Consent No. WAR040096

Category: Discharge Permit - discharge to land (30785) - discharge to water (30786) - discharge to air (30787)

Pursuant to Sections 105 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:

Name	South Wairarapa District Council	
Address	PO Box 6, Martinborough	
Term of Consent	Effective: 17 June 2005	Expires: 30 September 2025
	Change of conditions granted: 10 January 2011	
Purpose for Which Right is Granted	To construct and operate a community wastewater treatment plant and disposal system	
Location	Lake Ferry at or about NZMS 260 Grid ref : R28: 2689553.5977247	
Legal Description of Land	Part Lot 45 DP 12843	
Conditions	1-63 as attached	

For and on behalf of WELLINGTON REGIONAL COUNCIL

Team Leader, Environmental Regulation

Date:

Conditions to Resource Consent WAR040096

Consent Term

1. Resource Consent WAR040096 shall expire at the dates set out below:

WAR040096 [30785]:	Discharge Permit (sewage effluent - to land) shall expire on 30 September 2025.
WAR040096 [30786]:	Discharge Permit (sewage effluent - to water) shall expire on 30 September 2025.
WAR040096 [30787]:	Discharge Permit (sewage - to air) shall expire on 30 September 2025.

Lapsing of Consent

2. These consents shall lapse five (5) years from the date of granting of these consents unless the consents are given effect to before that date, or unless an application is made within three (3) months of the expiry of that date for the Wellington Regional Council to grant an extension of time for the establishment of the activity. Any such application for an extension of time shall be subject to the provisions of Section 125 of the Resource Management Act 1991.

Adhering to Lodged Plans

- 3. The location, design, implementation and operation of the works shall be in accordance with the resource consent application WAR040096 and its associated plans and documents lodged with the Wellington Regional Council on 17 June 2004 and further information provided on 6 December 2004, unless otherwise specified by a consent condition.
- 4. No alterations shall be made to the consent holder's plant or processes, as described in the application, which may substantially change the nature and/or quantity of contaminants discharged to land, without prior consultation between the consent holder and the written authorisation of the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division. Any proposed changes to the site activities will need to be evaluated against the provisions of the relevant Regional Plan to determine whether the changes are within the scope of a permitted activity, or whether a variation to the consent, or an application for a new resource consent will be required.

Records

5. The consent holder shall make a permanent record of any complaints and system malfunctions regarding the wastewater reticulation system, the treatment system and the land application system and shall report these to the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division within 7 days of the event occurring or of receipt of complaint. The consent holder shall outline a schedule of any action taken in response, and any further action proposed to remedy any such problems.

Review of Conditions

- 6. The Wellington Regional Council may review any or all conditions of these consents 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 31 July in any year for the duration of the consent, for any of the following purposes:
 - to deal with any adverse effects on the environment which may arise from the exercise of these consents, and which it is appropriate to deal with at a later stage;

- to review the adequacy of any plan(s) prepared for these consents and/or monitoring requirement(s) so as to incorporate into the consents any modification to any plan(s) or monitoring requirement(s) which may become necessary to deal with any adverse effects on the environment arising from the exercise of these consents;
- to alter the monitoring requirement(s) in light of the results obtained from any previous monitoring;
- to reduce the monitoring requirements if appropriate when the effects of the sewage discharge are adequately established.
- to review the adequacy of any discharge standards to ensure consistency with any national water quality standards and/or regional plan water quality standards.

Cost Recovery for Review of Conditions

7. The Wellington Regional Council shall be entitled to recover from the consent holder the costs of the conduct of any review, calculated in accordance with and limited to that Council's scale of charges in force and applicable at that time pursuant to Section 36 of the Resource Management Act 1991.

Resource Management Charges

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

Consent Copy to Operator

9. The consent holder shall pass a copy of these consents, including site plans and attachments, to any operator undertaking work authorised by these consents. Any operator undertaking works authorised by these consents shall be familiar with the consent conditions prior to undertaking any work on site.

Notifying Regional Council: Commencement and Completion of Works

10. The consent holder shall notify the Consents & Compliance Section, Wellington Regional Council, at least 48 hours prior to commencement of any works, and upon completion of works so that compliance inspections may be arranged.

