

Egmont National Park
Septic Tank Discharges
Joint Monitoring Programme
Annual Report
2010-2011
Technical Report 2011– 06

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Taranaki Regional Council
Private Bag 713
STRATFORD

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Executive summary

The Department of Conservation, Mountain House Lodge (Stratford) and Dawson Falls Mountain Lodge operate various sewage disposal systems throughout Egmont National Park. These organisations hold resource consents to allow discharges into land via soakage systems and septic tanks. This report for the period July 2010-June 2011 describes the monitoring programme implemented by the Taranaki Regional Council to assess the consent holder's environmental performance during the period under review, and the results and effects of the consent holder's activities.

The Department of Conservation (DoC) is responsible for a number of septic tank systems within Egmont National Park. Both DoC and private leaseholders operate these septic tank service facilities. There are a total of three resource consents held for the various septic tanks and sewerage systems within the National Park, which include a total of 13 special conditions setting out the requirements that the consent holders must satisfy.

Various discharges covered under the DoC permit were inspected up to two times during the monitoring year. The Stratford Mountain House was inspected twice and water quality samples were collected on one occasion. The Dawson Falls facilities were inspected twice and water quality samples were also collected on one occasion. Ngati Ruanui Holdings are the consent holders (5062-1 Stratford Mountain House). Samples were also collected from the North Egmont facilities on one occasion.

The inspection of septic tanks covered by consent 2296-2 held by DoC, indicated continued compliance with special consent conditions. DoC has ensured that regular maintenance is conducted at all sites and facilities are well run.

The inspections conducted at Dawson Falls during the monitoring period identified no problems with the sewage treatment system, and regular maintenance of the system was evident. There were very low counts found in the Kaupokonui and Kapuni Streams via the soakage of treated wastewater to groundwater in these catchments.

Upgrades have been undertaken at the North Egmont Facilities, including taking all the untreated effluent from the Camphouse, visitors centre, and carpark toilets and treating the wastes through a combined sewage treatment system.

The rain gardens at the North Egmont car park have been filtering vehicle contaminants entrained in the stormwater runoff from polluting the surrounding native vegetation and entering the Waiongana Stream. No hydrocarbon sheen was visible in the rain gardens area during inspections at North Egmont.

During the year the consent holders demonstrated a high level of environmental performance and compliance with the resource consents. No significant environmental effects were noted from the results of the bacteriological surveys.

There were no unauthorised incidents and all sewage treatment systems were operating effectively with evidence of regular maintenance.

This report includes recommendations for the 2011-2012 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 Annual Report for the period July 2010-June 2011 by the Taranaki Regional Council on the monitoring programme associated with resource consents held by Dawson Falls Mountain Lodge [Dawson Falls], the Mountain House Lodge [Stratford Mountain House] and the Department of Conservation [DoC] in relation to sewage discharges and a number of septic tank systems within Egmont National Park.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by these organisations that relate to discharges within Egmont National Park.

One of the intents of the Resource Management Act (1991) is that environmental management should be integrated across all media, so that a consent holder's use of water, air, and land should be considered from a single comprehensive environmental perspective. Accordingly, the Taranaki Regional Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly. This report discusses the environmental effects of Dawson Falls, the Mountain House and DoC's use of water, land, and air, and is the seventeenth combined annual report by the Taranaki Regional Council for the Company.

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 Dawson Falls, the Mountain House and DoC, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted within the Egmont National Park.

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 2011-2012 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 (e.g. 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 Dawson Falls, The Mountain House, and DoC 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 trivial (such as data supplied after a deadline) non-compliance with conditions.
- a **good** level of environmental performance and compliance indicates that adverse environmental effects of activities during the year were negligible or minor at most, items of concern were resolved positively, co-operatively, and quickly, the Council did not record any verified unauthorised incidents involving significant environmental impacts and was not obliged to issue any abatement notices, 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.

- **improvement desirable** indicates that the Council may have been obliged to record against the consent holder a verified unauthorised incident involving significant environmental impacts, and/or abatement notices may have been issued; there were adverse 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.
- **poor** performance is used when there were grounds for prosecution or infringement notice.

1.2 Process description

Dawson Falls

Dawson Falls is located on the ridge between the Kapuni and Kaupokonui stream catchments at an elevation of 900 metres. The two streams are used for the public water supplies of Hawera and Waimate West, respectively.

There are three sewage treatment and disposal systems at Dawson Falls. Separate systems provide for the Mountain Lodge, Konini Lodge, and public toilets. The layout of the area is shown in Figures 1 and 2.

