Wai-inu Beach Settlement Monitoring Programme Biennial Report 2011-2013

Technical Report 2012-61

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Executive summary

The South Taranaki District Council (STDC) operates a sewage treatment system located at the Wai-inu Beach Settlement, in the Waitotara catchment. This report for the period July 2011-June 2013 describes the monitoring programme implemented by the Taranaki Regional Council to assess the STDC's environmental performance during the period under review, and the results and environmental effects of STDC's activities.

The STDC hold one resource consent in relation to the sewage treatment system, which includes a total of six conditions setting out the requirements that the STDC must satisfy.

The Council's monitoring programme for the two years under review included six site inspections, along with bacteriological sampling of seawater undertaken at two coastal sites during each inspection.

Inspections of the site showed that, apart from a few weeds on tanks, the treatment system was well maintained during the period under review. Bacteriological sampling did not indicate faecal contamination of seawater as a result of the treatment system.

During the two years, the STDC demonstrated a high level of compliance with the resource consent and environmental performance in relation to the consent. During the years under review there were no unauthorised incidents or any adverse effects on the receiving environment in relation to Consent 3769-3. However, unrelated to Consent 3769-3, an abatement notice was issued as a result of green waste and domestic rubbish dumped at the site during March 2012. This rubbish was cleared and the site remained free of green waste throughout the 2012-2013 season.

This report includes recommendations for the 2013-2014 year.

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Wai-inu Beach Settlement

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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 for the period July 2011-June 2013 by the Taranaki Regional Council describing the monitoring programme associated with a resource consent held by the South Taranaki District Council (STDC). The STDC operate a wastewater treatment system situated at the Wai-inu Beach Settlement in South Taranaki.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consent held by the STDC that relate to the discharge of treated sewage effluent to groundwater in the Waitotara catchment. This is the 20th report to be prepared by the Taranaki Regional Council to cover the STDC water discharge and its 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 and the Council's obligations and general approach to monitoring sites through annual programmes, the resource consents held by STDC, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted in the Wai-inu beach settlement.

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 2013-2014 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 Resource Management Act 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 a discharger, and may include cultural and socio-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 Taranaki Regional Council is recognising the comprehensive meaning of `effects' inasmuch as is appropriate for each discharge source. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the Resource Management Act to assess the effects of the exercise of consents. In accordance with section 35 of the Resource Management Act 1991, the Council undertakes compliance monitoring for consents and rules in regional plans; and maintains an overview of performance of resource users against regional plans and consents. Compliance monitoring, (covering both activity and impact) monitoring, also enables the Council to continuously assess its own performance in resource management as well as that of resource users particularly consent holders. It further 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 the STDC 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 (such as data supplied after a deadline) noncompliance 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 inconsequential non compliances with conditions were resolved positively, cooperatively, and quickly.
- improvement desirable indicates that the Council may have been obliged to record a verified unauthorised incident involving measurable environmental impacts, 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 end of the period under review, and/or abatement notices may have been issued.
- **poor performance** indicates that the Council may have been obliged to record a verified unauthorised incident involving significant environmental impacts, or, there were adverse environmental effects arising from activities and there were grounds for prosecution or an infringement notice.

1.2 Process description

The Wai-inu Beach Settlement treatment system was designed to service a population of approximately 420 persons. Communal septic tanks of 3600 litre capacity treat wastes from a maximum of four residential sections per septic tank. Effluent from the septic tanks is gravity fed to an underground dosing chamber of sufficient storage to allow the alternative dosing, via pumps, of two sand filter beds. The pumps are operated automatically by float switches and provide a dose volume of about 14m³ onto the surface of one or the other filter beds. These large filter beds are about 15.6 m in diameter and comprise of layers of coarse sand, pea gravel and graded stone chip. The filter media provides a physical and a limited amount of biological filtration of the effluent prior to ground storage.

This is a simple and effective treatment system; provided the septic tanks receive regular maintenance to prevent gross solids from clogging the filter system and the filter beds are not overloaded. The filter beds are essentially an aerated treatment device and when saturated for long periods, anaerobic conditions can occur causing excessive and pungent odour. Weed growth on top of the sand filter beds also needs to be monitored and removed on a regular basis.

