

Urenui and Onaero Motor Camps
Monitoring Programme
Biennial Report
2012-2014

Technical Report 2014-76

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Taranaki Regional Council
Private Bag 713
STRATFORD

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Executive summary

New Plymouth District Council (NPDC) operates the sewage disposal systems located at Urenui Beach Motor Camp and Onaero Bay Motor Camp. NPDC holds resource consents to allow it to discharge septic tank treated sewage to groundwater via infiltration trenches at each of the motor camps. This report for the period July 2012-June 2014 describes the monitoring programme implemented by the Taranaki Regional Council to assess NPDC's environmental performance during the period under review, and the results and effects of its activities.

NPDC holds one resource consent per motor camp, each of which has five special conditions setting out the requirements that the NPDC must satisfy.

During the monitoring period, NPDC demonstrated a high level of environmental performance and compliance with the resource consent for the Urenui Beach Motor Camp, but improvement is required in environmental performance and compliance associated with the resource consent for the Onaero Bay Motor Camp.

Each year, the Council's monitoring programme included three inspections per motor camp during the Christmas holiday period, including bacteriological sampling at four sites at Urenui and five sites at Onaero during one of the inspections.

Monitoring at the Urenui and Onaero Motor Camps did not indicate any bacterial contamination of the receiving waters as a result of the discharge of treated sewage to groundwater.

NPDC demonstrated a high level of environmental performance and compliance with the resource consent for Urenui Beach Motor Camp (2046-3), as indicated by site inspections and bacteriological monitoring of coastal waters.

Over the two year period there were a number of ongoing issues with the Onaero Bay Motor Camp sewage pump station and improved performance is required in relation to consent 1389-3.

For reference, in the 2012-2013 year, 35% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 59% demonstrated a good level of environmental performance and compliance with their consents. In the 2013-2014 year, 60% of consent holders achieved a high level of environmental performance and compliance with their consents, while another 29% demonstrated a good level of environmental performance and compliance.

This report includes recommendations for the 2014-2015 year.

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1. Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is the Biennial Report for the period July 2012-June 2014 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by New Plymouth District Council (NPDC) for the disposal of treated sewage at the Urenui and Onaero Motor Camps. NPDC operates the sewage treatment systems at each of the motor camps.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by the NPDC that relate to discharges of septic tank treated sewage effluent to groundwater via soakage trenches. This is the 24th report to be prepared by the Council to cover the NPDC's water discharges and their effects.

1.1.2 Structure of this report

Section 1 of this report is a background section. It sets out general information about compliance monitoring under the *Resource Management Act 1991* (RMA) and the Council's obligations and general approach to monitoring sites through annual programmes, the resource consents held by the NPDC, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted at the Urenui and Onaero Motor Camps.

Section 2 presents the results of monitoring during the period under review, including scientific and technical data.

Section 3 discusses the results, their interpretation, and their significance for the environment.

Section 4 presents recommendations to be implemented in the 2014-2015 monitoring year.

A glossary of common abbreviations and scientific terms, and a bibliography, are presented at the end of the report.

1.1.3 The Resource Management Act (1991) and monitoring

The RMA primarily addresses environmental 'effects' which are defined as positive or adverse, temporary or permanent, past, present or future, or cumulative. Effects may arise in relation to:

- (a) the neighbourhood or the wider community around an activity, and may include cultural and social-economic effects;
- (b) physical effects on the locality, including landscape, amenity and visual effects;
- (c) ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;

- (d) natural and physical resources having special significance (eg, recreational, cultural, or aesthetic);
- (e) risks to the neighbourhood or environment.

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' inasmuch as is appropriate for each activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region's resources.

1.1.4 Evaluation of environmental performance

Besides discussing the various details of the performance and extent of compliance by NPDC during the period under review, this report also assigns an overall rating. The categories used by the Council, and their interpretation, are as follows:

- A **high** level of environmental performance and compliance indicates that essentially there were no adverse environmental effects to be concerned about, and no, or inconsequential non-compliance with conditions.
- A **good** level of environmental performance and compliance indicates that adverse environmental effects of activities during the monitoring period were negligible or minor at most, or, the Council did not record any verified unauthorised incidents involving significant environmental impacts and was not obliged to issue any abatement notices or infringement notices, or, there were perhaps some items noted on inspection notices for attention but these items were not urgent nor critical, and follow-up inspections showed they have been dealt with, and any inconsequential non-compliances with conditions were resolved positively, co-operatively, and quickly.
- **Improvement required (environmental) or improvement required (administrative compliance)** (as appropriate) indicates that the Council may have been obliged to record a verified unauthorised incident involving measurable environmental impacts, and/or, there were measurable environmental effects arising from activities and intervention by Council staff was required and there were matters that required urgent intervention, took some time to resolve, or remained unresolved at the end of the period under review, and/or, there were on-going issues around meeting resource consent conditions even in the absence of environmental effects. Abatement notices may have been issued.
- **Poor performance (environmental) or poor performance (administrative compliance)** indicates generally that the Council was obliged to record a verified unauthorised incident involving significant environmental impacts, or there were

material failings to comply with resource consent conditions that required significant intervention by the Council even in the absence of environmental effects. Typically there were grounds for either a prosecution or an infringement notice.

Administrative performance

- **High** The administrative requirements of the resource consents were met, or any failure to do this had trivial consequences and were addressed promptly and co-operatively.
- **Good** Perhaps some administrative requirements of the resource consents were not met at a particular time, however this was addressed without repeated interventions from the Council staff. Alternatively adequate reason was provided for matters such as the no or late provision of information, interpretation of 'best practical option' for avoiding potential effects, etc.
- **Improvement required** Repeated interventions to meet the administrative requirements of the resource consents were made by Council staff. These matters took some time to resolve, or remained unresolved at the end of the period under review. The Council may have issued an abatement notice to attain compliance.
- **Poor** Material failings to meet the administrative requirements of the resource consents. Significant intervention by the Council was required. Typically there were grounds for an infringement notice.