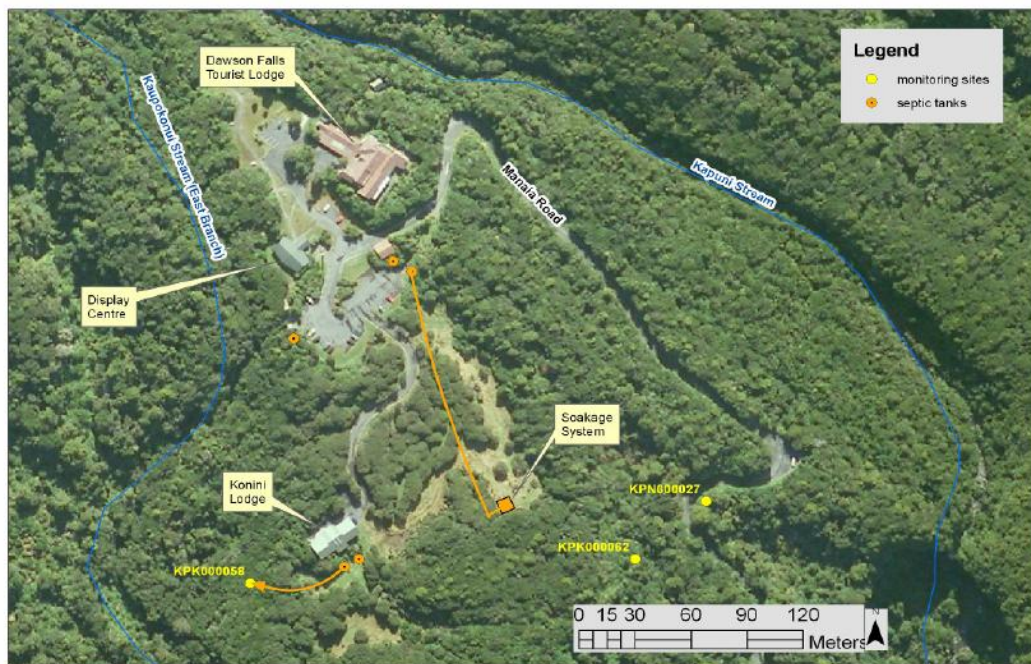


Figure 1 Dawson Falls sewerage treatment systems and location of bacteriological sampling points

Dawson Falls Mountain Lodge

DoC leases the Mountain Lodge to a private operator. The lodge has capacity for about 16 overnight guests and caters for social functions and business conferences.

In the past there have been problems with disposal of septic tank effluent, in relation to the ability for it to soak away into the ground. These problems were caused by poor grease control in the kitchen and the presence of a hardpan under the soakage area. Overflow from the 50 metre long soakage trench and adjacent soak hole had

been found on several occasions. In 1998, the system was upgraded through construction of a grease trap at the lodge, the installation of an effluent filter below the septic tanks, and replacement of the soakage trench and hole with an infiltration gallery similar to the one at Konini Lodge. The infiltration system comprises of a 15-metre long by 3-metre wide pit, with an automatic flushing system. Two 100mm diameter pipes slotted with small holes at 500mm intervals sit on 1.5 metres of gravel in the pit.

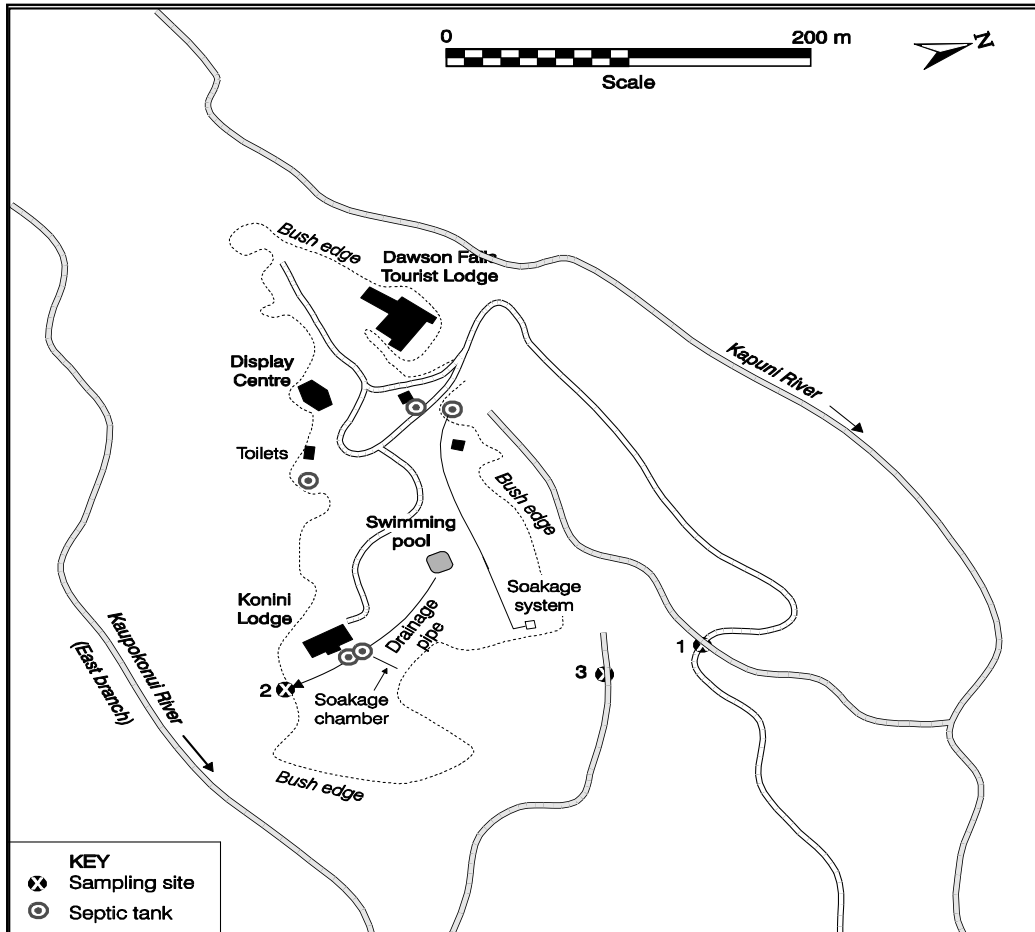


Figure 2 Dawson Falls schematic overview showing sewerage treatment systems and sampling points

Soakage from the disposal area drains underground, probably to the Kaupokonui catchment. The two septic tanks are in the Kapuni catchment. A water quality monitoring site is located in each catchment (Figure 2, sites 1 and 3) in a position which enables detection of contamination from the sewerage system.

Konini Lodge

Konini Lodge is operated by DoC for trampers and school groups, etc. There is accommodation and facilities providing for up to 38 persons, including two kitchens, four showers and four toilets.

