the Consent Holder.

Advice Note: The timing of monitoring required by Condition 51 and 53 will be the year before the system review report is prepared. Point (d) should take into account impacts on surface water from any suggestion of relaxed standards.

69. Following the completion of the System Review (Condition 68), the Consent Holder shall within one year set out a series of steps and changes to be implemented for continual system improvement, and reporting, within the next four years. Implementation and reporting shall consider obligations of the long term planning process including funding availability and asset ownership.

Spillages and Complaints

70. The Consent Holder must maintain and make available to the Council's Regulatory Manager on request, a record of complaints which lists all complaints received alleging adverse effects attributable to the activities. The record must include but not be limited to the following:

    a) Name and address of the complainant (if given);

    b) The nature and duration of the effect;

    c) The date and time the effect was detected;

    d) The location where the effect was detected;

    e) The prevailing weather conditions when the effect was alleged to be occurring e.g. wind speed and direction;

    f) The likely cause of the effect detected; and

    g) Any measures taken to mitigate the alleged effect and to avoid its recurrence.

71. The consent holder shall establish and maintain a 'complaints register' to record the date and time of any complaints received and from whom, the nature and location of the complaint, and any actions taken in response to that complaint. A copy of the complaints register shall be made available to the Council on request.

72. The Consent Holder must immediately notify the Council's Regulatory Manager and chairs of Te Rongo o Tahu marae and Rākautātahi marae of, and keep a record of, any major spillage of material into the wastewater collection system that may adversely impact on the wastewater treatment plant, the land application system or the river discharge system that have the potential to or will result in a non-compliance with any of the conditions of the activities authorised by these Consents.

73. If an event occurs on-site that may lead to effects including the contamination of groundwater that were not assessed in the application, the Consent Holder shall notify the Central Hawke's Bay District Council, or superseding registered drinking water supplier, and the Hawke's Bay Regional Council (Manager Compliance) of the event as soon as reasonably practicable after the event occurs

    Advice Note: Such an event might include for example discharge of untreated sewage to the ground or to water. The Central Hawke's Bay District Council can be contacted on 06 587 8060. The Regional Council 24 hour Pollution Hotline should also be contacted on 0800 108 838.

Accidental Discovery

74. In the event of an archaeological site, waahi tapu or koiwi being discovered or disturbed during the activities, the Consent Holder must immediately cease further work in the immediate area and inform Te Rongo o Tahu marae, Rākautātahi marae, Te Taiwhenua o Tamatea, the Council's Regulatory Manager, Heritage New Zealand and (in the event that human remains are found) the New Zealand Police. Further work at the immediate area must be suspended while Iwi carry out their procedures for the removal of Taonga. The Council's Regulatory Manager will advise the Consent Holder when work can resume.

    Advice Note: In accordance with Section 14(1) of the Coroners Act 2006, in the event that human remains are found the NZ Police should be contacted immediately and all works in the immediate vicinity will cease until advice is given that works can recommence.

Review

75. The Hawke's Bay Regional Council may annually during the month of May review the conditions of the consent in accordance with Sections 128, 129, 130, 131 and 132 of the Resource Management Act 1991 for the following purposes:

    a) To address any adverse effect on the receiving environment that can be reasonably attributed to the Activities which may arise from the exercise of the resource consent and which is appropriate to deal with at a later stage;

    b) To modify the Operational Management Plan as a result adverse effects on the environment as identified in (a) including, but not limited to: effects on groundwater and effects surface water.

    c) To modify the monitoring programme required by the resource consent or require additional monitoring if there is evidence that the current monitoring requirements of the resource consent are inappropriate or inadequate, including monitoring bores;

    d) To modify the reporting requirements of the resource consent if there is evidence that the current reporting requirements of the resource consent are inappropriate or inadequate;

    e) To allow for changes recommended by the System Review report;

    f) To address any new regional or national rules, standards, or regulations relating to freshwater and/or coastal water management;

    g) To identify new registered drinking water suppliers that may be directly impacted by the discharge to be notified under Condition 73 and any changes to the operational management plan to be adopted to avoid adverse effects on these receptors;

    h) Review of the median flow of Tukituki at Tapairu Road from State of the Environment reporting and update the location if a new one becomes available; and

    i) To address any new scientific understanding of groundwater movement downstream of the discharge and to address nutrient loading in a catchment that the discharge contributes when it is determined nutrient loading needs to be reduced as a result of any new national legislation, relevant regulations or regional rules.

