

Appendix A
Resource Consent
4007

Appendix A – Resource Consent 4007

96 4007 Notified Replacement
(01 – 03)

FAR NORTH DISTRICT COUNCIL, PRIVATE BAG 752, KAIKOHE
VK CONSULTING ENVIRONMENTAL ENGINEERS LTD, P O BOX 10022, TE MAI, WHANGAREI

To carry out the following activities associated with the operation and use of a sewage treatment and disposal system at Ryder and Parapara Roads, Taipa on, Pt Allot 57, Pt Sec 33, & Pt Allot 24, Blk IV Mangonui SD:

01

To discharge treated municipal wastewater to an unnamed tributary of the Parapara Stream, at Taipa, at or about Map Reference O04:514-882

02

To discharge contaminants from the wastewater treatment system to ground at two points, in the catchments of an unnamed tributary of the Parapara Stream and an unnamed tributary of Ryders Creek, at or about Map References O04:514-882 & O04:524-889 respectively;

03

To discharge contaminants to air from activities associated with the treatment and disposal of wastewater at two points, at or about Map References O04:514-882 & O04:524-889;

subject to the following conditions:

DISCHARGE TO WATER

- 1 The quantity of treated wastewater discharged shall not exceed 1005 cubic metres per day (based on dry weather flows).
- 2 The discharge shall not cause the water quality in the unnamed tributary of the Parapara Stream at NRC Sample Site No 5941 (see NRC Plan No. 3078, attached), to fall below the following standards:
 - a) The natural pH of the water shall be within the range 6.5 to 9.0 except where due to natural causes.
 - b) The visual clarity of the water shall not be reduced by more than 50%.
 - c) There shall be no production of significant oil or grease films, scums or foams, floatable or suspended materials, or emissions of objectionable odour
 - e) The median concentration of the faecal coliform bacteria in the water shall not exceed 600 per 100 millilitres, and the 80 percentile concentration shall not exceed 2400 per 100 millilitres, based on not fewer than 5 samples taken over any 30 day period.
 - e) The dissolved oxygen concentration shall not be reduced below 80% of saturation.
 - f) The concentration of total ammoniacal N shall not exceed the following:

Water Quality Criteria for Freshwater Aquatic Life based on Total Ammonia (milligrams per litre) (Four day average)

pH	Total Ammonia, NH ₄ -N g/m ³				
	10°C	15°C	20°C	25°C	30°C
6.50	1.81	1.81	1.22	0.86	0.60
6.75	1.81	1.81	1.22	0.86	0.60
7.00	1.81	1.81	1.22	0.86	0.61
7.25	1.81	1.81	1.23	0.86	0.61
7.50	1.81	1.81	1.23	0.86	0.61
7.75	1.73	1.64	1.15	0.81	0.58
8.00	1.13	1.09	0.76	0.54	0.39
8.25	0.64	0.62	0.44	0.32	0.23
8.50	0.37	0.36	0.26	0.19	0.14

- 3 Analysis of all samples taken to check compliance with Condition 2, shall be undertaken by a laboratory with a registered quality management system to the satisfaction of the Regional Council.
- 4 The Consent Holder shall maintain easy access to NRC Sampling Site Nos. 1687 on NRC Plan No. 3078 attached.

DISCHARGE TO AIR

- 5 The dissolved oxygen concentration in all the primary and secondary treatment ponds shall not fall below 1.0 gram per cubic metre.
- 6 There shall be no discharge to air of odours, which in the opinion of an enforcement officer of the Regional Council, is noxious, toxic, dangerous, offensive or objectionable, at or beyond the boundary of the property.

GENERAL CONDITIONS APPLYING TO ALL CONSENTS

- 7 The Consent Holder shall monitor the consents in accordance with the **attached** Schedule 1.
- 8 The wastewater treatment plant will be upgraded in accordance with the recommendations made in the report Far North District Council East Coast Bays Sewage Treatment System Resource Consent Renewal - 4007 Supporting Information dated July 1997. An average 40% establishment of wetland plants over the area of four cells of the constructed wetlands shall be achieved by December 2001.
- 9 The Consent Holder shall submit a Management Plan to the Regional Council for approval within 18 months of the date of commencement of this consent. The Management Plan shall cover all aspects of the operation and maintenance of the sewage treatment and disposal system including contingency measures for unforeseen or emergency situations. The operation and maintenance of the wastewater treatment and disposal system shall be carried out in accordance with the approved Management Plan.
- 10 The treatment system shall be adequately fenced to exclude stock.
- 11 The Consent Holder shall maintain fencing of the drain receiving the discharge from the discharge point to its confluence with the farm drain at NRC sampling point 5940 as shown on NRC Plan 3078 **attached**.