The sewerage treatment system comprises two septic tanks, one for the kitchens and one for the toilet area. The wastes are disposed of to a soak hole. A disposal system for the toilet wastes was completed in 1996. The system comprises a large chamber in the ground from which the treated wastes soak away.

The chamber is a wooden box, about 13.5 metres long by 2 metres wide and 3 metres deep, situated across the ground contour. On the bottom, a 0.5 metre deep sand bed overlies 0.2 metres of gravel.

The top and sides are sealed on the outside with polythene so that soakage occurs only through the bottom. Soakage tests carried out before the chamber was constructed demonstrated a high soakage capacity.

The soakage chamber is situated near an underground pipe that drains a swampy area beside the lodge to a tributary of the Kaupokonui River (and once received overflow from the septic tank). Given that the chamber lies below the surface level of a watercourse, potential does exist for rapid subsurface flow to the Kaupokonui tributary via the pipe. For this reason, the discharging drainage water from the pipe is sampled and analysed for faecal coliform bacteria.

Stratford Mountain House Lodge (Ngati Ruanui Holdings)

The Mountain House and adjacent public shelter are situated on the boundary between the Patea River and Te Popo Stream catchments at an altitude of 850 metres. The two streams are used for the public water supplies of Stratford and Midhirst, respectively. The area layout is shown in Figure 3.

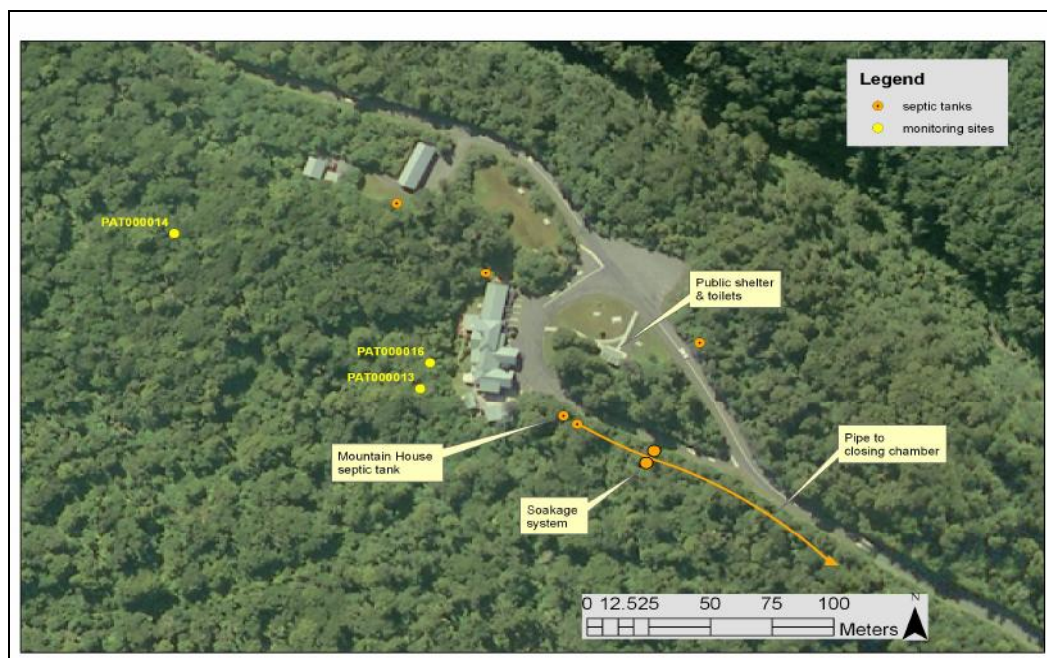


Figure 3 Stratford Mountain House sewerage treatment systems and location of upper bacteriological monitoring sites

DoC leases the Stratford Mountain House to a private operator (Ngati Ruanui Holdings). It has the capacity for 22 overnight guests and caters for social functions and business conferences. Three separate septic tank systems service the Stratford Mountain House, all of which are in the Patea catchment. Two of the systems provide solely for the accommodation blocks. The other (main) system provides for the dining, entertainment/conference area and kitchen.

The main septic tank system at the Stratford Mountain House was upgraded in 1997. The old system comprised two large septic tanks followed by two soak holes, all joined in series, and a grease trap in the kitchen. A washable mesh filter was fitted inside the second septic tank for removing the solids. A large twin sand filter, 30m² in area, was constructed on flatter ground about 500 metres down-slope, with a dosing chamber above it to enable intermittent flood loading for uniform distribution (rather than trickle feed). The dosing chamber was connected to the outlet of the second (old) soakhole with 50mm PVC pipe laid on the ground. Two perforated 100mm diameter plastic pipes, both about 40 metres in length, were connected to the sand filter and laid down slope on the ground for disposal of the effluent.

Water conservation measures to reduce effluent volume were also implemented, including the fitting of dual flush toilets and use of washing machines only when full.

The public day shelter at the Mountain House has also been upgraded on the existing site with a twin unit toilet block and shelter facility. The old septic tank and soakage system has been replaced with a sealed vault waste tank unit. Water conservation measures to reduce effluent volume have also been implemented. These facilities are managed by DoC. Wastes are routinely removed and dumped offsite at an approved location.

The old septic tank and soakage system at the Manganui Ski Lodge has recently been upgraded with a new septic tank system including water conservation measures to reduce effluent volumes. The Stratford Mountain Ski Club is responsible for maintaining these facilities.

The Council routinely samples surface waters in the vicinity of the Stratford Mountain House for bacteriological analysis. The three sample sites are shown in Figure 3. Difficult access to the Patea River tributary below the disposal area has forced the relocation of the sampling site to Barclay Road, a Council 'state of the environment' monitoring site on the Patea River, some 5.5 km downstream.