Cultural Sites, Artefacts and Human Remains

11. In the event that an archaeological site is encountered during works for the proposed development, work shall cease immediately and the consent holder shall immediately notify Ngati Kahungunu ki Wairarapa, Rangitaane o Wairarapa, Wellington Regional Council, the New Zealand Historic Places Trust and, if appropriate, the New Zealand Police so that an archaeological assessment can be made and advice given accordingly.

Management

12. The consent holder shall ensure the system is operated by a suitably qualified person experienced in wastewater treatment who shall advise the consent holder of any malfunctions of the system. The person responsible for the operation of the system shall undertake inspections and respond to incidents at the treatment plant, treatment field, within the reticulation network, on each lot, and at any discharge point from the disposal site.

Management Plan:

- 13. The consent holder shall prepare a Management Plan for the management of the wastewater collection, treatment and disposal systems. The Management Plan shall be prepared by a chartered professional engineer or other person suitably qualified and experienced in wastewater engineering and shall include, but not be limited to, the following:
 - i. Methods and procedures for recording daily wastewater flow to the discharge area and wetland;
 - ii. Procedures and schedules for regular inspections (both visual and maintenance inspections) of the tanks on the individual lots serviced;
 - iii. Appropriate management of the septic tanks on individual residential sections;
 - iv. A schedule or checklist of maintenance requirements for the septic tanks, recirculation tank, recirculating textile filters, treated wastewater tank, pumps, alarms and the dripper irrigation system. The maintenance requirements shall also specify when the tanks shall be desludged, and dripper line maintenance requirements;
 - A contingency plan for action to be taken in the event of pump failure or wastewater breakout from the treatment and disposal system or of exceedence of the maximum permitted discharge volumes as set out in condition 21;
 - vi. The design of drip-line emitter spacing and the level of soil saturation in relation to subsurface wastewater irrigation, including the peak daily loading relative to the soil's water holding capacity and instantaneous loading in relation to the soil's saturated hydraulic conductivity;
 - vii. Wastewater irrigation management including dosing cycles, return intervals, instantaneous application rates and line flushing;
 - viii. Procedures for notifying contributors as to the acceptance criteria of wastes and the avoidance of toxic discharges;
 - ix. A schedule and procedure for all monitoring to be undertaken;
 - x. Stock and crop management considerations, including stock and crop types, grazing regimes, crop establishment and harvesting practices;
 - xi. Practices to avoid and mitigate soil compaction;
 - xii. The use and operation of soil moisture probes;
 - xiii. Methods to avoid and if necessary remediate excessively wet areas which may develop in the wastewater irrigation area;
 - xiv. Wetland management including methods to avoid and mitigate preferential flow, maintenance of plants and how water levels will be maintained in summer:
 - xv. The recording of the details of all maintenance events and/or any system malfunctions;
 - xvi. Details of action responses to odour events caused by malfunctions or other events;
 - xvii. The maintenance and details of a complaints and incidents recording procedure (in line with the requirements of condition 5 of this consent.
 - xviii. Details of methods and action to ensure that no stormwater is allowed to enter the wastewater system. The wastewater system includes: collection, reticulation and treatment systems and, where appropriate, the discharge field and wetland.
 - xix. Details of the fencing and planting of the wetland and gully including plant types
- 14. The consent holder shall, prior to commissioning of the wastewater treatment system, submit the Management Plan to the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division. The wastewater treatment system shall not be commissioned or commence operation until the Manager, Planning & Resources, Wellington Regional Council, Wairarapa has certified that the Management Plan meets the requirements of condition 13.

- 15. The Management Plan shall be updated every three (3) years from commencement of this consent before 31 July in that year or at any time when significant process or operational changes take place. A copy of each revised plan shall be forwarded to the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division within one (1) month of the update having been undertaken and shall not be authorised or have effect until that Manager certifies that the amended Management Plan meets the requirements of condition 13.
- 16. The consent holder shall ensure that the wastewater collection, treatment and disposal systems operate in accordance with the Management Plan approved in conditions 13 15. This includes operation and activities undertaken by persons under the direction of the consent holder.

