

FAR NORTH DISTRICT COUNCIL, PRIVATE BAG 752, KAIKOHE 0440

To undertake the following activities associated with the operation of a wastewater treatment system that services the township of Rawene and treats septage from surrounding areas on Pt Montefiores Grant DP 739, SO 64643, Gaz. 1992, P3212 Blk XIV Maungamuka SD and Lot 13 DP 170443 Blk XIV Maungamuka SD, in the catchment of the Omanaia River:

- (01) To discharge treated wastewater into a flood-gated drain, at or about location co-ordinates 1645309E 6079915N.
- (02) To discharge contaminants to land by way of seepage from the base of a wastewater treatment system at or about location co-ordinates 1645520E 6080822N and 1645574E 6080808N.
- (03) To discharge contaminants, primarily odour, to air from a wastewater treatment system at or about location co-ordinates 1645520E 6080822N and 1645574E 6080808N.
- (04) To place, occupy space for and use an existing flood-gated culvert, at or about location co-ordinates 1645309E 6079915N.

Note: All location co-ordinates in this document refer to Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

Subject to the following conditions:

(01) & (02) Discharge to Water and Land

- 1 The quantity of wastewater inflow into the treatment plant, based on dry weather flows, shall not exceed 254 cubic metres per day. For compliance purposes the "average dry weather flow" shall be calculated in accordance with the details provided in Schedule 1 (**attached**).
- 2 Notwithstanding Condition 1, the Consent Holder shall minimise, as far as practicable, any increase in the quantity of wastewater discharged as a result of stormwater inflow and infiltration into the sewage reticulation network and treatment system. This shall include the prevention, as far as is practicable, of stormwater runoff from the surrounding land entering the treatment system. For compliance purposes, the Consent Holder shall record the daily wastewater inflow volume to the treatment system.



- 3 The Consent Holder shall notify the Northland Regional Council's Monitoring Manager in writing of any proposed changes to the wastewater treatment or discharge system, as installed at the date of commencement of these consents, at least one month prior to the proposed change(s) being undertaken.
- 4 The Consent Holder shall maintain a meter on both the inlet to, and the outlet from, the treatment system that has a measurement error of $\pm 5\%$ or less. These meters shall then be used to determine compliance with Conditions 1 and 2.
- 5 The Consent Holder shall test the electronics of the inflow meter required by Condition 4, and shall recalibrate the outflow meter required by Condition 4, at least annually to ensure that the specified accuracy is maintained. Written verification from a suitably qualified person that the meters have been tested or calibrated during the previous 12 month period shall be forwarded to the Northland Regional Council's Monitoring Manager by 1 May each year.
- 6 Septage shall only be discharged into the anaerobic ponds of the treatment system. The Consent Holder shall maintain a record of the daily quantity of septage discharged into the anaerobic ponds. These records shall be made available to the Northland Regional Council's Monitoring Manager as part of annual reporting required by Schedule 1 or upon request in writing by the Northland Regional Council's Monitoring Manager.
- 7 The Consent Holder shall ensure safe and easy access to the Northland Regional Council's sampling site 100544, discharge from constructed wetland, so that treated wastewater samples can be safely collected.
- 8 The contaminant concentrations in the treated wastewater, as measured at NRC sampling site 100544, shall not exceed the following limits:

Determinand	Median Concentration	90 percentile Concentration
5 day Biochemical Oxygen Demand (grams per cubic metre)	15	30
Faecal coliforms (MPN per 100 millilitres)	1,500	5,000
Total ammoniacal nitrogen (grams per cubic metre)	15	25
Total suspended solids (grams per cubic metre)	15	35

The median and 90 percentile concentrations are "rolling" values. Compliance with this condition shall, as a minimum, be determined by the results of the monitoring undertaken in accordance with Schedule 1 (**attached**).

The Consent Holder shall advise in writing the Northland Regional Council's Monitoring Manager within seven days of any recorded exceedance of the 90th percentile concentration limits, the reasons for the exceedance and the steps to be undertaken by the Consent Holder to ensure ongoing compliance with Condition 8.