1.3 Resource consents

1.3.1 Discharges of wastes to land

Sections 15(1)(b) and (d) of the Resource Management Act stipulate that no person may discharge any contaminant onto land if it may then enter water, or from any industrial or trade premises onto land under any circumstances, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations.

DoC:

DoC is responsible for a number of septic tank systems within Egmont National Park. Both DoC and private leaseholders operate these septic tank service facilities.

Septic tanks and/or enclosed systems are located at:

- Hen and Chickens/Tahurangi site (Broadcasting Corporation Limited Installation)

- Translator Road public toilets (containment tanks)
- Jacksons Lookout (Civil Aviation Installation Airways Corporation)
- Department of Conservation house (Pembroke Road)
- Department of Conservation workshop (Barclay Road)
- Konini Lodge
- Lucy's Gully picnic area
- Manganui Ski Lodge (Stratford Mountain Club)
- Manganui public shelter
- Mangaoraka picnic area
- Mountain House day shelter – (enclosed sealed unit)
- Rahiri Cottage
- Stratford Area Office – (Barclay Road)
- Stratford Plateau toilets
- Tahurangi Lodge (Taranaki Alpine Club)
- Telecom Installation (Carrington Road)
- Warwick Brown ski shelter (Stratford Mountain Club)
- Symes Hut
- North Egmont visitors centre
- North Egmont public toilets (2)
- North Egmont Camphouse

The North Egmont facilities underwent significant upgrades during 2009. A combined bio-cycle system has been put in place which discharges to a soakage field above the visitors centre. A sample can be collected from the system after the UV light treatment. Sampling of this discharge has been included in the bacteriological monitoring programme of National Park sewage systems to ensure the discharge is of high quality.

In addition to the above systems, DoC maintains a number of sealed containment units and soakage pits servicing tramping huts throughout the Egmont National Park.

Private Lease Holders:

- Dawson Falls Mountain Lodge
- Stratford Mountain House / As of June 2010 Ngati Ruanui Holdings

In 1987 water right **2296** was granted to DoC for the period until 1 June 1996 with the following purpose:

“To discharge up to 4000 litres/day of domestic effluent from various recreational and minor commercial facilities within the Egmont National Park by soakage to groundwater via septic tanks or soak holes”.

Given the minor nature of these discharges it was considered appropriate to grant one water right covering all the domestic effluent discharges within the Egmont National Park rather than granting individual water rights for each location. Four conditions were attached to the DoC consent providing for a schedule of authorised discharges, review of the schedule, maximum discharge rate and approval of septic tank systems.

An application for a new consent was received on 2 December 1996. The commercial facilities were not included in the application as DoC requires commercial operators within the National Park to hold their own resource consents (in accordance with section 12.7.6 (iv) of the Conservation Management Strategy Draft 1997). The facilities affected are Dawson Falls Mountain Lodge, Stratford Mountain House and chalets, and Manganui Lodge.

Consent applications were received for the Dawson Falls Tourist Lodge and for the Stratford Mountain House and chalets. DoC advised the Council on 10 July 1997 that it would retain responsibility for the discharge from Manganui Lodge, with the intention of transferring (part of) the consent to Stratford Mountain Club sometime in the future.

All three consent applications were processed simultaneously, although some delay occurred to allow the design and installation of new wastewater treatment and disposal systems for both the Mountain House and Dawson Falls to be undertaken. A further delay occurred while the relative responsibilities of DoC and the old and new lessees at Dawson Falls were established. In the interim DoC retained responsibility for all of the discharges provided for by water right 2296.

Three new resource consents with similar conditions were issued by the Taranaki Regional Council under Section 87(e) of the Resource Management Act on 30 June 1999 for a period until 1 June 2016 as described in Table 1. Full copies of all three consents are contained in Appendix I.

Special conditions attached to all three consents include:

- The design, operation and maintenance of the septic tanks and soakage system shall be to the approval of the Chief Executive, Taranaki Regional Council.
- The discharge shall not be shown to adversely affect the microbiological quality of surface water in the relevant water bodies.
- The septic tank and soakage system shall not cause offensive or objectionable odour in the opinion of an enforcement officer of the Taranaki Regional Council.
- The Taranaki Regional Council may review any or all of the conditions of the consents by giving notice of review during the month of June 2010 (2296-2 and 5062-1), and June 2011 (5056-1) for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of the consents, which were either not foreseen at the time the applications were considered, or which it was not appropriate to deal with at the time.

Stratford Mountain House (Ngati Ruanui holdings)(5062) has an extra condition stating that:

- the consent holder or the consent holder's agent shall erect suitable signage adjoining the irrigation area to indicate a possible risk to human health.

Table 1 Consents to discharge domestic effluent or sewage within Egmont National Park

Consent holder	Consent No	Purpose
Department of Conservation	2296-2	To discharge up to 2 cubic metres/day of domestic effluent from various regional facilities within the Egmont National Park by soakage to groundwater via septic tanks or soakage.
Dawson Falls Mountain Lodge Ltd	5056-1	To discharge up to 4 cubic metres/day of domestic sewage by septic tanks and soakage to groundwater in the vicinity of the Kaupokonui River
Ngati Ruanui Holdings Operating Company Ltd (Mountain House Lodge)	5062-1	To discharge up to 4 cubic metres/day of domestic sewage from septic tanks by irrigation onto land in the vicinity of the Patea River

DoC also holds consent **0441-1** to discharge up to 300 litres/second of stormwater from the North Egmont Visitors Centre car park into the unnamed headwaters of the Waiongana Stream. The consent expires on 1 June 2014 and the last optional review date was June 2008.

1.4 Monitoring programme

1.4.1 Introduction

Section 35 of the Resource Management Act sets out obligation/s upon 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 and report upon these.