Inspections

- 17. The consent holder shall establish and maintain appropriate access arrangements to install, inspect and maintain on-site septic tanks.
- 18. The consent holder shall ensure that the wastewater collection and treatment systems, land soakage area, wetland and discharge points are maintained in good working order at all times. For the term of this consent, the system shall be monitored as follows:
 - i. On-lot facilities shall be inspected at least annually.
 - ii. Reticulation system shall be inspected at least annually.
 - iii. Pumping stations shall be inspected at least monthly.
 - iv. The discharge point to Lake Onoke shall be inspected at least monthly and after any significant storm events
 - v. The treatment plant shall be inspected at least weekly.
 - vi. The disposal field shall be inspected at least weekly.
 - vii. The wetland system shall be inspected at least weekly.

Annual Monitoring Report

- 19. The consent holder shall prepare an annual monitoring report presenting the results of monitoring (as detailed in conditions 31 to 37), and inspections and repairs undertaken (as detailed in conditions 17 and 18). The report shall cover the previous twelve (12) month period from July to June, commencing 31 July 2006.
- 20. The annual monitoring report shall be forwarded to The Manager, Planning and Resources, Wellington regional Council, Wairarapa Division no later than 31 July each year, commencing 31 July 2006.

Maximum discharge volumes

21. The discharge shall only be wastewater of domestic and commercial origin as described in the consent application and supporting documentation, and the maximum discharge to the discharge area shall not exceed 200 cubic metres per day (200m³/day) and shall not exceed 700 cubic metres per week (700m³/week) of wastewater.

Reticulation

- 22. The consent holder shall take all reasonable steps to prevent toxic substances from entering the reticulation system in circumstances where such substances could effect the treatment system or produces unacceptable residuals in the receiving environment.
- 23. The system shall be designed and operated so that system failure can be accommodated for a minimum period of 24 hours at peak daily flow, without creating any overflows at any point. The emergency storage provisions shall operate regardless of the time and location of system failure.

Note: Emergency storage shall provide a minimum of 24 hour storage anywhere in the system.

- 24. The consent holder shall ensure that there is emergency pumping equipment reasonably available, with an independent power supply, adequate at least to independently pump all flow to the treatment plant for one day, in the event of pumping failure related to a loss or failure of electricity to the system.
- 25. All pumping stations shall have duty and standby pump systems installed as redundancy for individual pump failure.
- 26. The consent holder shall ensure that a reliable telemetry system is installed on both Pump Station 1 and Pump Station 2 no later than 1 February 2012. The telemetry system shall be capable of transmitting a high-level, pump failure alarm to appropriate person(s) and shall be installed between pump stations to prevent pumping to a faulty pump station.
- 27. At all times, all wastewater treatment and storage tanks, including on-lot facilities, shall be located, and the surrounding area maintained, such that they are readily accessible for maintenance and emptying.
- 28. The consent holder shall ensure that no stormwater is allowed to enter the wastewater system. All stormwater from buildings is to be directed away from the collection, reticulation and treatment systems and, where appropriate, the discharge field.
- 29. The consent holder shall be responsible for the satisfactory management of the septic tanks and reticulation equipment located within individual allotments in accordance with the Management Plan approved under condition 13 of this consent.

Note: A nominated person will be responsible for managing the entire system from onsite septic systems to the irrigation, wetland and discharge systems.

30. Prior to commissioning of the system, signage advising the public of the hazardous nature of the site shall be placed and maintained on all gates and structures relating to the treatment plant, wastewater irrigation area and wetland area. A removable sign providing a description of the operation and advising the public of the potential hazardous nature of the site shall be placed at or near the Lake Onoke discharge point only when there is effluent being discharged to and or from the wetland.