As the shallow groundwater receiving the treated effluent flows more than 200 m toward the beach, the measurement of coastal seawater quality allows the effectiveness of the effluent treatment system to be assessed. There are no users of shallow groundwater in the area, as the settlement is supplied from a bore (45 m deep) to the west of the settlement.

1.3 Resource consents

1.3.1 Water discharge permit

Section 15(1)(a) of the Resource Management Act 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.

STDC holds water discharge permit **3769** to cover the discharge of up to 84 cubic metres/day of treated domestic wastewater from the Wai-inu Beach Settlement via seepage to groundwater in the Waitotara catchment. This permit was issued by the Taranaki Regional Council on 29 July 1992 under Section 87(c) of the Resource Management Act. It was reissued in November 2003 and is due to expire on 1 June 2022.

There are six special conditions attached to this consent.

Condition 1 relates to the exercise of the consent being carried out in accordance with the information supplied in support of the application.

Condition 2 requires the consent holder to adopt the best practicable option to prevent or minimise any actual or potential effect on the environment.

Condition 3 relates to the proper and effective maintenance and operation of the treatment system, in particular the septic tank and filter beds.

Condition 4 requires monitoring of the treatment system and coastal waters.

Condition 5 requires the consent holder to provide the Council with a contingency plan.

Condition 6 deals with reviews of the consent.

A copy of the permit is attached to this report in Appendix I.

1.4 Monitoring programme

1.4.1 Introduction

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

The Taranaki Regional 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 Wai-inu Beach Settlement site consisted of three primary components.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Taranaki Regional 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, or new consents, advice on the Council's environmental management strategies and the content of regional plans, and consultation on associated matters.

1.4.3 Site inspections

The Wai-inu beach settlement site was visited three times annually. With regard to consents for the abstraction of or discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses, including contaminated stormwater and process wastewaters. Air inspections focused on plant processes with associated actual and potential emission sources and characteristics, including potential odour, dust, noxious or offensive emissions. Sources of data being collected by the consent holder were identified and accessed, so that performance in respect of operation, internal monitoring, and supervision could be reviewed by the Council.



Figure 1 Location of bacteriological sampling sites and treatment system

1.4.4 Bacteriological sampling

The Taranaki Regional Council undertook sampling of coastal waters at two sites on three occasions annually, in conjunction with site inspections during the monitoring period. Figure 1 shows the location of the two sampling sites in relation to the twin filter beds.

Each sample was analysed for faecal coliforms, enterococci and conductivity. In 2003 MfE developed the *Guidelines for recreational water quality* to assess the safety of water for contact recreation. The guidelines use enterococci as the preferred indicator for the microbiological quality of marine waters. Alert mode occurs when a single sample maximum is greater than 140 enterococci cfu/100ml. Action mode occurs when two consecutive samples are greater than 280 cfu/100ml

 Table 1
 Marine recreational bathing guidelines (2003)

Mode	Acceptable (green)	Alert (amber)	Action (red)
Marine (enterococci/100mls)	<u>≤</u> 140	141-280	>280 (two consecutive samples)

2. Results

2.1 Water

2.1.1 Inspections

Six inspections were performed during the two year period under review in relation to the wastewater treatment system at Wai-inu Beach Settlement.

8 December 2011: There were mild sewage odours present. No weeds were growing on top of the sand filter beds. Three campervans and buses were present onsite. Seawater samples were taken at the two established sites, plus two additional samples taken from ground water running across the beach. Additional samples were taken to investigate any possibility of leaching from the septic treatment system.

12 January 2012: Moderate odours were present and there were a few weeds and some ponding on top of the sand filters. Two tents and 6 campervans/buses were present. Seawater samples were taken: the sea was discoloured due to recent rain. There was an area of the camp ground that had been used as a rubbish dump; this is not permitted. It was recommended that the rubbish be removed.

29 March 2012: No odours were detected. A few weeds were present, but there was no ponding of water on the top of the sand filters. Two campervans were present on the day. Seawater samples were taken. An area of the camp ground continued to be used as a rubbish dump; this is not permitted and an abatement notice was issued. Rubbish required removal by 10 April 2012.

5 December 2012: No odours were detected around the tanks. A few weeds were growing on top of the tanks. There was no ponding of water on top of the tanks. One caravan was present on site with two people on the beach. Seawater samples were taken for faecal indicator bacteria analysis. Rubbish and green waste present during the previous inspection had been removed. Two signs were present instructing strictly no dumping.