For reference, in the 2012-2013 year, 35% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 59% demonstrated a good level of environmental performance and compliance with their consents. In the 2013-2014 year, 60% of consent holders achieved a high level of environmental performance and compliance with their consents, while another 29% demonstrated a good level of environmental performance and compliance.

1.2 Process description

1.2.1 Urenui Beach Motor Camp

The current sewage disposal system at Urenui Beach Motor Camp has been in use since 1987. Prior to this, septic tank wastes were pumped to a nearby cliff top and discharged to the sea below. This was found to be unsatisfactory, as the septic tank retention time was about 21 hours during the peak summer usage period, resulting in inadequate treatment of sewage.

With the current disposal system the waste from the campsite receives primary treatment through a septic tank system and is then pumped to groundwater via soakage trenches located approximately 50 m from the edge of the cliff to the northeast of the camp and golf course. Regular maintenance ensures continued satisfactory performance of the system.

1.2.2 Onaero Bay Motor Camp

The current sewage disposal system at the Onaero Bay Motor Camp has been in use since 1984. Prior to this, wastes were collected in septic tanks and the overflow gravitated to a small pumping station on the northern side of the Onaero River. The wastes were then pumped to the top of a nearby ridge and into a soakage pit (approximately 4 x 2 x 3 m). This was found unsatisfactory during the peak summer usage period, resulting in inadequate treatment of sewage.

The current disposal system treats waste from the campsite in a similar manner to the Urenui sewage treatment system. Wastes receive primary treatment through a septic tank system and are then pumped to soakage trenches located on high ground approximately 300 m away. Regular maintenance ensures continued satisfactory performance of the system.

1.3 Resource consents

1.3.1 Water discharge permit

Section 15(1)(a) of the RMA stipulates that no person may discharge any contaminant into water, unless the activity is expressly allowed for by a resource consent or a rule in a Regional Plan, or by national regulations.

The NPDC holds water discharge permit **2046-3** to discharge up to 85 m³/day of septic tank treated sewage effluent via soakage trenches to groundwater in the vicinity of the Urenui River. This consent was originally issued on 21 August 1991 as a water right under the Water and Soil Conservation Act 1967. This was re-issued by the Council on 6 December 2002 as a discharge permit under Section 386(1)(e)(ii) of the RMA. It is due to expire on 1 June 2021.

Discharge permit **2046-3** has five special conditions attached.

Condition 1 requires bacteriological monitoring of the coastal waters of the foreshore and the Urenui River.

Condition 2 requires the consent holder to ensure proper maintenance of the septic tank, pumping station and soakage trenches.

Condition 3 requires the consent holder to provide records of daily effluent volumes discharged.

Condition 4 requires the consent holder to provide a contingency plan and condition 5 deals with review of the consent.

The NPDC holds water discharge permit **1389-3** to discharge up to 17 m³/day of septic tank treated sewage effluent via soakage trenches to groundwater in the vicinity of the Onaero River. This consent was originally issued on 21 August 1991 as a water right under the Water and Soil Conservation Act 1967. This was re-issued by the Council on 6 December 2002 as a discharge permit under Section 386(1)(e)(ii) of the RMA. It is due to expire on 1 June 2021.

The discharge permit has five special conditions attached.

Condition 1 of the consent requires bacteriological monitoring of the coastal waters of the foreshore and the Onaero River.

Condition 2 requires the consent holder to ensure proper maintenance of the septic tank, pumping station and soakage trenches.

Condition 3 requires the consent holder to provide records of daily effluent volumes discharged.

Condition 4 requires the consent holder to provide a contingency plan and condition 5 deals with review of the consent.

Copies of the permits are attached to this report in Appendix I.

1.4 Monitoring programme

1.4.1 Introduction

Section 35 of the RMA sets out an obligation for the Council to gather information, monitor, and conduct research on the exercise of resource consents, and the effects arising, within the Taranaki region.

The Council may therefore make and record measurements of physical and chemical parameters, take samples for analysis, carry out surveys and inspections, conduct investigations, and seek information from consent holders.

The monitoring programme for the Urenui and Onaero motor camps consisted of three primary components.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Council in:

- ongoing liaison with resource consent holders over consent conditions and their interpretation and application;
- in discussion over monitoring requirements;
- preparation for any reviews;
- renewals;
- new consents;
- advice on the Council's environmental management strategies and content of regional plans; and
- consultation on associated matters.

1.4.3 Site inspections

The Urenui and Onaero camp sites were each visited six times during the biennial monitoring period. With regard to consents for the discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses. The neighbourhood was surveyed for environmental effects.

1.4.4 Bacteriological sampling

The Council undertook bacteriological sampling in conjunction with the first post-Christmas inspections in January.

Samples were collected at four sites in conjunction with the Urenui Beach Motor Camp: two river and two coastal sites (Figure 1). Samples were collected at five sites in conjunction with the Onaero Bay Motor Camp: two river and three coastal sites (Figure 2). All samples were analysed for temperature, conductivity, faecal coliforms, *E. coli* and enterococci bacteria. Faecal indicator bacteria (faecal coliforms, *E. coli* and enterococci bacteria) were monitored to provide an indication of potential contamination of the water by animal and/or human excreta.

As the beaches and rivers around Urenui and Onaero Motor Camps are popular summer swimming areas, water quality at these sites is of particular interest. In 2003, the Ministry for the Environment (MfE) developed the *Guidelines for Recreational Water Quality* to assess the safety of water for contact recreation. The coastal guidelines focus on enterococci as this indicator provides the closest correlation with health effects in New Zealand coastal waters. 'Alert' and 'Action' guideline levels are summarized in Table 1 and are based on keeping illness risk associated with recreational use to less than approximately 2%. For freshwater, the MfE 2003 guidelines use *E. coli* as the preferred indicator (Table 1).

