

105551 Matangi Wastewater Discharge to Ground 2007-08

This consent authorises the Consent Holder to: discharge up to 52 cubic metres per day of treated sewage effluent from Matangi township, into the ground in the vicinity of Tauwhare Rd – Matangi. NZMS 260 S14:210-751

	Conditions	Comply Yes/No	Comments
1	The volume of effluent discharged from the wastewater treatment and disposal system shall not exceed 52 cubic metres per day.	Yes	The flow does not appear to have been exceeded. The discharge water meter was replaced and more regular recording of discharge flow indicated flows typically around 30m ³ /day.
2	The consent holder shall retain appropriately experienced personnel to operate the treatment and disposal system	Yes	The treatment plant is managed and operated by an appropriately trained and experienced engineers and operators.
3	The wastewater treatment plant and disposal system shall be operated and maintained in a manner that is consistent with the document titled “Matangi Township – Innoflow”, reference No. M3022, produced by Innoflow Technologies for the Waikato District Council on 29/09/99.	Partial	Innoflow Technologies supplied an operation manual. The manual provides a comprehensive description of the treatment system and servicing requirements. Recently degraded performance of the sand contactor has been noted, was investigated and a remediation project was planned. The remediation project was begun in June 2008, and a new management and operation manual was to be created at the end of that project.
4	The wastewater treatment tanks shall be de-sludged as necessary and in particular following receipt of notice in writing from the Waikato Regional Council to do so. The sludge waste shall be disposed of in an approved wastewater sludge disposal area.	Yes	The tanks were de-sludged during the reporting period prior to the remediation project in June 2008.
5	There shall be no overland flow of effluent from any part of the wastewater treatment or effluent disposal system.	Yes	There have been no recorded instances of overland flow of effluent from any part of the wastewater treatment system.
6	<p>The consent holder shall continue to a) determine the quality, quantity and variability of the treated wastewater prior to discharge, and b) determine the effects of the discharge on groundwater. To this end the consent holder shall undertake the following sampling to the satisfaction of Waikato Regional Council:</p> <p>(i) At an appropriate point immediately prior to discharge into the ground, to determine the total-nitrogen, nitrate-nitrogen, ammoniacal-nitrogen, dissolved reactive phosphorus, five-day biochemical oxygen demand (BOD₅) concentrations and faecal coliform bacteria numbers at three monthly intervals (i.e. four times) throughout the year (see note 1).</p>	Yes	<p>Data Supplied.</p> <p>Comparison with data from previous years noted increased pathogen counts had been detected in the groundwater sample bores. Sampling frequency was increased and an investigation of the cause begun.</p>

	(ii) From at least two groundwater monitoring bores to determine total-nitrogen, nitrate-nitrogen, ammoniacal-nitrogen, dissolved reactive phosphorus, five-day biochemical oxygen demand (BOD ₅) concentrations and faecal coliform bacteria numbers at three monthly intervals (i.e. four times) throughout the year (see note 1)	Yes	<p>Compliant.</p> <p>Testing in excess of the required quarterly regime was conducted to enable closer examination of results subsequent to the plant renewals.</p> <p>A comparison of the 2008-09 nutrient results for the three sampling bores versus the results for 2007-08 indicates there little overall change in ground water quality.</p> <p>The paddock bore (Bore 1) shows significant reductions in Total Ammoniacal Nitrogen, representative of the improved treatment at the plant in the current reporting period.</p> <p>The bore furthest from the plant (Bore 3 – beside the railway) remains least influenced.</p>
	Conditions	Comply Yes/No	Comments
7	<p>The consent holder shall retain an appropriately experienced person to compile an annual monitoring report that shall include the following:</p> <p>(i) Analyses of all samples that have been taken at three monthly intervals throughout the year.</p> <p>(ii) Sample analyses, which shall be provided to the Waikato Regional Council in an agreed data form.</p> <p>(iii) The total mass of nitrogen, stated as kilograms per hectare per year that has been discharged into ground during the year.</p> <p>(iv) The total volume of wastewater discharged per week.</p> <p>The report shall be provided to the satisfaction of the Waikato Regional Council within two months of the fourth annual sample being taken.</p>	Yes	<p>Sampling frequency was increased beyond that required, after higher than normal Faecal Coliform levels were detected in the groundwater bore samples in October 2007.</p> <p>2320kg/Ha application rate, based on the size of the disposal area of 250m² (0.153 Ha) Estimated Total Nitrogen discharged is 387 kg/yr for the 2007-2008 period. This is calculated from an average calculated TN 36.8 mg/L and an average flow of 29 m³/day</p> <p>The total volume of flow was generally recorded weekly or fortnightly and the daily flows averaged.</p>
8	<p>The Waikato Regional Council may review the conditions of this consent, every five years from the date of commencement this consent, for any of the purposes specified in s128 of the Resource Management Act, and specifically to:</p> <p>(i) Address any adverse effects on the environment which may arise from the exercise of this consent and which it is appropriate to deal</p>	Yes	Environment Waikato was appraised of the problems and kept up to date with planned solutions.

	<p>with at a later stage,</p> <p>(ii) Require the consent holder to adopt the best practical option to remove or reduce any adverse effect on the environment,</p> <p>(iv) Take into account any changes to Waikato Regional Council Policy or Plans.</p> <p>Note: Costs associated with any review of the conditions of this resource consent will be recovered from the consent holder in accordance with the provisions of section 36 of the Resource Management Act 1991.</p>		
9	<p>The consent holder shall pay the Waikato Regional Council any administrative charge fixed in accordance with Section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act 1991.</p>	Yes	<p>The Waikato District Council pays a fee for the cost of auditing the conditions of the resource consent.</p>