Discharge volume monitoring

- 31. The consent holder shall continuously measure the treated wastewater discharge volume from the wastewater treatment system with a meter capable of measuring to an accuracy of plus or minus 5 percent (or by measuring pump hours calibrated to represent flow volume to an accuracy of plus or minus 5 percent). The meter shall be installed in accordance with the manufacturer's specifications and shall be maintained in good working order at all times.
- 32. The flow meter shall be read on each consecutive day either electronically or manually in accordance with the schedule specified in the Management Plan specified by Condition 13. These readings shall be permanently recorded and copies of these records shall be forwarded to the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division, six-monthly in the first week of the months of February and August each year, for the term of this consent. Any exceedence of the consented discharge volume shall be reported to the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division within one week. The sampling frequency may be decreased following at least three years of complete readings following connection of all lots which also comply with the conditions of the consent, in the event written approval for a decreased monitoring frequency is provided by the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division.

Water Quality Monitoring

- 33. All water sampling shall be carried out by a person suitably qualified and experienced in sampling procedures. All analyses shall be carried out by an independently accredited laboratory in accordance with the *Standard Methods for the Examination of Water and Wastewater* (20th edition 1998), published jointly by the American Public Health Association, American Wastewater Association, and Water Environment Federation, including any subsequent amendments and updates.
- 34. A treated effluent sample shall be taken from the wastewater system immediately prior to discharge to the disposal field or wetland, on a monthly basis in accordance with the schedule and procedure specified in the Management Plan required by Condition 13. The samples shall be analysed for the following parameters:
 - (i) pH
 - (ii) Nitrate Nitrogen
 - (iii) Ammoniacal Nitrogen
 - (iv) Total Phosphorous
 - (v) Biochemical Oxygen Demand (BOD₅)
 - (vi) Suspended solids
 - (vii) Faecal coliform
- 35. The quality of the treated wastewater immediately prior to its discharge to the irrigation system or wetland shall conform to the following standards;

Nitrate Nitrogen - In any twelve month monitoring period shall not exceed a mass loading of 100 kg/hectare/year. *Ammoniacal nitrogen* - In any twelve month monitoring period shall not exceed a mass loading of 50 kg/hectare/year.

Total Phosphorous – In any twelve month monitoring period no more than 8 of the 12 dissolved reactive phosphorous results shall exceed 14 g-P/m³ and no more than 2 shall exceed 23 g-P/m³.

Biological chemical demand (BOD₅) - In any twelve month monitoring period no more than 8 of the 12 BOD₅ results shall exceed 15 g-O/m³ and no more than 2 exceed 25 g-O/m³.

Suspended solids - In any twelve month monitoring period no more than 8 of the 12 suspended solids results shall exceed 15 g/m³ and no more than 2 exceed 25 g/m³.

Faecal coliforms (only when the wetland is discharging) - In any twelve month monitoring period no more than 8 of the 12 faecal coliform results shall exceed 100 cfu/100mL and no more than 2 exceed 200 cfu/100mL.

Note 1: The mass loading rate being applied to land shall be calculated by multiplying the total annual flow by the average annual concentration of the respective parameters Nitrate or Ammoniacal Nitrogen.

Note 2: The total nitrogen loading rate being applied to land should be regularly monitored and included in the annual report required by condition 19 of this consent.

- 36. A water quality sample shall be taken from the gully prior to the discharge to Lake Onoke on a monthly basis in accordance with the schedule and procedure specified in the Management Plan required by Condition 13. The samples shall be analysed for the following parameters:
 - (i) pH
 - (ii) Nitrate Nitrogen
 - (iii) Ammoniacal Nitrogen
 - (iv) Total Phosphorous
 - (v) Biochemical Oxygen Demand (BOD₅)
 - (vi) Suspended solids
 - (vii) Faecal coliform

The sampling programme for this point shall commence at least six months prior to the commissioning of the treatment plant.

37. In addition to the sampling required in Condition 34 and 36, the consent holder shall, whilst there is an identified and observable discharge from the wetland, take 12 samples of the effluent immediately prior to discharge to the wetland and 12 samples of the water discharging from the gully prior to its discharge to Lake Onoke. This sampling shall be completed concurrently and as soon as site conditions and flows permit. However there shall be a minimum of 7 days between each concurrent sample taken. The samples shall be analysed for the same parameters identified in Condition 34.

Note: The purpose of this condition is to assess the effect of the discharge from the treatment plant on the receiving environment, including the performance of the wetland, when the wetland is discharging.