Table 1 Recreational bathing guidelines (MfE 2003)

	Indicator	Mode		
		Surveillance	Alert	Action
Marine	Enterococci (cfu/100ml)	No single sample >140	Single sample >140	Two consecutive single samples >280
Freshwater	<i>E. coli</i> (cfu/100ml)	No single sample >260	Single sample >260	Single sample >550

In addition to water quality monitoring during inspections, bacteriological samples were also collected from the Onaero Motor Camp as part of the Council's State of Environment Monitoring Programme during the 2012-2014 monitoring period. Results from this programme are available in the Council's Bathing Beach Water Quality State of the Environment Monitoring Reports 2012-2013 and 2013-2014.



Photo 1 Urenui Beach (20 December 2012)



Photo 2 Onaero Beach (19 February 2014)

2. Results

2.1 Urenui

2.1.1 Inspection

20 December 2012

The camp manager was away from camp during the inspection. Another member of staff reported that there had been no issues with wastewater. No odours were evident around the pump on the day of the inspection. The camp was busy with 152 campers on site.

10 January 2013

The camp manager reported that there had been no issues with wastewater since the previous inspection. No odours were evident around the pump on the day of the inspection. The camp was busy with 523 campers on site with additional visitors (approximately 200) staying in the batches. The camp was fully booked during Christmas with approximately 600 campers on site. Water samples were taken during the inspection for bacteriological analysis.

5 February 2013

The camp manager reported that a number of minor issues had occurred with the sewage disposal system since the previous inspection: A few weeks prior to the inspection the alarm had been triggered as a result of a block in the lines. No overflow had occurred and the problem was fixed without further issue. The alarm had also been triggered the day before the inspection as a result of heavy rain and a power cut. No further issues had resulted. The camp was relatively quiet on the day of inspection with 150 campers plus approximately 100 visitors staying in the batches.

20 December 2013

The camp manager reported that there had been no issues with the sewage disposal system since the previous inspection. No odours were evident around the pump on the day of the inspection. The camp was relatively quiet with approximately 20 campers plus 20 visitors staying in the batches.

9 January 2014

The camp manager reported that there had been no issues with the sewage disposal system since the previous inspection. No odours were evident around the pump on the day of the inspection. The camp was busy with approximately 500 campers plus 300 visitors staying in the batches. Water samples were taken during the inspection. There had been heavy showers overnight which should be taken into account when interpreting bacteriological results.

19 February 2014

The camp manager was not in the office at the time of inspection. No odours were evident around the pump. The camp appeared relatively busy.

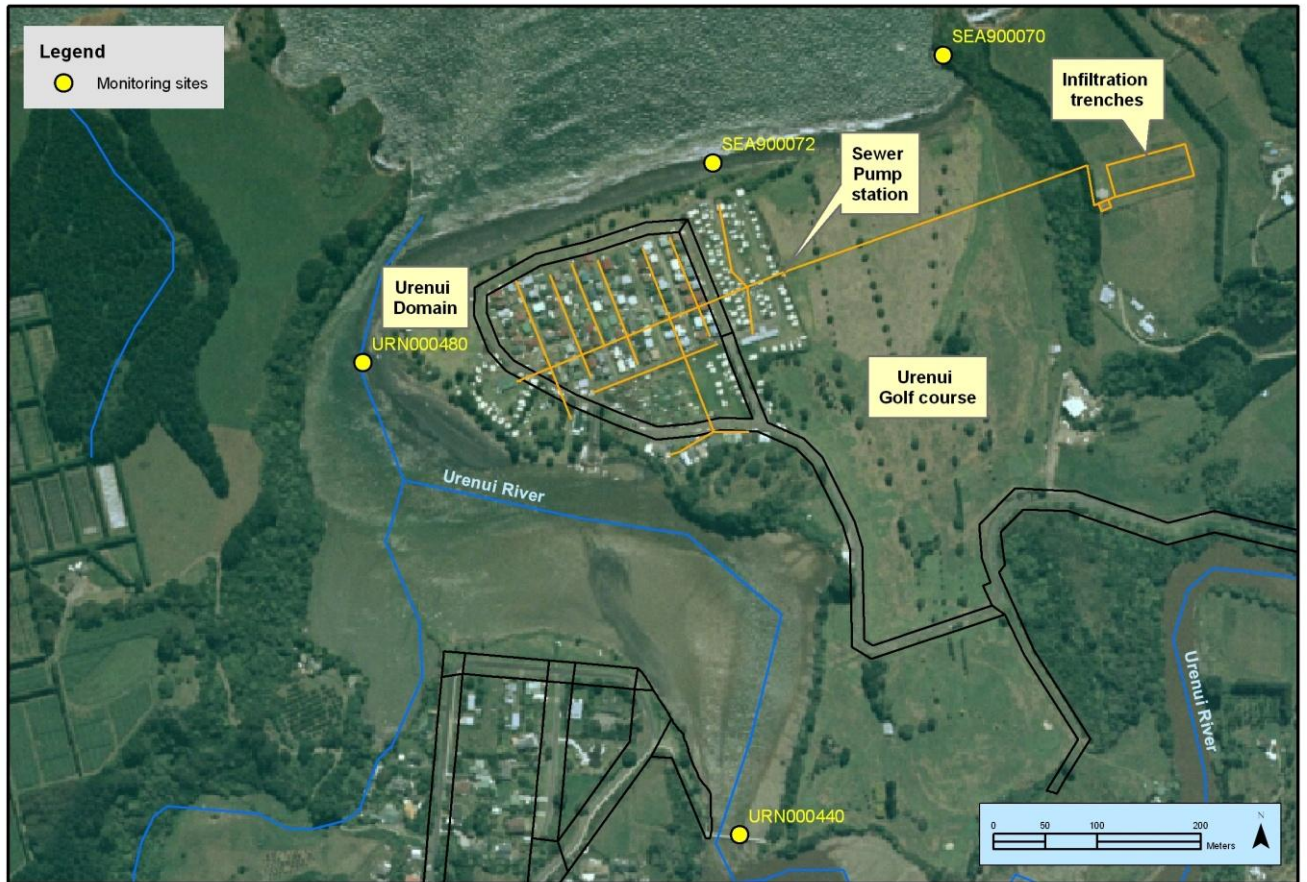


Figure 1 Location of sewage disposal system and sample sites, Urenui Beach Motor Camp

2.1.2 Receiving environment monitoring

The location of the four sampling sites is shown in Figure 1. A description of each site is provided in Table 2.

