

**Consent No. WAR 970080**

**Category:**  
**Discharge permit – water [2625]**  
**Discharge permit – land [23139]**  
**Discharge permit – air [20869]**

Pursuant to sections 104, 104B, 105, 107 and 108, and subject to all the relevant provisions of the Resource Management Act 1991 and any regulations made thereunder, a consent in respect of a natural resource is hereby granted to:

<b>Name</b>	South Wairarapa District Council	
<b>Address</b>	PO Box 6. Martinborough	
<b>Duration of consent</b>	Effective: 25 August 2009	Expires: 25 August 2012
<b>Purpose for which right is granted</b>	To discharge contaminants to water, land, and air associated with the operation of the Featherston wastewater treatment plant	
<b>Location</b>	Longwood West Road, Featherston, at or about map reference NZMS 260: S27: 2705187.6005162	
<b>Legal description of land</b>	Part Section 258 Featherston Suburban, Part Section 330 Featherston Suburban, Part Section 331 Featherston Suburban	
<b>Conditions</b>	1-37 as attached	

For and on behalf of  
WELLINGTON REGIONAL COUNCIL

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Manager, Environmental Regulation

Date: .....

# Conditions to Resource Consent WAR 970080

## General Conditions

1. The location, design, implementation and operation of the works shall be in accordance with the resource consent application WAR 970080 and its associated plans and documents lodged with the Wellington Regional Council in May 1997, October 2002 and on 11 December 2008 unless otherwise specified by a consent condition.
2. The discharge shall only be treated municipal wastewater from the township of Featherston, as described in the resource consent application, and its associated plans and documents as detailed in condition 1.
3. The volume of wastewater discharged to Donalds Creek shall not exceed 9,000 cubic metres per day dry weather flow and 12,000 cubic metres per day wet weather flow.

## Operations and Management

4. The treatment and disposal system shall be maintained in an efficient operating condition at all times. Details of all maintenance and any malfunctions or breakdowns shall be kept in a log and the log shall be made available to a warranted officer of the Wellington Regional council on request.

*Note: Any uncontrolled overland discharges are not considered to comply with this condition.*

5. The consent holder shall maintain a complaints register. Copies of the register shall be made available to a warranted officer of the Wellington Regional council on request.
6. Within two months of the commencement of this permit, there shall be no stock access to the discharge channel/maturation cells or Donalds Creek within the confines of the permit holder's disposal system.

## Review of conditions

7. The Wellington Regional Council may review any or all conditions of this consent by giving notice of its intention to do so pursuant to Section 128 of the Resource Management Act 1991, at any time within three months of the annual anniversary of the grant date of this consent for any of the following purposes:
  - to deal with any adverse effects on the environment which may arise from the exercise of this consent, and which it is appropriate to deal with at a later stage;
  - to review the adequacy of the monitoring requirements so as to incorporate into the permit any modification to monitoring which may be necessary to deal with any adverse effects on the environment arising from WWTP facility.
8. The Wellington Regional Council shall be entitled to recover from the consent holder the cost of the conduct of any review, calculated in accordance with and limited to Councils scale of charge in force and applicable at that time pursuant to Section 36 of the Resource Management Act 1991.

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## Resource Management Charges

9. A resource management charge, set in accordance with Section 36(2) of the Resource Management Act 1991 shall be paid to the Wellington Regional Council for the carrying out of its functions in relation to the administration, monitoring, and supervision of resource consents and for the carrying out of its functions under Section 35 (duty to gather information, monitor, and keep records) of the Act.

## Interim trial upgrade works

10. At least one month prior to commencing any works associated with the maturation cells and trickle filter system upgrade, the consent holder shall submit plans to the Manager, Environmental Regulation, Greater Wellington Regional Council for approval. These plans shall include but not be limited to:
- Methodology of any construction works
  - Precise location of works
  - Proposed operational regime of upgrade works
  - Proposed monitoring regime.
11. The consent holder shall convert the existing infiltration cells to fully clay lined maturation cells within 6 months of granting of consent. From this date all discharges from the oxidation ponds shall pass through the maturation cells prior to discharge to Donalds Creek.
12. The consent holder shall construct a trial trickle filter system and any associated works within the first year of consent.
13. The consent holder shall commence the trickle filter trial no later than the first anniversary of grant date of consent.
14. The consent holder shall monitor the performance of the trial trickle filter system for a period of at least 12 months. This should incorporate at least monthly testing of the wastewater for BOD, TSS and E.coli.