SCHEDULE 2: CONDITIONS FOR WAR040096 (30785) - DISCHARGE PERMIT - LAND

Discharge to land system

38. All wastewater discharged to land from the wastewater discharge system shall at a minimum have passed through a septic tank, effluent filter and treatment plant. The septic tank, effluent filter and treatment plant shall be of a design approved by the Manager, Planning and Resources, Wellington Regional Council, Wairarapa Division prior to any construction of the wastewater treatment system commencing.

Note: The treatment plant shall be of a similar standard to an Advantex Textile Reactor system described in the consent application and supporting documentation.

Maximum loading rate

39. The rate at which treated effluent may be applied to land is 3.0mm/day i.e. 3 litres/m²/day.

Wastewater Irrigation

40. The consent holder shall ensure that the subsurface wastewater irrigation lines are buried and maintained at a depth within the topsoil layer of no less than 100mm but no greater than 300mm.

Note: If the minimum depth of the dripline cannot be achieved within the topsoil layer then topsoil should be built up with a minimum 100mm cover.

- 41. The consent holder shall install durable marker pegs at the corners of the dripper irrigation fields and/or end of each line so that they are easily identified for maintenance purposes.
- 42. At least one soil moisture content sensor shall be installed and maintained for each dripline block. For the purposes of this condition the 'dripline blocks' are:
 - block 1: dripline fields 1-6; and
 - block 2: dripline fields 7-12.

The soil moisture content sensor shall provide an adequate indication of soil moisture content over the depth range of 100mm to 300mm and shall be representative of the entire dripline block. The soil moisture content sensors shall be installed and maintained to the satisfaction of the Manager, Environmental Regulation, Wellington Regional Council.

Note: The Manager, Environmental Regulation, Wellington Regional Council was previously known as The Manager, Planning and Resources, Wellington Regional Council

- 43. Wastewater irrigation to each dripline field shall cease when soil moisture levels in that dripline field has reach field capacity (as determined by the soil moisture probe where the dripline is located).
- 44. The consent holder shall determine field capacity of each dripline field prior to commissioning of the wastewater scheme. Results of field capacity shall be submitted to the Manager, Planning & Resource, Wellington Regional Council within 1 month of any analysis being completed.
- 45. No discharge to the land based disposal area shall occur within ten (10) metres of a terrace edge or five (5) metres of a boundary.
- 46. If there is any incidence of soil pugging or rutting of more than 50 mm depth as a consequence of stock grazing or vehicle access, then stock are to be removed, and vehicle access excluded to the wastewater irrigation area.
- 47. The consent holder shall ensure there is no surface ponding of wastewater in the disposal area.
- 48. Wastewater irrigation shall not be permitted in localised areas where prolonged (more than three (3) months) saturated conditions have developed.
- 49. The combined nitrogen loading resulting from wastewater application and any applied fertiliser (including manures), shall not exceed 200 kg N/ha/yr within any 12 month period.
- 50. Crop establishment or renovation in the area used for drip-line irrigation shall use minimum tillage techniques to minimise the risk of damage to drip pipelines and compaction of the surrounding land. The consent holder shall not permit any other person to use the land in a manner contrary to this condition.

SCHEDULE 3: CONDITIONS FOR WAR040096 (30786) - DISCHARGE PERMIT - WATER

Discharge to water system

- 51. All wastewater discharged and contributing to the wastewater discharge system shall have passed through a septic tank, effluent filter, treatment plant and ultra violet disinfection unit prior to the discharge to the wetland.
- 52. The consent holder shall only discharge treated effluent to water when the field capacity of the dripline field has been exceeded (as defined in Condition 44) and there is no storage capacity in the treatment and reticulation system or when a discharge is required for emergency or maintenance purposes.
- 53. If the consent holder requires discharging of treated effluent to water for emergency or maintenance purposes when the field capacity has not been exceeded they shall notify the Manager, Planning & Resources, Wellington Regional Council, Wairarapa Division within 7 days of undertaking any such discharge outlining when the discharge occurred and for what reasons.
- 54. Preferential flow through the wetland shall be avoided, with flow distribution covering at least 75 % of the wetland.
- 55. The consent holder shall investigate appropriate erosion and stormwater control measures in the vicinity of the point where the stream discharges to Lake Onoke (including but not limited to structures and culverts either side of the road) prior to commissioning the wastewater scheme. This is for the purpose of avoiding human contact with any discharges from the wetland.