Table 2 Location of bacteriological sampling sites at Urenui Beach Motor Camp

Site	Location	Site code	Map Reference
1	Urenui River SH3 bridge	URN000420	1721404 - 5682968
1a	Urenui River Footbridge	URN000440	1720608 - 5682914
2	Urenui River at mouth	URN000480	1720245 - 5683370
3	Sea coast approx. 200 m east of river mouth	SEA900072	1720582 - 5683563
4	Sea coast at east end of beach	SEA900070	1720803 - 5683667

The bridge on State Highway 3 (Site 1) had previously been used as the upstream sampling site, however, this site is no longer safe to sample from. The alternative site, 1 km downstream at the footbridge (Site 1a), has been used since 2001.

Faecal indicator bacteria have been sampled at the Urenui Beach Motor Camp since 1987. A summary of faecal coliform results from 1987 to 2012 is provided in Appendix II for comparative purposes (Tables 1A – 3A).

Bacteriological monitoring results for the 2012-2013 monitoring year are shown in Table 3. All faecal indicator bacteria counts from samples collected on 10 January 2013 were lower than the median results from previous seasons at the same sites (Appendix II). The 2013 enterococci counts at both coastal sites (Sites 3 and 4) were below the MfE 'Alert' level for coastal waters (<141 cfu/100 ml). The 2013 *E. coli* counts for freshwater Sites 1 and 2 were below the MfE 'Alert' level for freshwater (<260 cfu/100 ml).

Table 3 Bacteriological results Urenui 10 January 2013

Parameter	Unit	Site 1a	Site 2	Site 3	Site 4
Faecal coliforms	cfu/100 ml	130	6	30	8
Enterococci	cfu/100 ml	56	10	8	15
<i>E. coli</i>	cfu/100 ml	130	4	30	7
Conductivity @ 20 C	mS/m	4,390	4,750	4,750	4,760

Bacteriological monitoring results for the 2013-2014 monitoring year are shown in Table 4. All faecal indicator bacteria counts from samples collected on 9 January 2014 were higher than the median results from previous seasons at the same sites (Appendix II). The 2014 enterococci counts at both coastal sites (Sites 3 and 4) were above the MfE 'Alert' level for coastal waters (>140 cfu/100 ml). The 2014 *E. coli* counts for freshwater Sites 1 and 2 were above the MfE 'Alert' level for freshwater (>260 cfu/100 ml).

The most likely explanation for the elevated counts is related to the high rainfall which occurred prior to sampling. Under these circumstances, the sites can be influenced by the Urenui River which drains from developed agricultural land. High counts recorded at Site 1a, located upstream from the camp sewage treatment system, indicate that the elevated results did not occur as a result of wastewater discharge from the camp.

Table 4 Bacteriological results, Urenui, 9 January 2014

Parameter	Unit	Site 1a	Site 2	Site 3	Site 4
Faecal coliforms	cfu/100 ml	1,200	2,000	1,600	1,600
Enterococci	cfu/100 ml	290	260	240	250
<i>E. coli</i>	cfu/100 ml	1,200	2,000	1,500	1,600
Conductivity @ 20 C	mS/m	726	1,150	1,560	1,480

2.2 Onaero

2.2.1 Inspections

20 December 2012

The camp manager reported that the sewage pump had broken-down the weekend prior to the inspection. Due to pump failure there had been a minor overflow onto the bank but not into the river (later investigation confirmed that the overflow had occurred on 16 December 2012). The pump failure had been reported to the NPDC and repaired. There were no issues with the sewage system on the day of inspection. There was,

however, a faint sewage odour around the pump. Approximately 25 campers were staying on the day of the inspection.

10 January 2013

The camp manager reported that during late December 2012 the pump had broken down. A leak occurred when the pump failed, but the discharge was stopped before reaching the river (although originally it was believed that this was a separate incident to that recorded in the 20 December 2014 inspection, further investigation confirmed that this was the 16 December 2012 overflow). At the time of inspection a new system was waiting to be installed. There were no issues with the sewage system on the day of inspection and no sewage odours around the pump. Approximately 54 campers were staying on the day of the inspection (114 campers were present over Christmas). Water samples were taken for bacteriological analysis.

29 January 2013

A follow up inspection of the sewage pump at Onaero Bay Motor Camp was undertaken. The camp manager confirmed that there had only been one overflow during December 2012, occurring on the 16th, not two as previously reported in the Council Inspection Notices. There had been no issues with the pump since the previous inspection. Gaps were present around the pump station lid (Photos 3 and 4). The switchbox was checked; areas of corrosion were evident inside the box (Photo 5). There were no odours at the time of inspection.