## Wastewater quality and monitoring

15. The consent permit holder shall continuously measure wastewater flows entering the Featherston Wastewater Treatment Plant and the volume of the treated wastewater discharged to Donalds Creek. The flow measuring devices shall be capable of continuously measuring wastewater flows of magnitudes up to and beyond the peak instantaneous flow rate, and shall be maintained to ensure that the measurement error is no more than  $\pm 5\%$ .
16. Treated wastewater discharged to Donalds Creek shall comply with the following criteria:

Parameter	Standard Type	Standard
pH (pH units)	Acceptable range	6-9.5
Total carbonaceous BOD <sub>5</sub> (g/m <sup>3</sup> )	Maximum	40
Total suspended solids (g/m <sup>3</sup> )	Maximum	175 <sup>1</sup>
<i>Escherichia coli</i> (cfu/100 mL)	Maximum	100,000 <sup>2</sup>
Ammoniacal nitrogen (g/m <sup>3</sup> )	Maximum	18
Total nitrogen (g/m <sup>3</sup> )	Maximum	25
Dissolved reactive phosphorus (g/m <sup>3</sup> )	Maximum	8
Total phosphorus (g/m <sup>3</sup> )	Maximum	10

<sup>1</sup> This standard may be exceeded where the permit holder can demonstrate that it was a result of increased algal growth in the new maturation cells.

<sup>2</sup> Note that the *target* maximum concentration once the new maturation cells are operative shall be 15,000 cfu/100 mL

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# Continued Conditions to Resource Consent WAR 970080

Compliance with the wastewater quality standards set out in the table above shall be determined from the results of quarterly sampling undertaken in accordance with condition 18.

17. At weekly intervals representative the permit holder shall take the following measurements of the treated wastewater immediately prior to discharge to Donalds Creek:

Parameter	Measurement unit and detection limit
Temperature	0.1 °C
Dissolved oxygen	0.1 g/m <sup>3</sup>
pH	0.1 pH
Electrical conductivity	10 uS/cm
Colour	Visual observation
Foam and Scum	Visual observation

18. At three-monthly intervals in February, May, August and November each year, the permit holder shall collect representative grab samples of the treated wastewater immediately prior to discharge to Donalds Creek and have these analysed for:

Parameter	Measurement unit and detection limit
Total carbonaceous BOD <sub>5</sub>	1 g/m <sup>3</sup>
Total suspended solids	1 g/m <sup>3</sup>
<i>Escherichia coli</i>	10 cfu/100 mL
Ammoniacal nitrogen	0.1 g/m <sup>3</sup>
Nitrite nitrogen	0.1 g/m <sup>3</sup>
Nitrate nitrogen	0.1 g/m <sup>3</sup>
Total kjeldahl nitrogen	0.1 g/m <sup>3</sup>
Total nitrogen (by calculation)	0.1 g/m <sup>3</sup>
Dissolved reactive phosphorus	0.1 g/m <sup>3</sup>
Total phosphorus	0.1 g/m <sup>3</sup>

## Receiving water standards and monitoring

19. At three-monthly intervals to coincide with wastewater sampling undertaken in accordance with condition 18, the consent holder shall collect representative water samples from Donalds Creek sufficiently upstream so as to avoid contamination from backflow of the discharge, but not more than 20 metres and approximately 100 metres downstream of the wastewater discharge outfall to the creek. The samples shall be analysed for:

Parameter	Measurement unit and detection limit
Total carbonaceous BOD <sub>5</sub> ( g/m <sup>3</sup> )	1 g/m <sup>3</sup>
Total suspended solids	1 g/m <sup>3</sup>
Turbidity	0.05 NTU
<i>Escherichia coli</i>	1 cfu/100 mL
Ammoniacal nitrogen	0.01 g/m <sup>3</sup>
Nitrite nitrogen	0.002 g/m <sup>3</sup>
Nitrate nitrogen	0.002 g/m <sup>3</sup>
Total kjeldahl nitrogen	0.1 g/m <sup>3</sup>
Total nitrogen (by calculation)	0.1 g/m <sup>3</sup>
Dissolved reactive phosphorus	0.004 g/m <sup>3</sup>
Total phosphorus	0.004 g/m <sup>3</sup>

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20. At three-monthly intervals to coincide with the monitoring undertaken in accordance with condition 18, the consent holder shall make the following *in-situ* measurements using field equipment calibrated in accordance with the manufacturer's instructions:

Parameter	Measurement unit and detection limit
Water temperature	0.1 °C
Dissolved Oxygen	0.1 g/m <sup>3</sup> and 1 % saturation
pH	0.1 pH
Electrical conductivity	0.1 µS/cm
Black disc (visual clarity)	0.1 m

21. Once in either 2010 or 2011, during the period 31 January to 30 April inclusive and following at least a two week period without a significant flood event, an appropriately experienced and qualified freshwater ecologist shall carry out a quantitative ecological survey of the Donalds Creek upstream and downstream of the point of discharge for the purpose of determining the effect of the discharge on the aquatic ecosystem of the creek. The survey shall comprise as a minimum:

- A. An inspection of the streambed below the point of discharge (for a distance extending 100 m downstream of the discharge) for the presence of any nuisance heterotrophic or periphyton growths; and
- B. One upstream and one downstream periphyton and macroinvertebrate sampling site in the general locations outlined below (and agreed with Wellington Regional Council prior to sampling) that, where possible, share similar habitat features in terms of substrate, flow, depth and width:
  - (i) Immediately upstream of the discharge, at or about Map Reference NZMS 260 S27:053-051; and
  - (ii) Approximately 100 m downstream of the discharge, at or about Map Reference NZMS 260 S27:053-050.

22. The periphyton survey shall include:

- An assessment of the percentage cover of both filamentous algae and algal mats (to nearest 5%) at 10 points across each of four transects encompassing both riffle and run habitat and extending across the width of the creek at each sampling site;
- Collection of a composite periphyton sample from riffle and run habitat (a composite of scrapings from 10 rocks, 5 from a riffle and 5 from a run) across each sampling site using method QM-1a from the Stream Periphyton Monitoring Manual (Biggs & Kilroy 2000); and
- Analysis of periphyton samples for community composition and abundance using the Biggs & Kilroy (2000) relative abundance method, ash free dry weight and chlorophyll a.

23. The macroinvertebrate survey shall follow Protocols C3 and P3 from the Ministry for the Environment's report on protocols for sampling macroinvertebrates in wadeable streams (Stark et al. 2001). This shall involve:

- Collection of 5 replicate 0.1m<sup>2</sup> Surber samples at random within a 20 m section of riffle habitat at each sampling site;
- Full count of the macroinvertebrate taxa within each replicate sample to the taxonomic resolution level specified for use of the Macroinvertebrate Community Index (MCI); and
- Enumeration of the results as taxa richness, MCI, QMCI, %EPT taxa and %EPT individuals.

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# Continued Conditions to Resource Consent WAR 970080

24. The results of the ecological survey shall be reported in writing to Manager Environmental Regulation, Wellington Regional Council by 1 June of the year in which the survey was undertaken.

## Donalds Creek Flow Monitoring

25. The consent holder in consultation with Greater Wellington shall establish an appropriate flow gauging option for Donalds Creek. Stream flow gauging in Donalds Creek shall commence no later than 31 December 2009. Results shall be submitted quarterly in accordance with condition 31. The chosen gauging method and monitoring regime shall be to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

## Air discharge

26. There shall be no discharges to air that are noxious, dangerous, offensive or objectionable resulting from the operation of the Featherston wastewater treatment plant beyond the site boundary.