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 Dawson Falls, the Mountain House and DoC 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

All sites were visited at least once during the monitoring period. 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.

1.4.4 Bacteriological sampling

The Taranaki Regional Council undertook sampling of the water quality upstream and downstream of the discharge points from Dawson Falls and the Stratford Mountain House.

The Kapuni Stream and Kaupokonui Stream were sampled on one occasion in relation to the discharges for Dawson Falls (1 Site) and Konini Lodge (2 sites), and the Patea River was sampled on one occasion in relation to discharges from the Stratford Mountain House (4 sites). The samples were analysed for faecal coliform bacteria. An extra sample was collected from the Mountain House, at a tap in the restaurant to test the water following the installation of a new water treatment system.

Two samples were also collected from the North Egmont combined treatment system. One sample was collected prior to UV light treatment and one was taken after treatment.

2. Results

2.1 Water

2.1.1 Inspections

14 July 2010

Ski field: The septic tank system at the ski field looked to be working, all breather caps were in place and no odour detected in the surrounding area. There appeared to be no effluent escaping the system. There were 60-70 people using the field as there was snow cover and it was the school holidays. Everything looked to be working well at the time of inspection. **Plateau:** The toilet facilities looked to have been well used with a lot of people around at the time of inspection. Everything looked to be in place and working well with no odour detected around the toilet block and surrounding area. **Transmitter station:** Looks to have had very little use and there were no problems with odour or anything escaping the system.

Airways transmitter: Facilities looked to have had little use and everything looked to have been working well with no odours detected at various sites around the facilities. **Mountain House public toilets:** Working well with no odours detected and no evidence of anything having escaped the system. **Dawson Falls toilet facilities:** Working well with no evidence of anything having escaped the system and the breather caps were all in place. No odours were detected in the area around the facilities. **Dawson Falls lodge:** The system appeared to be working well with nothing appeared to have escaped the system and no odours detected. **Konini lodge:** The facilities were all intact and there appeared to be nothing escaping the system and no odours detected in the vicinity. All facilities appeared to be well used as there were large numbers of people around due to school holidays and slight snow cover. Everything looked to be working to approved standards and local government regulations.

19 July 2010

Rahiri cottage: No odour was evident anywhere around the site. One breather cap is not sitting on the tank properly but other than that the site looked good.

Mangaoraka carpark: The breather caps were in place and the toilet facilities were all intact with no odour detected anywhere around the site. **Chalet/North Egmont:** The rain gardens looked to be working well with no evidence of any hydrocarbon sheen in any of the gardens. The sump/main collection area appeared to be working well with no odour detected at or around the site. The soakage area where the treated effluent is pumped to looked good with no odour detected. There had been approximately 2400 visitors over the school holiday period at the chalet.

Camphouse: The system looked to be working well now that it is connected to the main effluent system with no odour detected around the camphouse site. **Lucy's**

Gully: The facilities looked to be working well with no odours detected around the site and the breather caps were in place. Everything looked to be working to approved standards and local government regulations.

19 January 2011

Ski field and Lodge: All facilities were intact and tidy with no odours detected at the site. A tap was found to be running continuously in the women's toilet block which was turned off. The toilet facilities were in tidy condition. **Plateau public toilets:** All of the facilities were intact and appeared to be functioning properly with no odour

detected. **Airway transmitter:** The facilities were intact and there were no odours detected at the site. **Transmitter station:** The facilities were intact and there were no odours detected at the site. **Mountain House public toilets:** The system looked to be well maintained and in very good order with no odours detected. **Main Sandtrap:** Everything looked to be in good order and there were no odours detected at the site. **Konini Lodge:** The system looked to be in good working order and there were no odours detected at the site.

20 January 2011

Rahiri Lodge: All breather caps in place and no odours detected at the site. The system looked to be working well. **Mangaoraka public toilets:** The system looked to be working well and the facilities were in good order. No odours were detected at the site. **Chalet and Camphouse:** The system looked to be working well with approximately 3m³ pumped daily. No odours were detected at the time of inspection. The camphouse facilities looked to be working well with no odours detected around the camphouse and everything directed to the system. **Tahurangi:** The public facilities were emptied approximately one month ago. The system looked to be working well. There was a slight odour inside the toilet block but nothing externally. **Tahurangi Lodge:** The system was emptied at the same time as the public facilities. There were no odours detected around the lodge. Everything appeared to be working to be working to approved standards and local government regulations.

21 January 2011

Dawson Falls area: The grease trap has been cleaned out regularly with no sign of anything escaping and no odours were detected. The inspection of the sewage system found no odours around the site and everything appeared to be in good working order.

24 May 2011

Mountain House facilities: Conducted an annual Compliance Monitoring Inspection of the Stratford Mountain House septic waste system and associated facilities. Kitchen fat has been regularly removed from the fat trap and no odour was found to be emanating from around the sump area. Water quality samples were collected from four sites in relation to the wastewater treatment system discharge.

Overhanging branches have been cut back around the sand filter allowing for more light penetration and air movement. Only very slight odours were detected in this area. The WWTP sand filter requires occasional raking to prevent ponding on top of the sand filter surface.

Dawson Falls: Inspected Dawson Falls facilities, Konini lodge and other facilities. Water quality samples were collected from the soakage discharge but staff were unable to collect receiving water samples due to nil water flow.

27 May 2011 - continuation of sample run & monitoring inspection.

Sampled the Konini Lodge wastewater discharge flow including the two receiving water monitoring sites. A large school group had occupied Konini Lodge the previous day. The estimated treated wastewater discharge flow rate = 0.25 L/sec, temp = 9.7°C @ 1005 hrs.