Advice Note: *If any single sample exceeds the 90 percentile concentration limit for any of the listed determinands, the Consent Holder is expected to take all steps necessary to ensure compliance with this Condition. Additional sampling may be required if this event does occur to allow confirmation of the treatment system performance and avoid any effects on Omanaia River.*



- 9 There shall be no discharge of contaminants onto or into land from any part of the treatment system except via seepage from the base of the treatment system, or a discharge to water except via the constructed outlet from the treatment system.
- 10 Within six months of the commencement of this consent, the Consent Holder shall:
- (a) Upgrade the bunds within and surrounding the existing wetland to prevent the overland flow of treated wastewater from that wetland;
 - (b) Install and maintain appropriate signage on any formal access points to the wastewater treatment plant site and in the vicinity of the flap-gated culverts discharging to the Omanaia River, warning that partially treated wastewater is present. Written confirmation of the signage wording, size and placement shall be provided to the Northland Regional Council's Monitoring Manager.

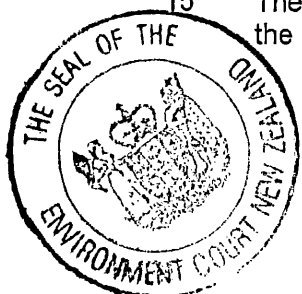
(03) Discharge to Air

- 11 The Consent Holder's operations shall not give rise to any discharge of contaminants at or beyond the legal boundary of Pt Montefiores Grant DP 739, SO 64643, Gaz. 1992, P3212 Blk XIV Maungamuka SD and Lot 13 DP 170443 Blk XIV Maungamuka SD which is deemed by a suitably trained and experienced Enforcement Officer of the Northland Regional Council to be noxious, dangerous, offensive or objectionable.
- 12 The Consent Holder shall maintain a log of all complaints (including those received from the Northland Regional Council) regarding odour. The Consent Holder shall notify the Northland Regional Council's Monitoring Manager of each complaint as soon as practicable. The Consent Holder shall record the following details in a complaints log:
- (a) Time and type of complaint including details of the incident, eg. duration, location and any effects noted;
 - (b) Name, address and contact phone number of the complainant (if provided);
 - (c) Where practicable, the weather conditions including wind direction at the time of the incident;
 - (d) The likely cause of the complaint and the response made by the Consent Holder including any corrective action undertaken;
 - (e) Future actions proposed as a result of the complaint; and
 - (f) The response from the Consent Holder to the complainant.

The complaint log shall be made available to the Northland Regional Council's Monitoring Manager immediately upon written request by the Monitoring Manager.

(04) Structure

- 13 This consent only authorises the existing structure as installed at the date of commencement of this consent.
- 14 The Consent Holder shall prepare as built design drawings of the existing flood-gated outfall structure and provide these to the Northland Regional Council's Monitoring Manager within three months of the date of commencement of these consents.
- 15 The structure shall be maintained so that effective flood protection and drainage of the upstream land area is achieved at all times.



Advice Note: Any maintenance or repair work on the discharge pipeline will need to meet the permitted activity criteria of Rule 31.4.4(f) of the Regional Coastal Plan for Northland or otherwise be the subject of an application for resource consent.

General Conditions (01) – (04)

- 16 The Consent Holder shall maintain the treatment system so that it operates effectively at all times, and a written record of all maintenance undertaken shall be kept. A copy of this record shall be forwarded to the Northland Regional Council's Monitoring Manager immediately on written request by the Monitoring Manager.
- 17 To prevent damage to the wastewater treatment system, stock shall not be allowed to enter any area that is utilised for the treatment of wastewater.
- 18 The Consent Holder shall monitor these consents in accordance with Schedule 1 (attached). Changes may be made to Schedule 1 with the written approval of the Northland Regional Council's Monitoring Manager.
- 19 The Consent Holder shall assist in the facilitation of, and actively participate in, meetings with a community liaison group. The purpose of the community liaison group is to provide a forum for the community to be fully informed about the on going operation of the treatment system, and to be directly involved in the development of research to determine the public health effects of the current system and alternative methods of waste treatment and disposal.
- 19A Within one month from the date of commencement of these consents, the Consent Holder shall assist in the formation of the community liaison group by inviting representatives of the following parties to participate in the community liaison group:
- (a) Ngati Kaharau hapu
 - (b) Ngati Hau ki Omanaia Hapu
 - (c) Te Mahurehure hapu
 - (d) Te Hikutu hapu
 - (e) Ngati Korokoro
 - (f) Ngai Tupoto Hapu
 - (g) Hokianga Community
 - (h) Rawene Community

The actual composition of the community liaison group is subject to invitees' willingness or availability to participate. The community liaison group may appoint, or invite, other persons to participate.

- 19B Unless otherwise advised by the Community Liaison Group, the Consent Holder shall meet with the community liaison group at least every two months, starting from the commencement date of these consents. If the community liaison group does not wish to meet, then it should advise the consent holder of this fact in writing so that a record is able to be kept for compliance purposes. The frequency of meetings shall be reviewed annually by the community liaison group and the Consent Holder.