9 January 2013: No odours were detected around the sand filters. The weeds had recently been removed from on top of the filters. There was no ponding of water on top of the tanks. Five caravans, 2 campervans, 5 cars and 1 tent were present on site. A local commented that the campsite had been busy over Christmas. Seawater samples were taken for faecal indicator bacteria analysis. Rubbish and green waste present during the 2011-2012 inspections had been removed. The area had remained free from rubbish. Two signs were present instructing strictly no dumping.

8 March 2013: Faint sewage odours were detected around the sand filters. There were a few dead weeds on top of the filters. There was no ponding of water on top of the tanks. Nine campervans and four cars/vans were present on site. Seawater samples were taken on 27 March 2013 (i.e. not during the inspection) for faecal indicator bacteria analysis. The campground remained free from rubbish and the two signs instructing no dumping were present.

2.1.2 Bacteriological monitoring

Seawater samples were collected at two coastal sites during six inspections for the 2011-2012 and 2012-2013 monitoring years. Bacteriological results for 2011-2013, along with a statistical summary of data between 1992 and 2011, are presented in Table 2. Low faecal indicator bacteria counts (<10 cfu/100ml) were obtained for all samples collected on 8 December 2011, 29 March 2012, 5 December 2012, 9 January 2013 and 27 March 2013. Elevated counts were obtained on 12 January 2012, with enterococci reaching Alert level (>140 cfu/100ml) at the eastern end of the beach (Table 2). These high counts occurred in conjunction with heavy rainfall, resulting in lower seawater conductivity (Table 2).

Table 2 Bacteriological monitoring at Wai-inu Beach Settlement 2011-2013, including a summary of data between 1992 to 2011

Site	Western end of beach – SEA907093			Eastern end of beach – SEA907098		
Date	Faecal coliform (cfu/100ml)	Enterococci (cfu /100 ml)	Conductivity (mS/m)	Faecal coliform (cfu/100ml)	Enterococci (cfu/100 ml)	Conductivity (mS/m)
08-Dec-11	<1	<1	4660	<1	<1	4640
12-Jan-12	110	110	4550	150	150	4540
29-Mar-12	<3	<3	4610	<3	<3	4550
05-Dec-12	<1	<1	4500	<1	<1	4680
09-Jan- 12	1	7	4730	<1	<1	4660
27-Mar-13	3	4	4710	1	2	4710
No of samples	58	56	50	58	56	50
Minimum	<1	<1	4020	<1	<1	3990
Maximum	300	310	4880	1000	1400	4920
Median	3	3	4640	3	3	4600

In order to establish if there was leaching from the septic treatment system, additional samples were taken from ground water running across the beach on 8 December 2011. There was minimal faecal contamination of this water, with low faecal indicator bacteria counts (≤1 cfu/100ml) obtained for both samples.

2.2 Investigations, interventions, and incidents

The monitoring programme for the two years 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 Taranaki Regional 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 Unauthorised Incident Register (UIR) 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 2011-2013 period, it was not necessary for the Council to undertake significant additional investigations and interventions, or record incidents, in association with STDC's conditions in the resource consent in relation to the Company's activities during the monitoring period. However, an abatement notice was issued as a result of unauthorised dumping of rubbish, which is unrelated to Consent 3769-3.

On 16 March 2012 a complaint was received concerning green waste and domestic rubbish being dumped at the Wai-inu Beach Camp. An inspection was undertaken on Thursday 22 March 2012 and it was found that there was a large area of green waste and domestic rubbish present at the site (Photograph 1). Abatement Notice No.11814 was issued requiring the materials to be removed from the site and to ensure that measures are undertaken to prevent any further dumping. Reinspection (April 2012) found that the abatement notice was being complied with at the time of inspection. The area stayed free from rubbish during the 2012-2013 inspections and two signs remained in place instructing strictly no dumping (Photograph 2).