Photo 3 Pump station lid (29 January 2013)



Photo 4 Gaps around the pump station (lid 29 January 2014)

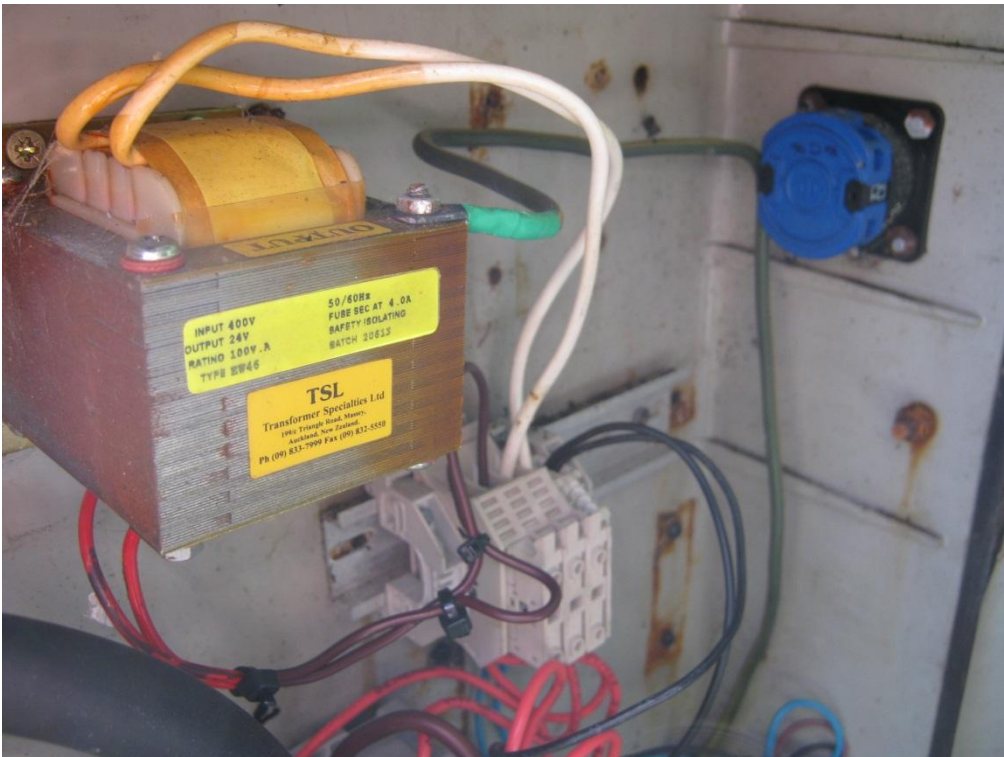


Photo 5 Corrosion inside the switchbox (29 January 2013)

5 February 2013

The camp manager reported that there had been no issues with the sewage disposal system (including the pump) since the previous inspection. As noted in the previous inspection, gaps were present around the pump station lid (Photos 3 and 4). No odours were evident around the pump on the day of the inspection. The camp was quiet on the day of inspection with only a few visitors staying overnight.

20 December 2013

Since the previous inspection improvements had been made to the pump station including installation of an alarm system and new lid (Photo 6). The camp manager reported that there had been no issues with the sewage disposal system and that the alarm system was working well. No odours were evident around the pump on the day of the inspection. The camp was quite with only a few visitors staying overnight.



Photo 6 Improvements to pump station including new lid, switchbox and alarm system (20 December 2013)

9 January 2014

The camp manager reported that there had been no issues with the sewage disposal system since the previous inspection. Faint sewage odours were evident around the pump on the day of the inspection. The camp was busy with many campers onsite. Water samples were taken during the inspection. There had been heavy showers overnight which should be taken into account when interpreting bacteriological results.

19 February 2014

The camp manager reported that there had been on-going electronics issues with the sewage disposal system since the previous inspection, with frequent triggering of the alarm. NPDC reported an unauthorised sewage discharge from this pump occurring on the 15 January 2014 as a result of blown fuses in the pillar box next to the pump station.

At the time of the inspection, work was being undertaken to replace a relatively old problematic cable with a larger cable with more capacity to carry the pump loads. No sewage odours were evident around the pump on the day of the inspection. The camp was quiet with only 8 campers onsite, but had been much busier over the weekend.

2.2.2 Receiving environment monitoring

The location of each of the five sites is shown in Figure 2 and a description of each site is provided in Table 5.

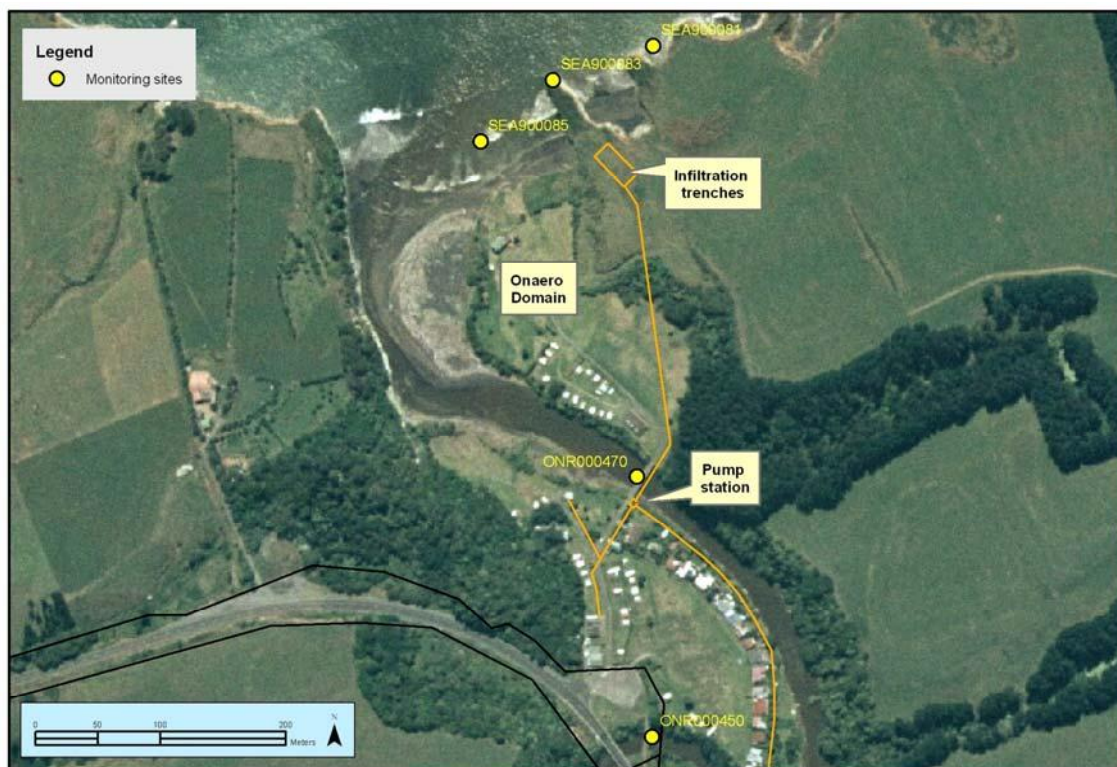


Figure 2 Location of sewage disposal system and sampling sites, Onaero Bay Motor Camp

