# Resource Consent Certificate

**Resource Consent Number:** 102927

**File Number:** 60 55 18A

Pursuant to the Resource Management Act 1991, the Waikato Regional Council hereby grants consent to:

Taupo District Council Private Bag 2005 TAUPO 2730

(hereinafter referred to as the Consent Holder)

Consent type: Discharge permit

Consent subtype: Discharge to water

**Activity authorised:** Discharge treated domestic effluent to the Hangarito Stream and

Taupo South wetland

**Location:** (Turangi Sewage) Awamate Rd – Turangi

**Map Reference:** NZMS 260 T19: 516-442

**Consent duration:** Granted for a period expiring fifteen years from the date of

commencement of this consent

Subject to the conditions overleaf:



#### **CONDITIONS**

- 1. The wastewater treatment and disposal system shall be operated and maintained in accordance with:
  - (a) the application for this resource consent; and
  - (b) the document titled "Taupo District Council Application to renew Resource Consent 900103 for the Discharge of Treated Wastewater from the Turangi Wastewater Treatment Plant Assessment of Environmental Effects (Brian T Coffey and Associates) and the associated Appendices; and
  - (c) the letter regarding "Turangi Wastewater Treatment Plant RC Application No. 102927, Section 92, RMA 1991 Request Response" dated 20 September 2002, from Taupo District Council; and

subject to the conditions of this resource consent.

- The consent holder shall upgrade the treatment plant so that it is capable of producing an
  effluent at least equivalent to an Activated Sludge Plant, and that it will meet the conditions of
  this consent. Concept design of the plant shall be submitted to the Waikato Regional Council
  for approval prior to any construction work commencing.
- 3. The treatment plant and discharge shall be managed and operated by an appropriately trained operator.
- 4. The consent holder shall provide easy access for Waikato Regional Council staff to the treatment plant and disposal facilities for the measurement of flow and quality of the discharge.
- 5. The consent holder shall ensure contractors are made aware of the conditions of this resource consent and ensure compliance with those conditions.
- 6. The consent holder shall pay to 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.

### **Discharge Constraints and Quality**

- 7. The maximum volume of treated wastewater discharged shall not exceed 2,100 cubic metres in any 24-hour period.
- 8. The consent holder shall meet condition 9 of this consent following the installation and commissioning of the new treatment plant at the treatment plant site or from the second anniversary of the commencement of this consent, which ever occurs first. Prior to this time condition 9 of this consent shall not apply and the consent holder shall meet the following discharge standards at the point of discharge from the existing oxidation ponds:

Parameter	Median Discharge Quality (g/m³)	Ninety Percentile Discharge Quality (g/m³)
Total Phosphorus	6	9.6
Biochemical Oxygen Demand (cBOD <sub>5</sub> )	20	60
Chemical Oxygen Demand	Monitor only	Monitor only
Suspended Solids	25	50
Ammoniacal Nitrogen	6	16
Total Nitrogen	12	25
Faecal coliform	5,000	20,000
Input volume	1000 m <sup>3</sup> /day	2100 m <sup>3</sup> /day (max)

All values are calculated as 100 day rolling values. N.B. The "100 day rolling" median is the median value of all the monitoring data collected over the 100 days previous to the date of calculation of the median. The median is a "rolling" median in that at the end of the 101st day the data collected on day 1 is ignored and replaced by data collected on the 101st day.

9. The consent holder shall ensure that the quality of the discharge from the Treatment Plant (being an AS Plant or equivalent) is equal to or less than the concentrations outlined in the table below as follows:

10.

Parameter	Measure	Median Discharge Quality)	Ninety Percentile Discharge Quality (unless shown otherwise)
Total Phosphorus	gm <sup>-3</sup>	<1.7	<4
Total Phosphorus	kgd <sup>-1</sup>	2.5	
CBOD <sub>5</sub>	gm <sup>-3</sup>	15	30
Suspended Solids	gm <sup>-3</sup>	20	30
Ammoniacal Nitrogen	gm <sup>-3</sup>	2.5	5
Total Nitrogen	kgd <sup>-1</sup>	12	
Total Nitrogen	gm <sup>-3</sup>	8	15
рН		7	6 -9
Faecal coliform	MPN per 100 ml	100	400*

N.B. All values are calculated as 100 day rolling values.