- 19C All Community Liaison Group meetings shall be held at Te Piiti Marae unless the Marae advises other wise. If this is the case then the meeting shall be held at a suitable local venue. The meeting shall be held at a time convenient for the majority of those parties comprising the community liaison group.
- 19D The Consent Holder shall meet the reasonable costs up to a maximum value of \$200 excluding GST associated with venue hire and other disbursements directly related to the facilitation of each Community Liaison Group meeting in which the Consent Holder is required to attend. If an annual public Community Liaison Group meeting (or Hui) is held, the Consent Holder shall meet the reasonable costs up to a maximum value of \$1200 excluding GST associated with venue hire and other disbursements directly related to the facilitation of the annual public meeting.
- 20 Within 12 months of the commencement of this consent, the Consent Holder shall undertake a specific field investigation within the perimeter drain between the point of the existing wetland discharge and the twin flap-gated culverts into the Omanaia River. The purposes of this investigation shall be to determine:
- (a) The level of mixing and dilution of treated wastewater within the drain; and
 - (b) The relative contributions from the treated wastewater discharge and from other drainage system inflows to contaminant loadings in the water discharged to the Omanaia River via the flood-gated outfall.
 - (c) The distribution and chemical characteristics of total ammonia nitrogen contained in the discharge for the purpose of determining whether concentrations of total ammonia nitrogen are likely to exceed ANZECC Guidelines as a consequence of the discharge, at any point in the Omanaia River where the discharged wastewater is fully mixed with the Omanaia River.

The investigation shall include sampling between the existing wetland discharge and the flood-gated outfall during both dry weather and wet weather conditions with at least three sampling runs carried out under each weather condition. Details of the investigation methodology shall be provided to the Northland Regional Council's Monitoring Manager for approval prior to commencement. The final report on this investigation shall be provided to the Northland Regional Council's Monitoring Manager within 12 months of the date of commencement of this consent.

- 21 Within three months of the commencement of these consents, the Consent Holder shall, with the involvement of the community liaison group, engage an experienced and independent public health risk professional to undertake a public health risk assessment of the effects of the wastewater discharge on shellfish gathering. The assessment methodology shall be developed by the public health risk professional, with the shellfish sampling methodology being developed by an independent and experienced water microbiologist. The scope and detail of the overall assessment shall be developed by the public health risk professional with the direct involvement of the community liaison group.
- 21A Within two years of the commencement of these consents, the public health risk assessment shall be completed and a written report setting out the results of the assessment provided to the Northland Regional Council's Monitoring Manager and the community liaison group.



21B Within six months of the written report required by Condition 21A being provided to the Northland Regional Council and the Community Liaison Group, the Consent Holder shall, with the involvement of the Community Liaison Group, engage an appropriately qualified and experienced wastewater design professional, or environmental engineer, to investigate and report on options for the treatment and disposal of wastewater from the Rawene area of benefit. The Consent Holder shall meet the costs of the investigation up to a maximum value of \$15,000 excluding GST.

21C The scope of the investigation required by Condition 21B shall be developed by the Community Liaison Group, in conjunction with the Consent Holder and the person(s) engaged to carry out the investigation. The Consent Holder shall notify the Northland Regional Council's Monitoring Manager in writing of the date that the scope for the investigation was finalised.

As a minimum, the required outcomes of the investigation shall include, but not be limited to:

- (a) The capital and operating costs of each option investigated ;
- (b) An assessment of the technical feasibility of each option, including the state of technical knowledge and the likelihood that alternatives can be successfully implemented;
- (c) The implementation timeframe for each option;
- (d) The operational lifespan of each option;
- (e) The cultural acceptability of each option.

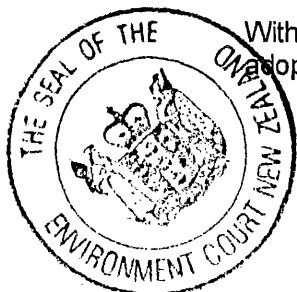
21D Within one year from the date that the scope of the investigation was finalised, as notified to the Northland Regional Council's Monitoring Manager in accordance with Condition 21B, a written report on the outcomes of the investigation required by Condition 21B (a) to (e) shall be provided to the Community Liaison Group and the Northland Regional Council's Monitoring Manager.