North Egmont facilities: Water samples were collected from the WWTP - before and after the UV sterilization lamp. Electrical maintenance had been carried out on the discharge pump. The UV light had recently been replaced on the 20 May 2011. The soakage field showed no signs of ponding after recent heavy rain. No odours were found to be emanating from around the WWTP facility & soakage trench areas. All water quality samples collected were analysed for faecal coliform bacteria.

The rain gardens were also inspected - no ponding was evident after recent rain.

All systems inspected were found to be satisfactory.

2.1.2 Results of discharge monitoring

2.1.2.1 Dawson Falls

The location of the water quality sampling sites is provided in Table 2 and shown in Figure 1. The results of bacteriological analysis of samples taken during site inspections in May 2011 are given in Table 3. The results of samples taken during previous monitoring periods have been included for comparison.

Table 2 Location of water quality sampling sites in the vicinity of Dawson Falls

Site	Site Code	Grid Reference	River/Stream	Location
1	KPN000027	P20: 054-084	Unnamed tributary of Kapuni Stream	Upper Manaia Rd, Dawson Falls
2	KPK000058	P20: 052-083	Unnamed tributary of Kaipokonui River	Below Konini Lodge
3	KPK000062	P20: 052-083	Unnamed tributary of Kaipokonui River	At Kapuni walk bridge

Table 3 Results of faecal coliform bacteriological samples (no. per 100mls) taken in the vicinity of Dawson Falls since 2006

Site No	1	2	3
Date	KPN000027	KPK000058	KPK000062
19-May-06	1	<2	3
07-Jun-07	11	500	17
12-Oct-07	2	60	21
23-Jun-08	8	5	13
2-Jun-09	<1	<1	2
31-May-2010	<1	7	2
27-May-2011	2	<1	<7

The bacterial counts were well within the range previously found at the monitoring sites at Dawson Falls. There was minimal contamination of flowing surface waters in the vicinity of the waste disposal systems at the time of the survey.

2.1.2.2 Stratford Mountain House

The locations of the water quality sampling sites in relation to the Stratford Mountain House sewerage system are listed in Table 4 and shown in Figure 2.

Table 4 Location of water quality sampling sites in the vicinity of Stratford Mountain House

Site	Site Code	Grid Reference	River/Stream	Location
1	PAT000013	P20: 068-104	Unnamed tributary of Patea River	U/s of Mountain House tributary
2	PAT000014	P20: 067-104	Unnamed tributary of Patea River	At 'Kamahi Walk' bridge
3	PAT000016	P20: 068-104	Unnamed tributary of Patea River	At rear of Mountain House
4	PAT000200	Q20: 127-083	Patea River	At Barclay Road bridge

The results of bacteriological analysis of samples taken from the receiving waters in the vicinity of the Stratford Mountain House during the site inspection in May 2011 are summarised in Table 5. The results of samples taken in the previous monitoring periods have been included for comparison.

Table 5 Results of faecal coliform bacteriological samples (no. per 100mls) taken in the vicinity of Stratford Mountain House since early 2006

Site No.	1	2	3	4
Date	PAT000013	PAT000014	PAT000016	PAT 000200
01-Feb-06	-	-	-	23
08-Feb-06	-	-	-	2000
15-Feb-06	-	-	-	40
19-May-06	1	6	<1	6
14-Feb-07	-	-	-	1400
14-Mar-07	-	-	-	2200
16-May-07	3	<1	4	11
10-Oct-07	-	-	-	46
14-May-08	-	-	-	7
23-Jun-08	23	46	7	78
2-Jun-09	<1	<1	5	4
14-Oct-09*	-	-	-	5
14-Apr-2010*	-	-	-	12
31-May-2010	<1	2	2	1
9-Feb-2011	-	-	-	230
13-May-2011	-	-	-	140
24-May-2011	1	<1	1	15

*SEM sampling run results

Bacterial counts recorded at the four main sites as part of the compliance monitoring programme on 27 May 2011 were low, at a similar level to previous results. The results show very little contamination, of the Patea River tributaries receiving waters, in the vicinity of the Stratford Mountain House, at the time of inspection. The waste treatment systems appeared to be working effectively at the time of inspection.

An extra sample was collected from inside the mountain house to check bacterial counts in the drinking water. A new potable water system has been installed including a UV light.

2.1.2.3 Faecal bacteria levels in the Patea River at Barclay Road

The Taranaki Regional Council monitors the water quality of the Patea River at Barclay Road on a monthly basis as part of a physicochemical State of the Environment Monitoring Programme (SEM). The Patea River at Barclay Road is one of eleven sites which have been monitored routinely since July 1995. The samples from this monitoring site are analysed for a range of parameters, including faecal coliform and enterococci bacteria. A selection of SEM results for bacteriological analyses are illustrated in table 5 show low bacterial counts (site PAT000200). The steady river flow conditions and a period of fine weather, combined with the waste treatment systems working effectively have all contributed to low bacterial counts for the May 2010 sampling period.

2.2 Register of incidents

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.

Incidents may be alleged to be associated with a particular site. If there is 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 2010-2011 year, there were no incidents recorded by the Council that were associated with the sewage discharges and septic waste systems for Dawson Falls, The Mountain House, or DoC.

3. Discussion

3.1 Discussion of site performance

The 2010-2011 monitoring period is the seventeenth in which a site specific monitoring programme was undertaken by the Council. The consents allow a discharge of domestic effluent from a number of recreational and minor commercial facilities within Egmont National Park. The most significant discharges in terms of usage occur at the North Egmont Visitors Centre, Konini Lodge, Stratford Mountain House and Dawson Falls Mountain Lodge. The latter two are now covered under separate consents (5062 and 5056 respectively).

