

FAR NORTH DISTRICT COUNCIL, PRIVATE BAG 752, KAIKOHE 0440

To carry out the following activities associated with the operation of a wastewater treatment plant servicing the Rangiputa community in the catchment of Kohanga Bay on Lot 1 DP 72867 Blk III Karikari SD, at or about location co-ordinates 1627065E 6140689N:

- (01) Discharge Permit:** To discharge treated domestic wastewater, including seepage from the base of the treatment system, to land;
- (02) Discharge Permit:** To discharge contaminants (primarily odour) to air.

To carry out the following activities associated with operation of a sewage pump station located within the Road Reserve of Rangiputa Road, Rangiputa, adjacent to Lot 47 DP 75565 at or about location co-ordinates 1626936E 6140319N:

- (03) Discharge Permit:** Unplanned discharge of raw sewage from sewage reticulation network onto land.
- (04) Discharge Permit:** To discharge contaminants to air during unplanned discharges of raw sewage from sewage reticulation network.

Note: All locations referred to in this document are expressed as Geodetic Datum 2000, New Zealand Transverse Mercator Projection.

Subject to the following conditions:

(01) Discharge Treated Wastewater to Land

- 1 Within six months of the date of commencement of this consent, the Consent Holder shall forward to Regional Council Monitoring Manager a Wastewater Treatment Plant Management Plan. The Management Plan shall include but not be limited to:
 - (a) An outline of the proposed treatment and disposal process; and
 - (b) A discussion on the operation of each treatment and disposal process unit; and
 - (c) A list of routine maintenance tasks.

If changes are made to the Management Plan within the duration of the consent, the Consent Holder shall forward a copy of the amended Management Plan to the Regional Council Monitoring Manager.

- 2 Within six months of the date of commencement of this consent, the Consent Holder shall install, and subsequently maintain, a flow meter that has a measurement error of $\pm 5\%$ or less to measure the daily quantity of untreated wastewater received at Rangiputa Wastewater Treatment Plant. The Consent Holder shall keep a written record of the daily volume received at the plant.

To determine the level of accuracy of the influent flow meter, the meter shall be calibrated at regular intervals in accordance with Schedule 1 (**attached**).

- 3 The Consent Holder shall undertake monitoring of this consent in accordance with Schedule 1 (**attached**).
- 4 Within six months of the date of commencement of this consent, the Consent Holder shall install, and subsequently maintain, an alarm system to notify the operator of the wastewater system that the water level in Pond 3 of the Rangiputa Wastewater Treatment Plant is within 500 millimetres of the level at which the wastewater would overflow the embankment of pond three.
- 5 Within six months of the date of commencement of this consent, the Consent Holder shall ensure that the Rangiputa Wastewater Treatment Plant is connected and continuously communicating with a remote electronic monitoring system. The monitoring system shall be capable of, and utilised for, notifying the treatment plant operator of at least the following:

- (a) High water level in pond three; and
- (b) Influent flow rate.

In addition, the monitoring system shall:

- (c) Have a continuous back up power supply in case of mains power failure.

The Consent Holder shall keep a written log of all alarms generated by the remote monitoring system.

- 6 Stormwater from surrounding areas shall, as far as is practicable, be prevented from entering the wastewater treatment and disposal system.
- 7 Notwithstanding any other condition, the exercise of this consent shall not result in wastewater from any treatment or disposal pond overflowing onto adjacent land.

(02) Discharge Contaminants to Air from a Wastewater Treatment Plant

- 8 The maintenance and operation of the Rangiputa Wastewater Treatment Plant shall not give rise to any discharge of contaminants to air, at or beyond the boundary of Lot 1 DP 72867 Blk III Karikari SD, which is deemed by a suitably trained and experienced Enforcement Officer of the Regional Council to be noxious, dangerous, offensive or objectionable.

(03) Unplanned Discharge of Raw Sewage onto Land

- 9 The Consent Holder shall keep a written record of all unplanned discharges of raw sewage from the sewage reticulation network. This record shall include the following information (or estimate) for each unplanned discharge:
- (a) The location of the discharge;
 - (b) The time the discharge started;
 - (c) The duration of the discharge;
 - (d) The quantity of wastewater that was discharged; and
 - (e) The reason for the unplanned discharge.