- 11. Notwithstanding the stated limits in conditions 8, and 9 of this consent, the consent holder shall make all reasonable and practical efforts to ensure that the final effluent quality is maximised within the capabilities of the treatment system in operation.
- 12. The consent holder shall ensure that after reasonable mixing the discharge does not cause any of the following effects in any receiving water body or wetland:
  - (a) The production of any conspicuous oil or grease film, scum, foam, or floatable or suspended materials:
  - (b) Any conspicuous change in the colour or visual clarity;
  - (c) Any emission of objectionable odour;
  - (d) The rendering of fresh water unsuitable for contact recreation either in the South Taupo Wetland or the Tokaanu Tailrace: and
  - (e) Any significant adverse effects on aquatic life or fauna or flora.
- 12. The discharge from the treatment plant shall be via a ground infiltration or rock trench system. Representatives of Ngati Turangitukua shall be offered the opportunity of having input into the disposal system design. The design of the disposal system, and any comments shall be provided to the Waikato Regional Council, who shall approve the design as being satisfactory in terms of the conditions of this consent, before construction begins.

# **Monitoring and Reporting**

- 13. The consent holder shall characterise the quality, quantity and variability of the discharge of sewage effluent to the satisfaction of the Waikato Regional Council. To this end, the consent holder shall develop a monitoring plan in consultation with the Waikato Regional Council and representatives of Ngati Turangitukua for approval by Waikato Regional Council to address the following matters:
  - (a) The monitoring requirements and compliance standards for the period of plant operation up to completion of the proposed upgrade;
  - (b) The location of monitoring sites and sampling required to measure the specified contaminants in the effluent discharged following completion of the Treatment Plant upgrade;

<sup>\*</sup> Eighty-percentile value (ANZECC, 2000).

- (c) The operational performance of the plant shall be monitored. As a minimum this monitoring should involve measurement of daily inflow volumes to the plant plus fortnightly cBOD<sub>5</sub> (carbonaceous biochemical oxygen demand), COD, Ammonia, Total Nitrogen and Total Phosphorous at the plant inlet based on 24 hr composite sampling. Effluent quality from the Activated Sludge Plant or approved alternative shall be monitored and shall include as a minimum fortnightly composite sample cBOD<sub>5</sub>, COD, Total Ammonia; Nitrate, Nitrite, TKN (Total Kjeldahl Nitrogen), faecal coliforms, and pH. All sampling should be cycled to sample on a different day each fortnight;
- (d) Monitoring of the environmental compliance of the plant effluent at the point of discharge in accordance with the requirements of this consent;
- (e) The impact of contaminant and nutrient discharge to the South Taupo Wetland (STW). In particular the monitoring plan should be designed to establish gradients and the zone of influence of the discharge from the discharge point to the wetland through to Lake Taupo and to measure: changes in soil and foliage nutrient levels; and vegetation diversity and composition within the STW resulting from the effluent discharge;
- (f) Establish monitoring of the seepage of groundwater into the Tokaanu Tailrace to identify and measure impacts on water quality. This should include TN, TP and faecal coliform levels as a minimum requirement;
- (g) Identify the frequency of monitoring required to minimise the level of environmental risk involved in accordance with NZ Municipal Wastewater Monitoring Guidelines (Ministry for the Environment, 2002).
- (h) The monitoring of DO in the Hangarito Stream and the STW;
- (i) The monitoring of heavy metals in the STW and its effects on fauna and flora using appropriate indicator species.

This Plan shall be lodged with the Waikato Regional Council for approval within three months of the commencement of this consent, for written approval.

14. All sample analyses shall be undertaken in accordance with the methods detailed in the "Standard Methods For the Examination of Water And Waste Water, 1998" 20<sup>th</sup> edition by A.P.H.A. and A.W.W.A and W.E.F, or any other method approved in advance by the Waikato Regional Council.

### Reporting

- 15. The consent holder shall provide to the Waikato Regional Council and Ngati Turangitukua a written monitoring report by 1 July each year that this consent is current. As a minimum this report shall include the following:
  - (a) A summary of the monitoring results required by condition 12 of this consent for 1 April to 31 March of the preceding year and a critical analysis of the information in terms of compliance and environmental effects;
  - (b) A comparison of data with previously collected data identifying any emerging trends;
  - (c) Comment on compliance, and any reasons for non-compliance or difficulties in achieving compliance, with conditions 8 and 9 of this consent;
  - (d) Comment on any works that have been undertaken, or that are proposed to be undertaken in the up-coming year, to improve the environmental performance of the treatment and/or disposal system;
  - (e) Report on and discuss any complaints received regarding the treatment and/or discharge of treated effluent; and
  - (f) Any other issues considered important by the consent holder.