- 12 In accordance with Section 128 of the Resource Management Act 1991, the Regional Council may review all conditions of this consent annually, following assessment of the results of the Monitoring Programme and other monitoring undertaken by the Regional Council in the area. The Consent Holder shall meet the reasonable costs of any such review.

EXPIRY DATE: 30 November 2008

SCHEDULE 1

The Consent Holder or its agent shall carry out the following monitoring programme.

1. MONITORING OF THE DISCHARGE

At not less than four monthly intervals the Consent Holder or its agent shall undertake the following sampling and analyses.

Composite samples of the discharge made up of not less than three consecutive grab samples of equal volume taken at least 5 minutes apart will be taken at NRC Sampling Site No 1687, and be analysed for the following:

Determinand
Total Ammonia
Five Biochemical Oxygen Demand
Suspended Solids

In addition to the above sampling, five consecutive samples shall be taken at least 5 minutes apart at NRC Sampling Site No 1687, and be analysed for the following:

Determinand
Faecal Coliforms (membrane filtration technique)

All analyses and measurements are to be undertaken using standard methods.

If the concentrations of suspended solids, five-day biochemical oxygen demand exceed 60 grams per cubic metre, or ammonium-nitrogen exceed 5 grams per cubic metre, then additional monitoring shall be carried out within two working days in accordance with Section 2.2.

Notwithstanding the above, if the median (based on the 5 consecutive samples taken on each occasion) concentration of faecal coliform bacteria exceeds 1,000 faecal coliform colonies per 100 millilitres, then additional monitoring shall be carried out within two working days in accordance with Section 2.2.

2.0 RECEIVING WATER QUALITY MONITORING

- 2.1 If a conspicuous change in clarity is apparent at the confluence of the discharge drain and the farm drain (NRC Sampling Site No 5941, see NRC Plan No. 3078), then a standard Black Disk shall be used to measure differences in clarity between the upstream waters and the waters within the plume.

For the sake of this exercise, a conspicuous change shall be deemed to be an observable plume of discoloured water extending at least 10 metres downstream of the confluence.

- 2.2 To ensure that samples are representative, triplicate samples shall be taken at all sampling sites. A composite sample made up of equal volumes of each triplicate sample shall be analysed to determine compliance.

Samples shall be taken from NRC Sampling Site No's , 1687, 5939, 5940, and 5941 (see NRC Plan No. 3078), and be analysed for the following determinands:

1. Total Ammoniacal-N
With respect to Ammoniacal-N three further samples will need to be taken each day within four days of the initial sample being taken to determine compliance with the Ammoniacal-N quality standards in condition 2.
2. Faecal Coliforms (membrane filtration technique)
With respect to faecal Coliforms four further samples will need to be taken within 30 days of the initial sample being taken, to determine compliance with the bacterial water quality standard in condition 2.

Temperature, pH and dissolved oxygen concentration shall be measured at all sampling sites using a meter and in accordance with standard procedures.

Results of this monitoring shall be used to determine compliance with Condition 2 of the consent.

3.0 OTHER COMPLIANCE MATTERS

During the quarterly visits undertaken in Section 1 of this schedule the following additional monitoring shall be undertaken.