A copy of this written record for an unplanned discharge shall be forwarded to the Regional Council Monitoring Manager within 24 hours of the occurrence of the unplanned discharge.

For the purposes of this consent, the sewage reticulation network includes the pump station located within the Road Reserve of Rangiputa Road, Rangiputa, adjacent to Lot 47 DP 75565, and pipelines, and manholes, and any other components which are involved in the conveyance of raw sewage from properties to the sewage treatment system.

- 10 The Consent Holder shall ensure that all unplanned discharges of raw sewage from the sewage reticulation network are responded to and cleaned up as soon as is practicable, in accordance with the Consent Holder's official response procedure for unplanned discharges.
- 11 In the event that an unplanned discharge of raw sewage from the sewage reticulation network enters any watercourse, or the coastal marine area, then the Consent Holder shall comply with Condition 16.
- 12 Within six months of the date of commencement of this consent, the Consent Holder shall ensure that the pump station located within the Road Reserve of Rangiputa Road, Rangiputa, adjacent to Lot 47 DP 75565 includes at least the following:
- (a) One duty and one standby pump. The capacity of the standby pump(s) shall be at least equal to that of the largest duty pump; and
 - (b) Automatic switching from duty to standby pumps on failure of the duty pump.

Within two years of the date of commencement of this consent, the Consent Holder shall ensure that the pump station located within the Road Reserve of Rangiputa Road, Rangiputa, adjacent to Lot 47 DP 75565 shall include the following:

- (c) The ability to connect a portable generator to the pump station switchboard which has the capacity to operate the duty pump.
- (d) Twelve hours of emergency storage volume between the start level of the duty pump and the lowest point at which sewage would start to discharge from the pump station or connected gravity sewers. As a minimum the emergency storage volume shall be based on the estimated average daily dry weather flow during peak summer use in the year 2032.

13 The Consent Holder shall ensure that the pump station located within the Road Reserve of Rangiputa Road, Rangiputa, adjacent to Lot 47 DP 75565, is connected and continuously communicating with a remote electronic monitoring system. The monitoring system shall be capable of, and utilised for, notifying the sewage reticulation network operator of at least the following:

- (a) Duty and standby pump start failure; and
- (b) Mains power failure; and
- (c) High water level in the pump station; and
- (d) An imminent overflow from a pump station; and
- (e) Monitoring system failure.

In addition, the monitoring system at the pump station shall:

- (f) Allow the operator of the system to remotely switch the duty and standby pumps; and
- (g) Have a continuous back up power supply in case of mains power failure.

The Consent Holder shall keep a written log of all alarms generated by the remote monitoring system.

(04) Discharge Contaminants to Air during Unplanned Sewage Discharges

14 The unplanned discharge of raw sewage from the sewage reticulation network, as defined in Condition 9, shall not give rise to any discharge of contaminants to air (namely odour) which is deemed by a suitably trained and experienced Enforcement Officer of the Regional Council to be noxious, dangerous offensive or objectionable to such an extent that it has, or is likely to have, an adverse effect on the environment.

Advice Note: It is expected that the Consent Holder will respond promptly to unplanned discharges from its pump stations. It is recognised that there is likely to be short term offensive and objectionable odours generated from a discharge of raw sewage. When assessing whether the odours are offensive or objectionable, the frequency, intensity, duration, offensiveness and location of the odour discharge will be taken into account.

General

- 15 The Consent Holder shall maintain the treatment system and reticulation network so that it operates effectively at all times and a written record of all maintenance undertaken shall be kept.
- 16 For the purposes of the lapsing provisions of Section 125 of the Act, consents (03) and (04) shall not lapse until their expiry.
- 17 The Consent Holder shall, for the purposes of adequately monitoring these consents as required under Section 35 of the Resource Management Act 1991, on becoming aware of any contaminant associated with the Consent Holder's operations escaping otherwise than in conformity with 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 Regional Council Monitoring Department 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 Regional Council Monitoring Manager 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.
- 18 The 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 of these consents annually during the month of May. 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 these consents and which it is appropriate to deal with at a later stage, or to deal with any such effects following assessment of the results of the monitoring of these consents and/or as a result of the Regional Council's monitoring of the state of the environment in the area;
 - (b) To require the adoption of the best practicable option to remove or reduce any adverse effect on the environment;

- (c) To provide for compliance with rules in any regional plan that has been made operative since the commencement of the consent;
- (d) To deal with any inadequacies or inconsistencies the Regional Council considers there to be in the conditions of these consents, following the establishment of the activity the subject of these consents;
- (e) To deal with any material inaccuracies that may in future be found in the information made available with the application (notice may be served at any time for this reason);
- (f) To impose new limits relating to the quality and quantity of the discharge;
- (g) To require additional emergency storage or other mitigation measures within the sewage reticulation network to reduce the frequency of unplanned discharges of raw sewage.