# Notification of limits being exceeded

16. The consent holder shall notify the Waikato Regional Council as soon as practicable and as a minimum requirement within 48 hours, of the consent holder becoming aware of the limits specified in condition 8 and 9 of this consent being exceeded and/or of any accidental discharge, plant breakdown, or other circumstances which are likely to result in the limits of this consent being exceeded. The consent holder shall, within 7 days of the incident occurring, provide a written report to the Waikato Regional Council identifying the exceedance, possible causes, steps undertaken to remedy the effects of the incident and measures that will be undertaken to ensure future compliance.

## **Management Plan**

- 17. The consent holder shall provide the Waikato Regional Council with a management plan that details the procedures that will be implemented to operate in accordance with the conditions of this resource consent. This plan shall be developed in consultation with representatives of Ngati Turangitukua and shall be lodged with the Waikato Regional Council within 6 months of the commencement of this consent. The plan shall be reviewed and updated as a minimum every two years that this consent is operative and shall address, but may not be limited to, the following:
  - (a) A description of the entire treatment system facility;
  - (b) A description of routine maintenance procedures to be undertaken;
  - (c) An outline of the methods to be utilised to monitor the treatment plant in an operational sense including:
  - (d) Monitoring of influent waste water
  - (e) Monitoring of treatment performance
  - (f) Specific management procedures for the efficient functioning of the treatment system;
  - (g) Procedures for recording routine maintenance and all repairs that are undertaken;
  - (h) Contingency measures in place to deal with unusual events such as any process failure in the activated sludge plant;
  - (i) Other actions necessary to comply with the requirements of this resource consent;
  - (j) Procedures for improving and/or reviewing the management plan; and
  - (k) Flow balancing, including for purposes of holding back wastewater during flood events (refer condition 18).

The consent holder shall manage the wastewater treatment and discharge in accordance with the management plan outlined in this condition. The consent holder following consultation with the Waikato Regional Council shall confirm any changes to the plan in writing.

18. In order to minimise the potential for effluent to reach the Mangakopikopiko Urupa, the consent holder shall investigate the potential for holding back discharges of effluent during flood events. These investigations and chosen management strategies shall be discussed with the Waikato Regional Council and representatives of Ngati Turangitukua, and implementation of the management options shall be such as to limit discharges during flood events to the satisfaction of the Waikato Regional Council.

## Site Rehabilitation

19. Any areas of the current treatment and disposal system that are no longer required (such as ponds, spray irrigation field and confined wetland) shall be remediated to the satisfaction of the Waikato Regional Council. Remediation plans for the redundant areas shall be developed in consultation with the Waikato Regional Council and Ngati Turangitukua and approved by Waikato Regional Council, and shall be designed to be in keeping with the surrounding area.

### Odour

20. The operation of the sewage treatment plant shall be carried out in such a way that the potential for odours is kept to a practicable minimum. The treatment and discharge of effluent shall be undertaken in such a manner that they do not produce an objectionable or offensive odour at or beyond the outer boundary of the land containing the Turangi Wastewater Treatment Plant being that land described as parts Tokaanu B 1L1, B 1K, B1J, B1G and B1G2 Blocks (N.Z. Gazette 1985 p.251).

For the purpose of this condition the Waikato Regional Council will consider an effect that is objectionable or offensive to have occurred if any appropriately experienced officer of the Waikato Regional Council deems it so after having regard to:

- (a) The frequency, intensity, duration, amount, effect and location of the effect(s) of the offensiveness of an odour; and/or
- (b) Receipt of complaints from neighbours or the public; and/or
- (c) Relevant written advice or a report from an Environmental Health Officer of a territorial authority or health authority.
- 21. Should an event occur which results in an objectionable or offensive odour, the consent holder shall provide written information on the odour incident including all of the details required by the complaints register of the site as outlined in condition 21 of this consent. This information shall be forwarded to the Waikato Regional Council within 5 days of the complaint being received.

### **Erosion**

- 22. The discharge structure to the Hangarito Stream shall be designed and constructed to ensure that local scour is avoided.
- 23. The consent holder shall be responsible for the structural integrity and maintenance of the discharge structure and for any erosion control works that become necessary to preserve the integrity and stability of the stream channel and/or to control erosion as a result of the exercise of this consent.