21E The Community Liaison Group may confirm in writing to the Consent Holder and the Northland Regional Council's Monitoring Manager the group's preferred option from the report required by Condition 21D. The Consent Holder shall as soon as reasonably practicable, but not later than three years after receiving this confirmation, incorporate the preferred option into the relevant financial planning document being either a draft Long Term Plan or Annual Plan. This draft Plan will then undergo the special consultation process in accordance with the provisions of the Local Government Act 2002 and a decision on whether the Community Liaison Group's preferred option is adopted will be decided in accordance with relevant provisions of that Act.

22 This condition applies only in the event that the:

- (a) Community Liaison Group provides its preferred option in accordance with condition 21E above; and
- (b) Far North District Council decides to adopt an Annual Plan or a Long Term Plan that does not include the preferred option put forward by the Community Liaison Group.

Within 24 months of the date on which the Plan referred to in Condition 22(b) is adopted, the Consent Holder shall design and construct an additional wastewater



treatment wetland on the land owned by the Far North District Council situated immediately to the south of the existing wetland. The purpose of the additional wetland shall be to receive and further treat the discharge from the existing wetland. The wetland design shall be undertaken in consultation with the Community Liaison Group. Details of the wetland design shall be provided to the Northland Regional Council's Monitoring Manager for information. As built drawings of the additional wetland shall be provided to the Northland Regional Council's Monitoring Manager within one month of its completed construction.

22A This condition applies only in the event that the:

- (a) Community Liaison Group provides its preferred option in accordance with condition 21E above; and
- (b) Far North District Council decides to adopt an Annual Plan or a Long Term Plan that includes the preferred option put forward by the Community Liaison Group.

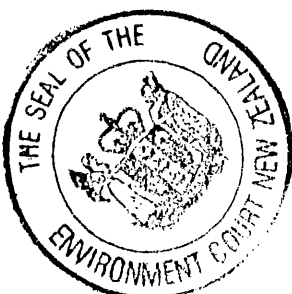
If additional authorisations are required under the Resource Management Act 1991 in order to undertake the development of the preferred option, the Consent Holder shall ensure that applications or notice of requirement are lodged with the relevant consent authority within 12 months of the date on which the Plan referred in 22A(b) is adopted.

Subject to the Consent Holder obtaining all necessary authorisations for the work, the Consent Holder shall ensure that the preferred option is commissioned as soon as is reasonably practicable and prior to the expiry of this resource consent.

23 The Consent Holder shall, for the purposes of adequately monitoring the consent as required under Section 35 of the Resource Management Act 1991, on becoming aware of any non-compliance with the conditions of these consents:

- (a) Immediately take such action, or execute such work as may be necessary, to stop and/or contain such escape;
- (b) Immediately notify the Northland Regional Council, Northland District Health Board's On-call Health Protection Officer, by telephone of an escape of contaminant;
- (c) Take all reasonable steps to remedy or mitigate any adverse effects on the environment resulting from the escape; and
- (d) Report to the Northland Regional Council's Monitoring Manager and the community liaison group for this consent in writing within one week on the cause of the escape of the contaminant and the steps taken or being taken to effectively control or prevent such escape

Advice Note: *With regard to telephone notification, during the Northland Regional Council's opening hours, the assigned monitoring officer for these consents should be contacted. If that person cannot be spoken to directly, or it is outside of the Northland Regional Council's opening hours, then the Pollution Hotline should be contacted.*



24 The Northland Regional Council may, in accordance with Section 128 of the Act, serve notice on the Consent Holder of its intention to review the conditions of these consents annually during the month of June. The review may be initiated for any one or more of the following purposes:

- (a) To deal with any adverse effects on the environment that may arise from the exercise of the consent and which it is appropriate to deal with at a later stage; or
- (b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment; or
- (c) To change existing, or impose new limits on, conditions relating to the quality of the discharge and the receiving waters; or
- (d) To change the monitoring programme contained in Schedule 1.

The Northland Regional Council may also serve notice at any time as a result of:

- (e) Any significant change proposed to the area serviced by the wastewater treatment system; or
- (f) Any significant change to the wastewater treatment and discharge system notified to the Northland Regional Council in accordance with Condition 3; or
- (g) The results of the monitoring and investigations undertaken in accordance with Conditions 20 and 21. In particular the review may provide for additional treatment to mitigate identified public health risks associated with shellfish gathering in the vicinity of the wastewater discharge to the Omanaia River.

The Consent Holder shall meet all reasonable costs of any such review.