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

EXPIRY DATE: 30 NOVEMBER 2032

ISSUED at Whangarei this Seventeenth day of July 2008

S J Savill
Team Leader - Water & Wastes

SCHEDULE 1

MONITORING PROGRAMME

1. INFLUENT FLOW

- (a) A record of the daily influent wastewater volume received at the wastewater treatment plant, between 12.00 a.m. to 12.00 p.m. (midnight), shall be kept.
- (b) To monitor the accuracy of the influent meter, the meter shall be calibrated at routine intervals in accordance with manufacturer's instructions. If no interval is prescribed by the manufacturer then the meter shall be calibrated at no more than two yearly intervals. Copies of the calibration certificates shall be retained by the Consent Holder and made available to Regional Council Monitoring Department within two weeks of written request by a Regional Council Monitoring Officer.
- (c) The Consent Holder shall advise the Regional Council Monitoring Manager if the results of the calibration show that the accuracy of the meter does not comply with the requirements of Condition 2, within two weeks of becoming aware of the calibration results.
- (d) In the event that the daily influent wastewater volume received exceeds 100 m³/d, the Consent Holder shall identify the cause of the high inflow volume.

2. TREATED EFFLUENT QUALITY

The Consent Holder shall undertake monitoring of the treated effluent in accordance with the following requirements:

- (a) The Consent Holder shall agree an Effluent Sampling Location with the Regional Council Monitoring Officer for these consents.
- (b) As a minimum, the sample location shall:
 - (i) Have safe and easy access at all times; and
 - (ii) Allow the collection of a treated wastewater sample that is representative of the treated effluent stream that will be discharged to land.
- (c) At eight **weekly** intervals a grab sample of treated effluent shall be collected at the agreed Effluent Sampling Location and analysed for five day Biochemical Oxygen Demand (BOD₅). The sample shall be filtered via Whatmans Glass Fibre size C (GFC), or equivalent, for the purpose of removing algae, prior to undertaking the analysis. The results shall be reported as filtered BOD₅.
- (d) Samples shall be collected and handled generally in accordance with New Zealand Wastewater Monitoring Guidelines, NZ Water Environment Research Foundation (October 2002).
- (e) Samples shall be analysed by an IANZ accredited laboratory.

3. GROUND WATER QUALITY

The Consent Holder shall undertake monitoring of the groundwater in accordance with the following requirements:

- (a) Water samples shall be taken from the NRC Sampling Site 104873, Rangiputa O/P Groundwater @ Sampling Bore No 2. The Consent Holder shall ensure safe and easy access to this monitoring site at all times.
- (b) At four **monthly** intervals a sample of groundwater from NRC Sampling Site 104873 shall be collected and be analysed for the following:

Parameter	Units
Conductivity	mS
Nitrate Nitrogen	mg / L
Faecal Coliforms	mg / L

- (c) The groundwater samples shall be taken in accordance with guidelines provided in Rosen, M.R., *et al.*, 1999; "New Zealand guidelines for the collection of groundwater samples for chemical and isotopic analysis"; Institute of Geological and Nuclear Sciences Limited; science report 99/9; p 80.
- (d) Samples shall be analysed by an IANZ accredited laboratory.

4. REPORTING

The Consent Holder shall forward an annual report to the Regional Council Monitoring Manager by 1 May each year, for the preceding year 1 April and 31 March, detailing the following:

- (a) Daily influent wastewater volumes, in cubic metres;
- (b) Cause(s) for inflow rates in excess of 100 m³/d;
- (c) The results from the effluent and groundwater monitoring undertaken in accordance with Section 2 and 3 of this Schedule; and
- (d) A summary of any other monitoring undertaken as required by this consent or environmental monitoring undertaken by the Consent Holder.

All the above records shall be provided in electronic format (Microsoft Excel spreadsheet) or as agreed with the Regional Council.