Dawson Falls Mountain Lodge has shown a high level of compliance with consent 5056. Regular monitoring and maintenance of the sewerage system has ensured good compliance with the consent during the monitoring year under review. No odours have been noted and the disposal system appears to be in good order. Regular cleaning and maintenance of the grease trap has also contributed to the septic system operating effectively.

Konini Lodge treatment system was operating efficiently with no sign of any odour or any recent overflows. Water quality samples collected from below the Konini Lodge indicated that there was minimal faecal contamination of flowing surface waters in the vicinity of the waste disposal systems at the time of the surveys.

The toilet facilities at Manganui Ski field, Stratford public shelter, and the NORSKI containment toilet facilities were all well maintained.

The remaining septic and soakage systems that are not presently self contained systems are still covered under consent 2296-1, were well maintained and did not cause any problems or concerns during the 2010-2011 monitoring period.

A high level of compliance regarding consent 5062-1 was achieved at Stratford Mountain House. Inspections found the treatment facility to be working well with no odour issues being reported. Regular maintenance of the bio filter and regular cleaning of the kitchen grease trap are both factors contributing to an effective sewage treatment system. The Mountain House lodge facilities have had little use in the last six months as it has been closed.

Upgrades at the North Egmont facilities include taking all the combined untreated effluent wastes from the Camphouse, visitors centre and carpark toilets, and treating all wastes through a combined sewage treatment system. Sampling of this combined system may be added to the monitoring programme in future to ensure the discharge is of good quality.

Consent 0441-2 allows up to 300 litres/second of stormwater from the North Egmont Visitors Centre carpark into the unnamed headwater of the Waiongana Stream. The construction of rain gardens is designed to remove vehicle contaminants from polluting the surrounding native vegetation and entering the Waiongana Stream. The Council monitors the surface water runoff from all car park areas during rainfall events and to date, no problems have occurred. Special conditions set out in the consent allow for monitoring of contaminants including oil and grease which would be the main environmental concern.

The Council recently inspected the sewage treatment system and rain gardens.

3.2 Environmental effects of exercise of consents

The potential adverse environmental effects that could occur with discharge from any septic tank system are:

- leachate entering a water body resulting in localised nitrification, and microbiological contamination
- nutrient enriched leachate possibly increasing the nutrient concentration of soil in the immediate area and modifying the plant community
- offensive odour being released from the microbial degradation of waste substances

Annual inspections are made of sewerage disposal facilities at Lucy's Gully, North Egmont waste water treatment facility and the Stratford Plateau. There were no problems or areas of concern identified in association with the effects of any of these systems.

Inspections of toilet facilities at the Broadcasting Corporation Limited installation and the Manganui ski field, including the Warwick Brown ski shelter, Manganui Lodge and Manganui public shelter, and Tahurangi Lodge were also undertaken. As in the past, no problems were identified at any of these locations.

Bacteriological sampling in the Kaupokonui and Kapuni Streams indicated no contamination of the headwaters of either stream. Since the system was upgraded there have been no significant effects on the receiving waters in these catchments.

The Patea River catchment receives treated sewage discharges from the Stratford Mountain House; the river contained low bacteria levels during the 2010-2011 monitoring period. The effects of this system on the receiving environment have been minimal since it was upgraded. Annual cleaning of the septic tanks and grease trap, and ongoing maintenance of the sand-trap area has ensured that low bacteriological contamination has occurred in recent monitoring periods.

The locality and design of disposal systems at both Dawson Falls and the Mountain House have ensured that there have been no adverse effects on the community, landscape and amenity values, and sensitive alpine ecosystems.

3.3 Evaluation of performance

A tabular summary of the consent holders' compliance record for the year under review is set out in Tables 6-8.

Table 6 Summary of performance for Consent 5062-1 Discharge of domestic sewage from septic tanks by irrigation onto land

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Design, operation and maintenance of septic tanks and soakage system to be approved by Council	Inspections and sampling	Yes
2. Discharge not to affect the microbiological quality of surface water in the Patea River	Sampling	Yes
3. Erect suitable signage adjoining the irrigation area to indicate risk to human health	Inspections	Yes
4. Septic tank and soakage not to cause offensive or objectionable odour	Inspections of site	Yes
5. Review provision	Optional review date - June 2010	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High

Table 7 Summary of performance for Consent 2296-2 Discharge of effluent within the Egmont National Park

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Design, operation and maintenance of systems to be approved by Council	Inspections of site and sampling	Yes
2. Discharge not to effect microbiological quality of surface water	Sampling	Yes
3. Septic tank and pit not to cause offensive or objectionable odour	Inspections of site	Yes
4. Review provision	Optional review date - June 2010	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High

Table 8 Summary of performance for Consent 5056-1 Discharge of domestic sewage by septic tanks and soakage to groundwater within the Egmont National Park

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Design, operation and maintenance of systems to be approved by Council	Inspections of site and sampling	Yes
2. Discharge not to effect microbiological quality of surface water in Kaupokonui River	Sampling	Yes
3. Septic tank and soakage not to cause offensive or objectionable odour	Inspections of site	Yes
4. Review provision	Next consideration for optional review June 2011	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High

During the year, the consent holders demonstrated a high level of environmental performance and compliance with the resource consents. There were no unauthorised incidents and regular monitoring and maintenance has ensured that sewerage systems at all sites have been operating reasonably well. No adverse effects on the receiving waters were noted in the monitoring year under review.

This monitoring programme is a residual programme and due to the consistent high level of performance from all three consent holders in recent years, has been reduced to a baseline level. Continued inspections are required to ensure that this level of compliance is maintained.

