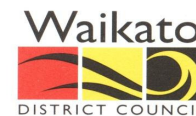


CONSENT MONITORING REPORT



Your Community Partner

Consent Name	Te Kauwhata Wastewater Treatment System
Consent No.	940355
Year	2008-09
Date	30 September 2009
File No.	55 06 19M

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REPORT/COMMENTS

Te Kauwhata Wastewater Treatment System

The Waikato District Council holds resource consent (940355) to discharge up to 1080 cubic metres of treated wastewater per day from the Te Kauwhata wastewater treatment plant to Lake Waikare.

A review of the consent conditions during the 2008-2009 reporting year indicated that the treatment system is meeting the water quality parameters of the resource consent and is having no more than a minor environmental effect.

Discharge water quality parameters generally improved on the results of the previous reporting period.

The maximum consented discharge flow was exceeded on more than 40 days over July and August 2008 during a period of extremely wet weather. The maximum consented discharge flow was exceeded regularly for short durations in October, December, February, May and June during the reporting period.

The maximum daily flow was 1723 cubic metres per day in August 2008. The median maximum was 1188 cubic metres per day over the total reporting period. The monthly outflows for the reporting period are considerably higher than the previous period. This is to be expected as the 2007-2008 period was very dry.

The overall performance picture has remained good with improvement in median recorded values for suspended solids, ammoniacal nitrogen and faecal coliforms results.

Summary of Nutrient load discharged to Waikato River

During the 2008-2009 period we have changed our method of calculation to utilise the monthly average daily Inflow volumes. In previous year we used the monthly average daily outflow from the wetland.

Monthly data indicated that the Maximum Total Nitrogen average daily loading into the wetland was 7.52 kg/ha/day¹⁶ during October 2008.

Total Nitrogen applied to the Wetland

The 90th Percentile value was 6.69 kg/ha/day. Median value for the 2008-2009 year was 2.94 kg/ha/day. Minimum 0.85 kg/ha/day in February 2009. Mean 3.48 kg/ha/day.

Total Nitrogen discharged to Lake Waikare

The 90th Percentile value was 3.6 kg/day. Median value for the 2008-2009 year was 1.81 kg/day. Maximum recorded monthly total was 4.1 kg/day in October 2008. Minimum 0.77 kg/day in September 2008. Mean 1.98 kg/day

Total Phosphorous discharged to Lake Waikare

The 90th Percentile value was 2.59 kg/day. Median value for the 2008-2009 year was 1.58 kg/day. Maximum recorded monthly total was 2.65 kg/day in August 2008. Minimum 0.94 kg/day in November 2008. Mean 1.71 kg/day

Summary of Treatment

The Aquamats system is providing very good treatment performance. It is assumed that earlier variability in performance was linked to discharges received from the meat processor Richmonds and the local haulage company Carleys Transport. Richmonds is now closed and Carleys is monitored weekly for trade waste compliance in an attempt to encourage them to reduce their fertiliser washings going directly to the treatment plant.

The Wetland continues to contribute to the overall improvement of the discharge quality. The attached data tables demonstrate there is a general quality improvement from the pond 2 outlet and the wetland outlet sample values recorded. The wetland also contributes to significant buffering of the final discharge pH thereby ensuring the toxic NH₃ form of the Ammonia in the discharge plume to the river remains very low.

An application to renew the resource consent was made on the 30 January 2008, six months prior to expiry. The application was notified and received a number of submissions in opposition. The application is on hold while consultation continues with submitters.

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H Cameron
PLANTS ENGINEER

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L Larsen
ACTING GENERAL MANAGER
WATER & FACILITIES