# **Complaints Register**

- 24. The consent holder shall maintain and keep a complaint register for all complaints made about the treatment and disposal site received by the consent holder. The register shall record:
  - (a) The date, time and duration of the event/incident that has resulted in a complaint;
  - (b) Any corrective action undertaken by the consent holder in response to the complaint including actions taken to prevent similar events in the future;
  - (c) The location of the complainant when the event was detected;
  - (d) The possible cause of the event;
  - (e) The weather conditions and wind direction at the site when the odour event occurred.

The register shall be available to the Waikato Regional Council at all reasonable times. Complaints received by the consent holder that may infer non-compliance with the conditions of this consent shall be forwarded to the Waikato Regional Council within 5 days of the complaint being received.

# Signage

25. The consent holder shall construct and place a sign in the vicinity of the discharge to the Hangarito Stream and the South Taupo Wetland in such a way that it is conspicuous to stream and wetland users, advertising the presence of the wastewater discharge.

#### Review

- 26. The Waikato Regional Council may in the month following each two yearly anniversary of the commencement of this consent, serve notice on the consent holder under section128 (1) of the Resource Management Act 1991, of its intention to review the conditions of this resource consent for the following purposes:
  - (a) to review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment, in particular effects on the Hangarito Stream, The Tokaanu Tailrace and the South Taupo Wetland, from the exercise of this resource consent and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or
  - (b) if necessary and appropriate, to require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the surrounding environment due to contaminants entering the environment; or
  - (c) to review the adequacy of and the necessity for monitoring undertaken by the consent holder.

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.

Dated at Hamilton this **23** day of **June 2003** 

For and on behalf of the	
Waikato Regional Council	

(NB: electronic signatures not to be e-mailed, hence deleted prior to sending. BHF 6/7/04)

# **Advice notes**

- 1. In accordance with section 125 RMA, this consent shall lapse two (2) years after the date on which it was granted unless it has been given effect to before the end of that period.
- 2. Where resource consent has been issued in relation to any type of construction (e.g. dam, bridge, jetty) this consent does not constitute authority to build and it may be necessary to apply for Building Consent from the relevant territorial authority.
- 3. This resource consent does not give any right of access over private or public property. Arrangements for access must be made between the consent holder and the property owner.
- This resource consent is transferable to another owner or occupier of the land concerned, upon application, on the same conditions and for the same use as originally granted (s.134-137 RMA).
- 5. The consent holder may apply to change the conditions of the resource consent (except for the duration) if circumstances change (s.127 RMA).
- 6. The reasonable costs incurred by Waikato Regional Council arising from supervision and monitoring of this consent will be charged to the consent holder. This may include but is not limited to routine inspection of the site by Waikato Regional Council officers or agents, liaison with the consent holder, responding to complaints or enquiries relating to the site, and review and assessment of compliance with the conditions of consents.

In reply please quote: 60 55 18A

Doc #833804

Enquiries to: Ruth Hutchinson

23 June 2003

Taupo District Council
Attention: John Campbell
Private Bag 2005
TAUPO 2730

Dear Sir/Madam

#### **RESOURCE CONSENT NUMBER 102927**

Please find enclosed the certificate detailing the terms and conditions of your resource consent recently granted by the Waikato Regional Council. Please keep this important document in a safe place for easy reference during the term of the consent.

Please note the following:

- (i) Only the holder of the consent or their agent may exercise this consent, and then only for the purpose specifically authorised by the consent.
- (ii) Those exercising the consent must comply with the conditions of the consent at all times.
- (iii) The majority of consent holders will incur annual charges for holding consents, and may also incur costs associated with monitoring, inspecting and reporting on the exercise of this consent.
- (iv) If the consent has not been exercised within two years from the commencement date of the consent, the consent will lapse unless approval has been obtained from the Regional Council to extend the period.
- (v) Should you no longer wish to perform the activities authorised by the consent, you may wish to apply to surrender the consent, giving reasons for the surrender. In addition should you sell the property or the operation to which this consent applies, you may wish to transfer the consent to the new owner. If you wish to undertake either of these actions, please forward the resource consent certificate to this office with advice of the action you require to be taken.

Should you have any further queries on these matters, or any other issues relating to the exercise of this resource consent, please do not hesitate to contact the Hamilton office toll-free on 0800 800 402 quoting the above reference.

Yours faithfully

Sharyn Goodwin

Administration Officer – Resource Use