## Warning signage

27. The consent holder shall erect and maintain appropriate signage on:

- the true right bank at a suitable visible location immediately in the vicinity of the wastewater outfall.
- the Longwood West Road access gate

to the satisfaction of the Manager Environmental Regulation, Wellington Regional Council.

28. The signage shall:

- a) Provide clear identification of the location and nature of the discharge; and
- b) Provide a 24-hour contact phone number; and
- c) Be visible to the public visiting the area and legible from a reasonable distance without unnecessarily detracting from the visual amenity of the area.

Written confirmation of the signage placement accompanied by photographs of the signage shall be provided to the Manager Environmental Regulation, Wellington Regional Council within two months after the commencement of this permit.

*Note: The consent holder shall consult with Wairarapa Public Health regarding the wording of the signs prior to submitting them for approval to Wellington Regional Council.*

## Access

29. The access gate on Longwood West Road shall remain locked at all times to prevent public access.

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## Sampling and analytical methods

30. All sampling techniques employed in respect of the conditions of this permit shall be acceptable to the Wellington Regional Council. Unless specifically approved otherwise in writing by the Manager Environmental Regulation, Wellington Regional Council, all analytical testing undertaken in connection with this permit shall be performed by a laboratory that is IANZ registered for the analytical tests.

## Reporting

31. The consent holder shall submit all stream flow, wastewater flow, wastewater quality and receiving water quality monitoring results to the Manager Environmental Regulation, Wellington Regional Council, in electronic and written format by no later than the last day in March, June, September and December for the preceding three-month period. The three-monthly report shall include reasons for any non-compliance and subsequent actions undertaken to remedy the non-compliance.
32. The consent holder shall prepare and submit to the Manager Environmental Regulation, Wellington Regional Council, an annual monitoring report summarising compliance with all resource consent conditions. This report shall be submitted by 30 June each year and include as a minimum:
- a) A summary of all monitoring undertaken and a critical analysis of the information in terms of compliance and adverse environmental effects; and
  - b) A comparison of data with previously collected data in order to identify any emerging trends; and
  - c) Comment on any groundwater inflow and stormwater infiltration reduction measures implemented in the preceding 12 months, including their effectiveness and planned measures for the coming 12 months; and
  - d) Comment on progress on the development of a preferred long term upgrade option and consultation with the working party.
  - e) Comment on compliance with consent conditions; and
  - f) Any reasons for non-compliance or difficulties in achieving compliance with any consent conditions; and
  - g) Any measures that have been undertaken, or are proposed to be undertaken in the upcoming 12 months, to improve the environmental performance of the wastewater treatment and disposal system; and
  - h) Copies of the laboratory analytical results monitoring results; and
  - i) Any other issues considered important by the permit holder.

## Working party for long term upgrade

33. Within two months of commencement of this consent the consent holder shall establish a Working Party which shall include but not be limited to representatives of the consent holder, submitters, iwi, Department of Conservation, Wellington Fish and Game, Wairarapa Public Health and the Featherston Community Board.
34. Within two months of the granting of this consent, the consent holder shall commence an investigation into the options for land treatment and disposal of wastewater. This investigation shall be undertaken in consultation with the Working Party.
35. The consent holder shall meet with Working Party representatives on at least a six-monthly basis and provide written progress to the Wellington Regional Council in the annual monitoring report.

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# Continued Conditions to Resource Consent WAR 970080

36. The consent holder shall produce a final report evaluating long-term wastewater treatment and disposal options, including a detailed timeframe for implementation of the preferred option. The report shall be submitted to the Manager Environmental Regulation, Wellington Regional Council, by no later than November 2011.

*Note: It is Greater Wellington's expectation that the long-term wastewater treatment and disposal options will work towards a year round nil discharge to water i.e. 100% land-based.*

37. The consent holder shall host an annual site visit to Featherston Wastewater Treatment Plant for the working party.

*Note: The purpose of the working party is to:*

- *allow continued consultation with submitters;*
- *provide a forum in which to explore appropriate long term, land based wastewater disposal options, and;*
- *allow the consent holder to update submitters on progress and monitoring results.*

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