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Photo 1 Green waste and domestic rubbish dumped at the Wai-inu Beach Camp 22 March 2012



Photo 2 Signs present during the 2012-2013 inspections (5 December 2012)

3. Discussion

3.1 Discussion of site performance

The six inspections conducted during the 2011-2012 and 2012-2013 summer periods of the Wai-inu beach camp and receiving waters did not indicate any serious problems with the wastewater treatment system. There were no more than slight odours in the vicinity of the filter beds and, except for a few weeds, the system appeared to be well maintained. The contingency plan was last updated in June 2012. The next update is due in August 2013.

3.2 Environmental effects of exercise of consents

Routine bacteriological monitoring showed that faecal indicator bacteria counts were low (<10 cfu/100ml) during all inspections with the exception of 12 January 2012. Elevated counts (110 and 150 cfu/100ml) were obtained on 12 January 2012 in conjunction with heavy rainfall, resulting in discolouration of the sea and lower seawater conductivity (Table 2). Under such circumstances, high faecal indicator bacteria counts are often obtained, linked with agricultural run off and contamination from wildfowl.

Wai-inu Beach is monitored every three years in relation to the Council's State of the Environment Marine Bathing monitoring programme to assess suitability for bathing/contact recreation. The beach was sampled during the 2012-2013 summer (TRC Technical Report 2013-17). All 13 enterococci counts obtained for the 2012-2013 bathing season (Figure 1) were well below MfE (2003) guideline levels (<140 cfu/100ml).

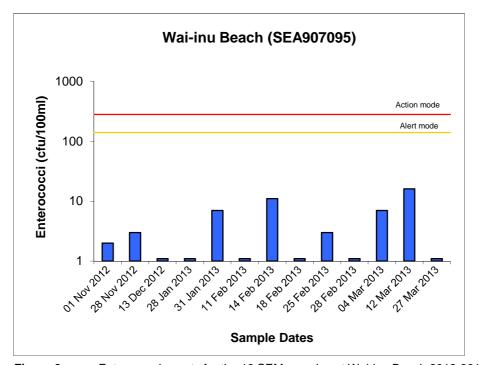


Figure 2 Enterococci counts for the 13 SEM samples at Wai-inu Beach 2012-2013

3.4 Evaluation of performance

A summary of the consent holder's compliance record for the two years under review is set out in Table 3.

Table 3 Summary of performance for Consent 3769 to discharge 84 cubic metres of treated domestic wastewater to groundwater from the Wai-inu Beach Settlement

Co	ndition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent to be carried out in accordance with information supplied	Site inspections of system and receiving waters	Yes
2.	Consent holder to adopt best practicable option to minimise effects on the environment	Bacteriological sampling and site inspections	Yes
3.	Consent holder shall maintain and operate the treatment system	Site inspections	Yes
4.	Consent holder in conjunction with the Council to undertake monitoring of coastal waters	Three bacteriological samples taken at two sites throughout the summer high use period	Yes
5.	Contingency plan to be provided to the satisfaction of Chief Executive	Updated July 2012	Yes
6.	Optional review provision re environmental effects	Next due in 2016 if required	N/A
Ov	erall assessment of consent compliance a	High	

N/A = not applicable

During the two years, the STDC demonstrated a high level of environmental performance and compliance with the resource consent. There were no breaches of consent conditions and bacteriological sampling of the receiving waters showed no adverse effects caused by the treatment system.

The abatement notice (11814) issued as a result of unauthorised dumping of rubbish at the site, is unrelated to Consent 3769-3.

3.5 Recommendations from the 2010-2011 Annual Report

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

THAT monitoring of discharges from Wai-inu Beach Settlement wastewater treatment system in the 2011-2012 year continue at the same level as in 2010-2011.

This recommendation was implemented during the two years under review.

3.6 Alterations to monitoring programmes for 2013-2014

In designing and implementing the monitoring programmes for air/water discharges in the region, the Taranaki Regional Council has taken into account the extent of information made available by previous authorities, its relevance under the Resource Management Act, the obligations of the Act in terms of monitoring emissions/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 emitting to the atmosphere/discharging to the environment.

It is proposed that for 2013-2014, the monitoring programme for the Wai-inu Beach Settlement remains unchanged on the grounds that there were no significant adverse effects on the receiving environment. A recommendation to this effect is attached to this report.

4. Recommendation

1. THAT monitoring of discharges from Wai-inu Beach Settlement wastewater treatment system in the 2013-2014 year continues at the same level as in 2012-2013.