Note: Depending on any mitigation measures adopted, separate resource consents may be required.

Management: Wetland and Gully

- 56. Prior to the commissioning of the wastewater system, fencing shall be constructed around the wetland and gully to exclude stock at all times for the term of this consent.
- 57. Within 1 year of the commissioning of the wastewater systems, the wetland shall be planted with plant species appropriate to the purpose of the wetland, using native species where possible. No potential weed species are to be used.
- 58. Within 5 years of the commissioning of the wastewater system, the gully shall be planted with native species appropriate to the site. The final areas of the gully to be planted, density of planting and species selection shall be determined by the consent holder in consultation with Greater Wellington.

SCHEDULE 4: CONDITIONS FOR WAR040096 (30787) - DISCHARGE PERMIT - AIR

Scope of Consent

59. The discharge allowed by this consent includes odours from the wastewater collection, treatment and discharge facilities. This includes the wastewater irrigation, wetland, gully and roadside culvert areas.

Discharges to Air Not to Cause Nuisance Beyond Site Boundary

60. There shall not be any objectionable or offensive discharges to an extent that they cause an adverse effect beyond the boundary of the property on which this consent is exercised. Such discharges include but are not limited to odour, dusts, gases, vapours and aerosols.

Production of Malodour

- 61. The on-site processes shall be operated, the operations supervised and the plant maintained in such a manner as to ensure that the emissions of contaminants into the air is kept to a practicable minimum by using best practical option principles. In particular, all practical steps shall be taken to minimise the production and release of contaminants or odour, which are noxious, offensive or objectionable arising from the operation of the sewage treatment system to an extent such that it has, or is likely to have, an adverse effect on the environment. The determination of malodour shall be within 50 metres of any dwelling to be constructed on land adjacent to land of the consent holder.
 - Note An odour shall be considered to be offensive or objectionable if an appropriately experienced Wellington Regional Council officer deems it so after having regard to:
 - (a) frequency, intensity, duration and location of the effects of odour;
 - (b) relevant written advice or a report from an Environmental Health officer, or a territorial or health authority.

Complaints and Incidents

- 62. The consent holder shall maintain a permanent record of any complaints that are received in relation to the exercise of this consent, alleging adverse effects of the activities. The record shall contain at least the following, where practical:
 - (a) Name and address of the complainant.
 - (b) Location where the alleged contaminants or odour was detected by the complainant;

- (c) Identification of the nature of the complaint.
- (d) Date and time of the complaint and of the alleged event
- (e) Weather conditions at the time of the complaint, including a description of the wind speed and wind direction when the contaminants or odour were detected by the complainant;
- (f) The most likely cause of the contaminants or odour detected; and
- (g) Any corrective action undertaken by the consent holder to avoid, remedy or mitigate the contaminants or odour detected by the complainant.

The consent holder shall notify the Manager, Planning & Resources, Wellington Regional Council of any complaints relating to the exercise of this consent, within twenty-four hours of being received by the permit holder or the next working day.

A summary of all complaints received shall be provided to the Wellington Regional Council by 31 March each year, and otherwise on request by the Manager, Planning & Resources.

- 63. The consent holder shall keep a record of any incident that has or could have resulted in a condition of this consent being contravened.
 - (a) The consent holder shall notify the Manager, Planning & Resources, Wellington Regional Council of any such incident, within twenty-four hours of the incident being brought to the attention of the permit holder, or the next working day. This includes any incident that may result in a complaint.
 - (b) The consent holder shall forward an incident report to the Manager, Planning & Resources, Wellington Regional Council within seven working days of the incident occurring. This report shall describe reasons for the incident, measures taken to mitigate the incident and measures to prevent recurrence.

Note: For the purposes of this consent incidents include but are not limited to incidents such as power or mechanical failure, monitoring equipment failure, or unusual discharges.