Advice Note: *The Northland Regional 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 any time for the following purposes:*

- (a) *To provide for compliance with rules relating to minimum standards of water quality or air quality in any regional plan that has been made operative since the commencement of the consent; or*
- (b) *To provide for compliance with any relevant national environmental standards that have been made; or*
- (c) *Where there are inaccuracies in the information made available with the application that materially influenced the decision on the application and where the effects of the exercise of consent are such that it is necessary to apply more appropriate conditions.*

EXPIRY DATE: 31 OCTOBER 2023



SCHEDULE 1

MONITORING PROGRAMME

The Consent Holder, or its authorised agent, shall undertake the following monitoring:

1. WASTEWATER VOLUMES

-- The Consent Holder shall keep a written record of both the daily, midnight to midnight, inflow volumes to the treatment system and the wastewater discharge volume using the meters required by Condition 4 of this Consent.

The average dry weather flow shall be a "rolling" (moving) average based on the inflow volumes from the 30 most recent "dry weather flow" days. For the purposes of this calculation, a "dry weather flow day" is any day on which there is less than 1 millimetre of rainfall and that day occurs after three consecutive days either without rainfall or with rainfall of less than 1 millimetre.

Advice Note: *The daily rainfall can be taken from the Northland Regional Council's rainfall recorder site 534403: Hokianga Harbour - Omapere. This data will be supplied by the Northland Regional Council on written request by the Consent Holder.*

The Consent Holder shall also keep a written record of the daily volume of septage that is discharged into the treatment system.

2. TREATED WASTEWATER

The following sampling and analyses shall be undertaken on at least one occasion each calendar month. During the months of May, June, July, August and September, the sampling shall be undertaken during, or immediately after, a rain event on at least three occasions.

A composite* wastewater sample shall be collected from the outlet of the treatment system at NRC Sampling Site 100544 (Discharge from constructed wetland) and analysed for the following:

Faecal Coliforms
Escherichia coli
5 day Biochemical Oxygen Demand
Total Suspended Solids
Total Ammoniacal Nitrogen

*A sample made up of equal volumes from three samples taken at least one minute apart during the same sampling event.

The monthly monitoring of Escherichia coli concentrations is to be undertaken for the purpose of establishing an appropriate median and 90 percentile value to replace the current faecal coliform concentrations in Condition 8. The reason for this is that enumeration tests for E. coli have significantly less variance than the MPN faecal coliform test.



After a period of two years, the Condition 8 may be reviewed in accordance with Condition 21(c) to replace Faecal Coliforms with Escherichia coli.

Temperature, pH and dissolved oxygen concentration shall be recorded in the wastewater sample using an appropriate meter, and in accordance with standard procedures.

3. COMPLIANCE WITH CONDITION 8

3.1 Median Value

The median value for the determinands listed shall be a "rolling" median calculated on the 12 most recent treated wastewater samples collected. Until such time as 12 individual monthly samples have been collected, the results of sampling to date shall be utilised for compliance purposes.

3.2 90th Percentile Value

The 90th percentile value for the determinands listed shall be a "rolling" 90th percentile value calculated on the 12 most recent treated wastewater samples collected. Until such time as 12 individual monthly samples have been collected, the results of sampling to date shall be utilised for compliance purposes.

4. COLLECTION OF SAMPLES

All samples shall be collected using standard procedures and in appropriate laboratory supplied containers.

All samples collected as part of this monitoring programme shall be transported in accordance with standard procedures and under chain of custody to the laboratory.

All samples taken shall be analysed at a laboratory with registered quality assurance procedures[#], and all analyses are to be undertaken using standard methods, where applicable.

[#] *Registered Quality Assurance Procedures are procedures which ensure that the laboratory meets recognised management practices as would include registrations such as ISO 9000, ISO Guide 25, Ministry of Health Accreditation.*



5. REPORTING

The Consent Holder shall forward an annual report to the Northland Regional Council's Monitoring Manager and the Community Liaison Group for this consent by 1 May each year, for the preceding year 1 April and 31 March, detailing the following:

- The daily wastewater inflow and discharge volumes, and
- An assessment of any increase in the inflow volumes as a result stormwater infiltration and inflow, and what is proposed to be undertaken to rectify any identified problems. The daily rainfall record for this area shall be included in this assessment to identify rainfall events; and
- The monitoring results for Section 2; and
- All the calculated "rolling" medians and 90 percentile value for the determinands listed in Condition 8; and
- An analysis of the trends identified in each reporting year relative to previous reports.

All required numerical monitoring results shall be provided in a Microsoft Excel spreadsheet, or otherwise an alternative format agreed to beforehand with the Northland Regional Council.