Table 5 Location of bacteriological sampling sites at Onaero Bay Motor Camp

Site	Location	Site code	GPS
1	Onaero River SH3 bridge	ONR000450	1718296 - 5682687
2	Onaero River at domain pump station bridge	ONR000470	1718283 - 5682895
3	Sea coast on beach adjacent surf club	SEA900085	1718158 - 5683163
4	Sea coast beneath sewage infiltration cliff	SEA900083	1718216 - 5683212
5	Sea coast north of sewage infiltration cliff	SEA900081	1718296 - 5683239

Faecal indicator bacteria have been sampled at the Onaero Bay Motor Camp since 1987. A summary of the faecal coliform results between 1987 and 2012 is provided Appendix III for comparative purposes (Tables 4A - 6A).

Table 6 shows the results of bacteriological monitoring undertaken during the 2012-2013 monitoring year at four sites. The tide was too high to sample Site 5 on 10 January 2013. Faecal indicator bacteria counts from samples collected on 10 January 2013 were within

the range of results from previous seasons at the same sites (Appendix III). The 2013 enterococci counts at both coastal sites (Sites 3 and 4) were below the MfE 'Alert' level for coastal waters (<141 cfu/100 ml). The 2013 *E. coli* counts were below the MfE 'Alert' level for freshwater (<260 cfu/100 ml) at Site 1, but not at Site 2.

Table 6 Bacteriological results, Onaero, 10 January 2013

Parameter	Unit	Site 1	Site 2	Site 3	Site 4
Faecal coliforms	cfu/100 ml	93	700	52	56
Enterococci	cfu/100 ml	280	380	78	76
<i>E. coli</i>	cfu/100 ml	89	430	52	56
Conductivity @ 20 C	mS/m	2,000	1,962	4,700	4,690

Bacteriological monitoring results for the 2013-2014 monitoring year are shown in Table 7. All faecal indicator bacteria counts from samples collected on 9 January 2014 were higher than the median results from previous seasons at the same sites (Appendix III). The 2014 enterococci counts at the coastal sites (Sites 3, 4 and 5) were below the MfE 'Alert' level for coastal waters (<141 cfu/100 ml). The 2014 *E. coli* counts for freshwater Sites 1 and 2 were above the MfE 'Alert' level for freshwater (>260 cfu/100 ml). Elevated counts were associated with high rainfall prior to sampling. High counts recorded at Site 1, located upstream from the camp sewage treatment system, indicate that the elevated results did not occur as a result of wastewater discharge from the camp.

Table 7 Bacteriological results, Onaero, 9 January 2014

Parameter	Unit	Site 1	Site 2	Site 3	Site 4	Site 5
Faecal coliforms	cfu/100 ml	1,600	1,800	440	470	110
Enterococci	cfu/100 ml	710	650	140	120	35
<i>E. coli</i>	cfu/100 ml	1,600	1,800	440	470	98
Conductivity @ 20 C	mS/m	9.9	11.0	3,950	3,380	4,440

2.3 Investigations, interventions, and incidents

The monitoring programme for the year was based on what was considered to be an appropriate level of monitoring, review of data, and liaison with the consent holder. During the year matters may arise which require additional activity by the Council eg provision of advice and information, or investigation of potential or actual courses of non-compliance or failure to maintain good practices. A pro-active approach that in the first instance avoids issues occurring is favoured.

The Council operates and maintains a register of all complaints or reported and discovered excursions from acceptable limits and practices, including non-compliance with consents, which may damage the environment. The Incident Register includes events where the company concerned has itself notified the Council. The register contains details of any investigation and corrective action taken.

Complaints may be alleged to be associated with a particular site. If there is potentially an issue of legal liability, the Council must be able to prove by investigation that the identified company is indeed the source of the incident (or that the allegation cannot be proven).

In the 2012-2014 period, it was not necessary for the Council to undertake significant additional investigations and interventions, or record incidents in association with the Urenui Motor Camps' conditions in resource consents or provisions in Regional Plans in relation to the Camps' activities during the monitoring period.

However, at the Onaero Motor Camp a number of incidents occurred with the wastewater treatment system which required follow up investigation by the Council. Originally, based on information received during inspections, the Council were under the impression that two sewage overflows had occurred at the Onaero Motor Camp pump station during December 2012 as a result of inadequate maintenance of the pump. Consequently an Abatement Notice was issued. NPDC provided justification that only one overflow had occurred during December 2012 and that the pump had been regular maintained/serviced. Based on this evidence, the Council withdrew the Abatement Notice on the agreement that NPDC would undertake the following actions:

- replace the pump switchbox and fit an alarm within one month;
- update the contingency plan for Onaero Bay Motor Camp, identifying key contacts; and
- address issues of concern (i.e. guide rails, lid, pump chain) raised in the 6 month pump station check.

These actions were undertaken by NPDC.

Further electrical issues with the Onaero Motor Camp pump station occurred in January 2014, resulting in a sewage discharge into the Onaero River. In response to corrective action requested by Council in the February Inspection Notice, an email was received from NPDC in March 2014 outlining preventative maintenance to be carried out.

3. Discussion

3.1 Discussion of plant performance

3.1.1 Urenui Beach Motor Camp

There were no detectable odours associated with the sewage pump station during all six inspections undertaken during the 2012-2014 monitoring period. During one inspection (5 February 2013) the camp manager reported that a number of minor issues had occurred with the camp wastewater treatment system. All faults had been reported and repaired promptly.