76. The Hawke's Bay Regional Council may, every five years, during the month of May review the conditions of the consent in accordance with Sections 128, 129, 130, 131 and 132 of the Resource Management Act 1991 for the following purposes:

    a) To review the appropriateness the nitrogen and phosphorus limits in Condition 8 having regard to usage by crops over the previous five years.

    b) To review the appropriateness nitrogen and phosphorus limits in Condition 8 having regard to new national and regional planning policy regulatory framework.

    c) changes of consent conditions and / or treatment system in respond to system review reports undertaken in accordance with Conditions 68 and 69.

REASONS FOR DECISION

The effects of the activity on the environment will not be more than minor. Granting the consent is consistent with the purpose and principles of the RMA, the National Policy Statement for Freshwater, the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 and with all relevant plans and policies.

Advice Notes

1. All information required by the conditions of this consents can be emailed to ComplianceReturns@hbrc.govt.nz

MONITORING BY THE COUNCIL

Routine monitoring

An initial monitoring inspection may be undertaken by Council officers to establish that the wastewater treatment plant and land treatment field have been constructed in accordance with the conditions of the resource consent and information supplied in the application. The cost of this inspection is charged to the consent holder.

Subsequent routine monitoring inspections may be undertaken by the Council up to once every 12 months to ensure that the wastewater treatment plant and land treatment field is well maintained and continues to comply with the consent conditions. A sample of the treated effluent may be taken for analysis at that time.

The costs of **any** routine monitoring will be charged to the consent holder in accordance with the Council's Annual Plan at the time.

Any actual and reasonable costs incurred in the follow-up of non-compliance with consent conditions will also be charged to the consent holder, regardless of the accreditation status of the system.

Non-routine monitoring

"Non routine" monitoring will be undertaken if there is cause to consider (e.g. following a complaint from the public, or routine monitoring) that the consent holder is in breach of the conditions of this consent. The cost of non-routine monitoring will be charged to the consent holder in the event that non-compliance with conditions is determined, or if the consent holder is deemed not to be fulfilling the obligations specified in section 17(1) of the RMA shown below.

Section 17(1) of the RMA states:

> *Every person has a duty to avoid, remedy, or mitigate any adverse effect on the environment arising from an activity carried on by or on behalf of the person, whether or not the activity is carried on in accordance with*
>
> *a) any of sections 10, 10A, 10B, and 20A; or*
>
> *b) a national environmental standard, a rule, a resource consent, or a designation.*

Consent Impact Monitoring

In accordance with section 36 of the RMA (which includes the requirement to consult with the consent holder) the Council may levy additional charges for the cost of monitoring the environmental effects of this consent, either in isolation or in combination with other nearby consents. Any such charge would generally be set through the Annual Plan process.

DEBT RECOVERY

It is agreed by the consent holder that it is a term of the granting of this resource consent that all costs incurred by the Council for, and incidental to, the collection of any debt relating to this resource consent, whether as an individual or as a member of a group, and charged under section 36 of the RMA, shall be borne by the consent holder as a debt due to the Council, and for that purpose the Council reserves the right to produce this document in support of any claim for recovery.

CONSENT HISTORY

Authorisation No.	Date	Event	Relevant Rule	Relevant Plan
AUTH-127077-01 (discharge to water)	04/10/2022	Consent initially granted	52	Regional Resource Management Plan
AUTH-127078-01 (discharge to air)	04/10/2022	Consent initially granted	28	Regional Resource Management Plan
AUTH-127079-01 (discharge to land)	04/10/2022	Consent initially granted	52	Regional Resource Management Plan
AUTH-127616-01 (production land use)	04/10/2022	Consent initially granted	TT2A	Regional Resource Management Plan

APPENDIX 1: LOCATION OF GROUNDWATER MONITORING BORES