

CONSENT MONITORING REPORT



Your Community Partner

Consent Name	Huntly Wastewater Treatment System
Consent No.	951126 and 119647
Year	1 July 2011 – 30 June 2012
Date	25 September 2012
File No.	55 06 29M / USV03

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REPORT/COMMENTS

Huntly Wastewater Treatment Discharge 1 July 2011 – 30 June 2012

The Waikato District Council holds the above resource consents associated with the treatment and discharge of wastewater from the Huntly sewage treatment plant located on the outskirts of the settlement. The resource consents issued by Environment Waikato include the following:

- | | |
|--------|--|
| 951126 | Active prior to April 2012
To discharge up to 6000 cubic metres per day of treated wastewater from the plant after treatment subject to a number of conditions. |
| 119647 | Active after April 2012
To discharge up to 11500 cubic metres per day of treated wastewater from the plant after treatment subject to a number of conditions. |

A renewal of the expired consent came into force on 13 April 2012. A subsequent request for a review of some of the conditions of the consent has resulted in an amended consent approved on 21 August 2012.

Although high pH was measured at the outlet of Pond 2, the existing wetland contributed to significant buffering of the final discharge pH resulting in no measurements of high pH at the wetland outlet. This ensured that the toxic NH₃ form of the ammonia in the discharge to the river remained low.

Treatment Performance and Consent Compliance

Treatment performance and compliance with consent conditions is documented on the attached Consent Report Table and Monitoring Results Spreadsheet. The worksheet labelled 'Trends' compares the current year to 30th June to the previous 4 years.

The graphs show that most criteria used for compliance have been within the required limits. Instances of high pH at the consent measuring point (Pond 2 outlet) have been buffered through the wetland system and there were no pH measurements taken before the receiving waters that exceeded the consent limits.

Measurements indicate that the effluent quality would not meet the new standards required from 1 December 2012. Of particular concern are suspended solids levels and total nitrogen. Phosphorus levels in the effluent are also marginal.

Discharge quantity allowances were exceeded on two occasions under Consent 951126:

1 July 2011	6164m ³
22 Dec 2011	6086m ³

Decommissioning of the gravel filter and construction of a rock lined channel will be completed this financial year.

The combined discharge quality of the Huntly and Ngaruawahia treatment plants will be significantly improved this year with the installation and commissioning of new treatment steps at both plants. At Ngaruawahia, an 'Actiflo' treatment system will be installed to remove most of the suspended solids material from the effluent. This process will also significantly improve most other consent parameters. Ultraviolet disinfection will also be installed.

At Huntly ultraviolet disinfection will be installed.

Operational Comments

Septage Receiving Plant:

Modifications to the plant have largely addressed earlier problems of solids jamming the unit and it is now generally working very well.

Main Stepping Screen:

This works well and there have been no major problems.

Aerators:

The existing aerators provide good dissolved oxygen levels.

Wetland:

These continue to assist with improving water quality. Further rehabilitation works will be carried out as part of a wider plant upgrade program. There were no incidents of overflows from the wetlands during winter months.

Staff Maintenance Visits:

A dedicated staff member visits the site at least twice a week.

Inflow and Infiltration:

Council has budgeted \$100,000 for I&I investigation and remediation in the current financial year in an effort to reduce the high inflows experienced during significant rainfall events.

Work In Progress:

Council has engaged consultants (MWH Consultants) to provide final upgrade proposals for consideration, final design and implementation before the tighter consent limits apply from 1

December 2012. The improvements will include the construction of a rock lined channel as required by Condition 7 of Consent 119647. A current year budget of \$900,000 has been allocated for these works.

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TREATMENT PLANTS ENGINEER

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R Bax
GENERAL MANAGER
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