The contingency plan for Urenui Beach Motor Camp is now included in the NPDC Water and Wastes Incident Response Plan, originally received on 27 September 2013 with regular updates as required. As no significant changes have taken place at the camp since, this plan is considered to be valid and active.

3.1.2 Onaero Bay Motor Camp

During the 2012-2014 monitoring period, either no or faint odours were detected at the pump station during the inspections. However, a number of ongoing issues with the wastewater treatment system were reported during the inspections (explained further in Sections 2.2.1 and 2.3).

The contingency plan for Onaero Beach Motor Camp is now included in the NPDC Water and Wastes Incident Response Plan (as referred to in Section 3.1.1).

3.2 Environmental effects of exercise of consents

Monitoring indicated that the sewage treatment systems were not having an adverse effect on the receiving waters in the vicinity of each camp. Faecal indicator bacteria counts from samples collected on 10 January 2013 were relatively low. Enterococci counts from all coastal sites were below MfE 'Alert' level.

On 9 January 2014, faecal indicator bacteria counts were elevated at all sites sampled. The high faecal indicator bacteria counts recorded at the sites upstream of the wastewater treatment systems, indicate that the elevated results did not occur as a result of camp wastewater discharges. High counts are consistent with freshwater systems draining through developed agricultural land following heavy rainfall.

3.3 Evaluation of performance

A summary of the NPDC's compliance record for the year under review is provided in Tables 8 and 9.

Table 8 Summary of performance for Consent 2046-3 discharge of treated septic tank effluent in the vicinity of the Urenui River

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Bacteriological monitoring of Urenui River and coastal foreshore	Sample collection	Yes
2. Consent holder to maintain septic tank system as required	Site inspections	Yes
3. Records of daily effluent volumes if requested	Not requested during period under review	N/A
4. Contingency plan	Approved on 5 November 2010. No changes to site/system.	Yes
5. Optional review provision re environmental effects	Next optional review June 2015	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 9 Summary of performance for Consent 1389-3 discharge of septic tank sewage effluent at Onaero

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Bacteriological monitoring of Onaero River and coastal foreshore	Sample collection	Yes
2. Consent holder to maintain septic tank system as required	Site inspections	No
3. Records of daily effluent volumes if requested	Not requested during period under review	N/A
4. Contingency plan	Approved on 5 November 2010. No changes to site/system.	Yes
5. Optional review provision re environmental effects	Next optional review June 2015	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		Improvement required
Overall assessment of administrative performance in respect of this consent		High

NPDC demonstrated a high level of environmental performance and compliance with the resource consent for Urenui Beach Motor Camp (2046-3), as indicated by site inspections and bacteriological monitoring of coastal waters.

Over the two year period there were a number of ongoing issues with the Onaero Bay Motor Camp sewage pump station (reported in Sections 2.2.1 and 2.3). An improved performance is required for this consent (1389-3).

3.4 Recommendations from the 2011-2012 Annual Report

In the 2010-2011 Annual Report, it was recommended:

1. THAT monitoring of discharges from Urenui Domain Motor Camp in the 2012-2013 year continue at the same level as in 2011-2012.
2. THAT monitoring of discharges from Onaero Domain Motor Camp in the 2012-2013 year continue at the same level as in 2011-2012.

Both these recommendations were implemented.

3.5 Alterations to monitoring programmes for 2014-2015

In designing and implementing the monitoring programmes for water discharges in the region, the Council has taken into account the extent of information made available by previous authorities, its relevance under the RMA, the obligations of the RMA in terms of monitoring discharges and effects, and subsequently reporting to the regional community, the scope of assessments required at the time of renewal of permits, and the need to maintain a sound understanding of industrial processes within Taranaki discharging to the environment.

In the case of the Urenui and Onaero beach camps, the programme for 2012-2014 was unchanged from that for 2011-2012. It is now proposed that for 2014-2015, the programme remains unaltered. A recommendation to this effect is attached to this report.

4. Recommendations

1. THAT monitoring of discharges from Urenui Domain Motor Camp in the 2014-2015 year continue at the same level as in 2012-2014.
2. THAT monitoring of discharges from Onaero Domain Motor Camp in the 2014-2015 year continue at the same level as in 2012-2014.

Glossary of common terms and abbreviations

The following abbreviations and terms are used within this report:

cfu	colony forming units. A measure of the concentration of bacteria usually expressed as per 100 ml sample
Conductivity	conductivity, an indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m
Contact recreation	recreation activities that bring people physically in contact with water, involving a risk of involuntary ingestion or inhalation of water
<i>E.coli</i>	<i>Escherichia coli</i> , an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 ml sample
Enterococci	an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 ml of sample
Faecal Coliforms	An indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 ml sample
fresh	elevated flow in a stream, such as after heavy rainfall
incident	an event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred
intervention	action/s taken by Council to instruct or direct actions be taken to avoid or reduce the likelihood of an incident occurring
investigation	action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident
Median	central value when values are arranged in order of magnitude
NZDT	New Zealand Daylight Time, the addition of one hour to New Zealand Standard time (NZST) for daylight savings
resource consent	refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15)
RMA	Resource Management Act 1991 and subsequent amendments
SEM	State of Environment Monitoring performed as part of Council obligations under the RMA
Temp	temperature, measured in °C (degrees Celsius)
UI	Unauthorised Incident
UIR	Unauthorised Incident Register – contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan
Water quality	the bacteriological condition of a water body as it relates to human health, measured using indicator bacteria

For further information on analytical methods, contact the Council's laboratory

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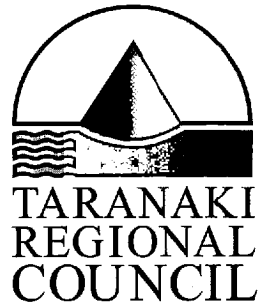
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Appendix I