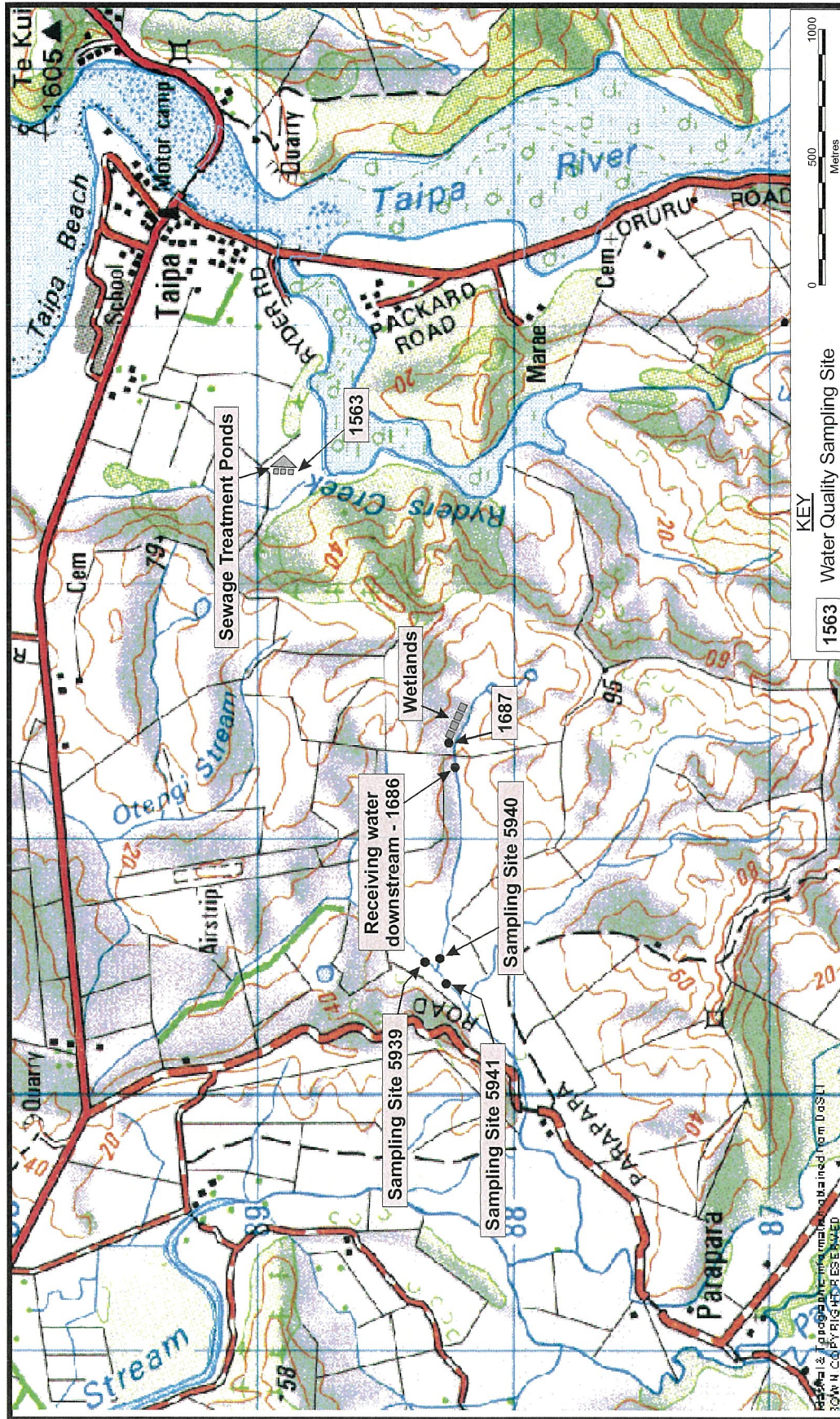
1. Dissolved oxygen concentration is to be measured at three points at approximately equal intervals around the edge of each pond (Taipa Ponds). Measurements shall be taken at least 60 cm from waters edge and at least 5 cm below the water surface. The median of these values shall be used to determine compliance with Condition 5 of the consent.
2. Any odours at the site need to be noted.

4.0 REPORTING

The results of the monitoring shall be reported to the Regional Council within one month of each monitoring visit, or immediately (within 1 working day) when monitoring is required under Section 2 of this Schedule, or possible non compliance with a consent condition is detected.

5.0 REVIEW

This monitoring programme may be reviewed two years after the commencement of the consent, where a need arises. The Northland Regional Council in conjunction with the Consent Holder shall undertake the review. The Consent Holder shall meet the reasonable costs of any such review.



<p>RESOURCE CONSENT NLD 68 4007</p> <p>for</p> <p>Far North District Council</p> <p>East Coast Bays Sewage Treatment</p>		<p>NORTHLAND REGIONAL COUNCIL</p>	
<p>By C N Anderson</p>	<p>Date 10/99</p>	<p>Scale N.T.S.</p>	<p>Plan No. 3078</p>
<p>No.</p>	<p>Amendment By</p>	<p>Date</p>	<p>Date</p>

REASONS FOR THE DECISION

The reasons for the decision to grant this consent are that, given adherence to the terms and conditions specified, sustainable use of the affected resource will not be compromised, and conforms with Part II of the Resource Management Act 1991.

Appendix B

Fourth Schedule of

RMA