Glossary of common terms and abbreviations

The following abbreviations and terms are used within this report:

'Action' mode two consecutive single samples greater than 280 enterococci/100ml

'Alert' mode single sample greater than 140 enterococci/100ml

Bacteriological micro-organisms selected as indicators of faecal materialindicators
Bathers those who enter the water, and either partially or fully immerse

themselves

Bathing season generally the bathing season extends between 1 November and 31 March

Beach the shore or any access point to the sea

cfu colony forming units. A measure of the concentration of bacteria usually

expressed as per 100 millilitre sample

Condy 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

Enterococci an indicator of the possible presence of faecal material and pathological

micro-organisms. Usually expressed as colony forming units per 100

millilitre 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

millilitre sample

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

Resource consents 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

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

*an abbreviation for a metal or other analyte may be followed by the letters 'As', to denote the amount of metal recoverable in acidic conditions. This is taken as indicating the total amount of metal that might be solubilised under extreme environmental conditions. The abbreviation may alternatively be followed by the letter 'D', denoting the amount of the metal present in dissolved form rather than in particulate or solid form.

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

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Appendix I

Resource consent held by South Taranaki District Council Wai-inu Beach Settlement

TRK923769

DISCHARGE PERMIT



Pursuant to the RESOURCE MANAGEMENT ACT 1991 a permit is hereby granted by the Taranaki Regional Council to

PRIVATE BAG STRATFORD NEW ZEALAND PHONE (0663) 7127 FAX (0663) 5097

Name:

SOUTH TARANAKI DISTRICT COUNCIL

PRIVATE BAG HAWERA

For a period to:

1 June 2004

Renewal:

29 July 1992

Review Dates:

1 June 1998

Local Authority:

SOUTH TARANAKI DISTRICT COUNCIL

Catchment:

WAITOTARA

339.000

DETAILS OF PERMIT

Purpose:

TO DISCHARGE UP TO 84 CUBIC METRES/DAY OF TREATED DOMESTIC WASTEWATER FROM WAIINU BEACH SETTLEMENT VIA SEEPAGE TO GROUNDWATER IN THE WAITOTARA

CATCHMENT AT OR ABOUT GR: R22:595-473

Location of site:

WAIINU BEACH SETTLEMENT WAITOTARA

Legal description

at location:

ROAD RESERVE WAIINU BEACH SETTLEMENT WAITOTARA

For conditions, restrictions and prohibitions pertaining to this permit, please see reverse side of this document.

TRK923769



- (a) The Grantee shall provide on request by the General Manager, Taranaki Regional Council, plans, specifications and maintenance programmes of works associated with the exercise of this permit, showing that the conditions of this permit are able to be met.
- (b) The standards, techniques and frequency of monitoring of this permit shall be to the specific approval of the General Manager, Taranaki Regional Council.
- (c) The actual and reasonable cost of administration, supervision and monitoring of this permit, deemed necessary by the General Manager, Taranaki Regional Council, shall be met by the Grantee.
- (d) This permit may be cancelled in writing to the Grantee by the Taranaki Regional Council if the permit is not exercised within twelve months of the date of granting or such longer time as the General Manager, Taranaki Regional Council, may approve.
- (e) This permit may be terminated by the Taranaki Regional Council upon not less than six months notice in writing to the Grantee if, in the opinion of the Council, the public interest so requires, but without prejudice to the Grantee to apply for a further permit in respect of the same matter.

SPECIAL CONDITIONS

- THAT the Grantee shall properly and effectively maintain and operate the treatment system with particular emphasis on septic tank and filter bed maintenance.
- 2) THAT the Grantee shall, in conjunction with the Taranaki Regional Council, undertake such monitoring of the treatment system and coastal waters as deemed necessary by the General Manager, Taranaki Regional Council, subject to Section 35 (2d) of the Resource Management Act 1991.
- 3) THAT the Grantee shall provide, to the satisfaction of the General Manager, Taranaki Regional Council a written contingency plan outlining septic tank maintenance and measures to be undertaken in the event of a failure of the components of the treatment system. This report is to be in the hands of the General Manager, Taranaki Regional Council, by no later than 31 January 1993.

Signed at Stratford on 29 July 1992

For and on behalf of TARANAKI REGIONAL COUNCIL

GENERAL MANAGER