Resource consents held by the New Plymouth District Council



Discharge Permit
Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

CHIEF EXECUTIVE
PRIVATE BAG 713
47 CLOTEN ROAD
STRATFORD
NEW ZEALAND
PHONE 06-765 7127
FAX 06-765 5097

Please quote our file number
on all correspondence

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 6 December 2002

Conditions of Consent

Consent Granted: To discharge up to 17 cubic metres/day of treated septic
tank sewage effluent via soakage trenches into
groundwater in the vicinity of the Onaero River at or about
GR: Q19:284-448

Expiry Date: 1 June 2021

Review Date(s): June 2009, June 2015

Site Location: Onaero Bay Motor Camp, State Highway 3, Onaero

Legal Description: Sec 82 Urenui Dist Blk III Waitara SD Kaipikari Farm Sett
Rec Res

Catchment: Onaero

*For General, Standard and Special conditions
pertaining to this consent please see reverse side of this document*

www.trc.govt.nz

Consent 1389-3

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall, in conjunction with the Taranaki Regional Council, undertake such bacteriological monitoring of the Onaero River and coastal waters of the foreshore as deemed necessary by the Chief Executive, Taranaki Regional Council.
2. The consent holder shall ensure proper maintenance of the septic tanks, pumping station and soakage trenches as required.
3. The consent holder shall provide records of daily effluent volumes discharged to the soakage trenches at the request of the Chief Executive, Taranaki Regional Council.
4. The consent holder shall provide a contingency plan to the satisfaction of the Chief Executive, Taranaki Regional Council, outlining measures to be undertaken in the event of power failure, pump breakdown, pipe blockage and failure of soakage trenches, within three months of granting this consent.
5. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2009 and/or June 2015, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 6 December 2002

For and on behalf of
Taranaki Regional Council



Director-Resource Management



Discharge Permit
Pursuant to the Resource Management Act 1991
a resource consent is hereby granted by the
Taranaki Regional Council

CHIEF EXECUTIVE
PRIVATE BAG 713
47 CLOTEN ROAD
STRATFORD
NEW ZEALAND
PHONE 06-765 7127
FAX 06-765 5097

Please quote our file number
on all correspondence

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 6 December 2002

Conditions of Consent

Consent Granted: To discharge up to 85 cubic metres/day of treated septic tank sewage effluent via soakage trenches into groundwater in the vicinity of the Urenui River at or about GR: Q19:310-452

Expiry Date: 1 June 2021

Review Date(s): June 2009, June 2015

Site Location: Urenui Beach Motor Camp, Beach Road, Urenui

Legal Description: Lot 1 DP 15787 Blk III Waitara SD

Catchment: Urenui

Consent 2046-3

General conditions

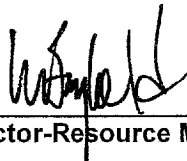
- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall, in conjunction with the Taranaki Regional Council, undertake such bacteriological monitoring of the Urenui River and coastal waters of the foreshore as deemed necessary by the Chief Executive, Taranaki Regional Council.
2. The consent holder shall ensure proper maintenance of the septic tanks, pumping station and soakage trenches as required.
3. The consent holder shall provide records of daily effluent volumes discharged to the soakage trenches at the request of the Chief Executive, Taranaki Regional Council.
4. The consent holder shall provide a contingency plan to the satisfaction of the Chief Executive, Taranaki Regional Council, outlining measures to be undertaken in the event of power failure, pump breakdown, pipe blockage and failure of soakage trenches, within three months of granting this consent.
5. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2009 and/or June 2015, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 6 December 2002

For and on behalf of
Taranaki Regional Council



Director-Resource Management

Appendix II

Urenui Faecal Indicator Bacteria Results 1987-2012

Table 1A Faecal coliform results 1987 to 2012

Parameter	Site 1/1a	Site 2	Site 3	Site 4
No of samples	33	35	33	33
Median*	280	100	46	37
Mean*	654	316	190	144
Minimum*	<1	<1	1	<1
Maximum*	3,300	2,100	1,700	2,200

* cfu per 100 ml

Table 2A Enterococci results 1993 to 2012

Parameter	Site 1/1a	Site 2	Site 3	Site 4
No of samples	20	20	20	20
Median*	78	60	23	18
Mean*	149	105	50	54
Minimum*	<1	<1	1	1
Maximum*	540	340	250	400

* cfu per 100 ml

Table 3A *E. coli* results 1995 to 2012

Parameter	Site 1/1a	Site 2	Site 3	Site 4
No of samples	17	17	17	17
Median*	280	180	87	56
Mean*	597	350	246	219
Minimum*	8	5	1	5
Maximum*	3,300	2,100	1,700	2,200

* cfu per 100 ml

Appendix III

Onaero Faecal Indicator Bacteria Results 1987-2012

Table 4A Faecal coliform results, 1987 to 2012

Parameter	Site 1	Site 2	Site 3	Site 4	Site 5
No of samples	34	36	35	32	28
Median*	535	510	52	47	40
Mean*	773	676	238	193	193
Minimum*	38	7	1	<1	1
Maximum*	2,400	2,000	1,600	2,000	1,800

* cfu per 100 ml

Table 5A Enterococci results, 1993 to 2012

Parameter	Site 1	Site 2	Site 3	Site 4	Site 5
No of samples	19	20	20	20	17
Median*	320	315	43	34	31
Mean*	367	380	129	115	101
Minimum*	38	60	1	3	1
Maximum*	930	1,100	1,100	1,200	1,000

* cfu per 100 ml

Table 6A *E. coli* results, 1995 to 2012

Parameter	Site 1	Site 2	Site 3	Site 4	Site 5
No of samples	16	17	17	17	14
Median*	695	660	40	57	48
Mean*	925	748	262	197	189
Minimum*	150	84	5	<1	5
Maximum*	2,400	2,000	1,500	1,900	1,700

* cfu per 100 m