

# CONSENT MONITORING REPORT



Your Community Partner

Consent Name	Raglan Wastewater Treatment System
Consent No.	971390
Year	1 July 2010 – 30 June 2011
Date	26 September 2011
File No.	55 06 17M / USV03

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## REPORT/COMMENTS

### Raglan Wastewater Treatment System 1 July 2010 – 30 June 2011

The Waikato District Council holds resource consent to discharge up to 2600 cubic metres of treated wastewater per day into the Raglan Harbour. The consent was issued on 1 Feb 2005 and has an expiry date of 14 February 2020.

The data summarises annual monitoring test results for the parameters monitored at the consented site.

A review of the compliance with consent conditions during the 2010/11 reporting year indicated that the treatment system is closer to meeting the water quality parameters of the resource consent than in the previous period and is likely to be having no more than a minor effect on the receiving environment. The exception to this was suspended solids which in summer is generally algae.

For 6 days in January, April, May and June 2011 there was pumping outside the consented tidal times due to weather and high inflows into the treatment plant. Pumping was done to avoid overtopping of the treatment ponds and Environment Waikato was notified of these events at the time.

The median maximum daily flow was estimated 2154 cubic metres per day over the total reporting period. The maximum daily flow was 2706 cubic metres in early October, associated with heavy rain.

### Summary of discharge quality to Raglan harbour

#### *Non-compliant Suspended Solids*

The Target Median was 20 g/m<sup>3</sup>. The 90<sup>th</sup> Percentile target was 30 g/m<sup>3</sup>.

- The Median value for the 2010/11 year was 42 g/m<sup>3</sup>, down from 75 g/m<sup>3</sup> in 2009/10.
- Maximum recorded value was 97 g/m<sup>3</sup> in February 2011.
- The 90<sup>th</sup> Percentile target was exceeded at 63 g/m<sup>3</sup>, down from 117 g/m<sup>3</sup> in 2009/10.

A trial project to reduce suspended solids using ultrasound was run from September 2010 to June 2011. When comparing 2009/2010 and 2010/2011 results for median and 90 percentile, suspended solids have been reduced by about 45%, however results for 2010/2011 are still above consent limits.

### *Compliant Biochemical Oxygen Demand*

The Target Median was 10 g/m<sup>3</sup>. The 90<sup>th</sup> Percentile target was 20 g/m<sup>3</sup>.

- The Median value for the 2010/11 year was 7.4 g/m<sup>3</sup> down from 11 g/m<sup>3</sup> in the previous period.
- Maximum recorded value was 14 g/m<sup>3</sup> down from 26 g/m<sup>3</sup> for the previous year.
- The 90<sup>th</sup> Percentile value was 11.8 g/m<sup>3</sup> down from 20 g/m<sup>3</sup> in 2009/10.

### *Compliant Faecal Coliforms*

The Target Median was 14 MPN/100mL. The 90<sup>th</sup> Percentile target was 43 MPN/100mL.

Significant improvement on previous period due to UV system.

- The Median value for the 2010/11 year was 2 MPN per 100mL.
- Maximum recorded value in May 2011 was 40 MPN per 100mL.
- The 90<sup>th</sup> Percentile value was 10 MPN per 100mL

### *Partial Compliance Enterococci*

The Target Median was 35 MPN/100mL.

- The Median value for the 2010/11 year was 2 MPN per 100mL, for the period 15 December 2010 to 28 January 2011.

The high result on 11 January 2011 may have been due to a low intensity of approximately 30w/m<sup>3</sup> on that day. Other days had a minimum of 35w/m<sup>3</sup> and achieved a good result. Work with the supplier in June resulted in intensities in the 70s which should give better results in 2011/12.

## **Summary of Treatment Issues and Improvement Plans**

The results for this year are markedly improved on the previous period in most areas except Suspended Solids. With increased UV intensity, Enterococci should comply.

The discharge compliance with the Suspended Solids requirement has not been achievable. It is suspected that the final holding pond is still not improving elevated Suspended Solids levels due to lack of settlement action. This pond must be kept at low levels to reduce the incidence of out-of-hours pumping.

After trying several methods to eliminate odours, which included surface aeration and pH adjustment, the anaerobic ponds have been bypassed as no solution to the odour problem could be found at this time.

Telemetry, a new link between the discharge pumping station and the treatment plant main building, has eliminated the past communications problems at the site. However there are still some issues with the overall communications between Raglan and WDC head office. These are due to be addressed in 2011/12.

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**OPERATIONS MANAGER**

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