3.4 Recommendations from the 2009-2010 Annual Report

In the 2009-2010 Annual Report, it was recommended:

1. THAT monitoring of consented activities in the Egmont National Park in the 2010-2011 year continues at the same level as in 2009-2010.
2. THAT for 2010-2011, compliance monitoring by way of sampling the treated effluent (following UV light treatment) at the North Egmont visitors centre be added to the sampling run, and that investigation into the need for receiving water sampling below the soakage area be undertaken.
3. THAT the option for a review of resource consents in June 2010, as set out in condition 4 of consent 2296-1 and condition 5 of consent 5062-1, not be exercised, on the grounds that the current conditions have been adhered to and no environmental effects have been observed.

These recommendations were implemented during the year under review.

3.5 Alterations to monitoring programmes for 2011-2012

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 2011-2012, compliance monitoring at the Stratford Mountain House and Dawson Falls and Konini Lodge be carried out at the same level as 2010-2011.

It is proposed that for 2011-2012 that investigation into the need for receiving water sampling below the soakage area be undertaken.

Recommendations to this effect are attached to this report.

3.6 Exercise of optional review of consent

No consents discussed in this report are due for review in June 2012.

4. Recommendations

1. THAT monitoring of consented activities in the Egmont National Park in the 2011-2012 year continues at the same level as in 2009-2010.
2. THAT for 2011-2012, compliance monitoring by way of sampling the treated effluent (following UV light treatment) at the North Egmont visitors centre be added to the sampling run, and that investigation into the need for receiving water sampling below the soakage area be undertaken.

Glossary of common terms and abbreviations

The following abbreviations and terms may have been used within this report:

Al*	aluminium
As*	arsenic
Biomonitoring	assessing the health of the environment using aquatic organisms
BOD	biochemical oxygen demand. A measure of the presence of degradable organic matter, taking into account the biological conversion of ammonia to nitrate
BODF	biochemical oxygen demand of a filtered sample
bund	a wall around a tank to contain its contents in the case of a leak
CBOD	carbonaceous biochemical oxygen demand. A measure of the presence of degradable organic matter, excluding the biological conversion of ammonia to nitrate
cfu	colony forming units. A measure of the concentration of bacteria usually expressed as per 100 millilitre sample
COD	chemical oxygen demand. A measure of the oxygen required to oxidise all matter in a sample by chemical reaction
Condy	conductivity, an indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m
Cu*	copper
Cumec	A volumetric measure of flow- 1 cubic metre per second (1 m ³ s ⁻¹)
DO	dissolved oxygen
DRP	dissolved reactive phosphorus
<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 millilitre sample
Ent	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
F	fluoride
FC	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
fresh	elevated flow in a stream, such as after heavy rainfall
g/m ³	grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures
l/s	litres per second
MCI	macroinvertebrate community index; a numerical indication of the state of biological life in a stream that takes into account the sensitivity of the taxa present to organic pollution in stony habitats
mS/m	millisiemens per metre
mixing zone	the zone below a discharge point where the discharge is not fully mixed with the receiving environment. For a stream, conventionally taken as a length equivalent to 7 times the width of the stream at the discharge point
NH ₄	ammonium, normally expressed in terms of the mass of nitrogen (N)
NH ₃	unionised ammonia, normally expressed in terms of the mass of nitrogen (N)

NO ₃	nitrate, normally expressed in terms of the mass of nitrogen (N)
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water
O&G	oil and grease, defined as anything that will dissolve into a particular organic solvent (e.g. hexane). May include both animal material (fats) and mineral matter (hydrocarbons)
Pb*	lead
pH	a numerical system for measuring acidity in solutions, with 7 as neutral. Numbers lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For example, a pH of 4 is ten times more acidic than a pH of 5
Physicochemical	measurement of both physical properties (e.g. temperature, clarity, density) and chemical determinants (e.g. metals and nutrients) to characterise the state of an environment
PM ₁₀	relatively fine airborne particles (less than 10 micrometre diameter)
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 including all subsequent amendments
SS	suspended solids
SQMCI	semi quantitative macroinvertebrate community index;
Temp	temperature, measured in °C (degrees Celsius)
Turb	turbidity, expressed in NTU
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
Zn*	zinc

*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.

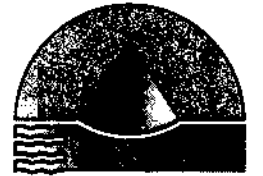
Bibliography and references

- Taranaki Regional Council, 2009: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2009-2010. Technical Report 2010-52.
- Taranaki Regional Council, 2009: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2008-2009. Technical Report 2009-64.
- Taranaki Regional Council, 2008: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2007-2008. Technical Report 2008-18.
- Taranaki Regional Council, 2007: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2006-2007. Technical Report 2007-54.
- Taranaki Regional Council, 2006: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2005-2006. Technical Report 2006-23.
- Taranaki Regional Council, 2005: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2004-2005. Technical Report 2005-25.
- Taranaki Regional Council, 2004: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2003-2004. Technical Report 2004-15.
- Taranaki Regional Council, 2003: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2002-2003. Technical Report 2003-27.
- Taranaki Regional Council, 2002: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2001-2002. Technical Report 2002-15.
- Taranaki Regional Council, 2001: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 2000-2001. Technical Report 2001-10.
- Taranaki Regional Council, 2000: Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report 1999-2000. Technical Report 2000-48.
- Taranaki Regional Council, 1999: Department of Conservation Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report. Technical Report 99-20.
- Taranaki Regional Council, 1998: Department of Conservation Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report. Technical Report 98-26.
- Taranaki Regional Council, 1997: Department of Conservation Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report. Technical Report 97-25.
- Taranaki Regional Council, 1996: Department of Conservation Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report. Technical Report 96-28.
- Taranaki Regional Council, 1995: Department of Conservation Egmont National Park Septic Tank Discharges Monitoring Programme Annual Report. Technical Report 95-76

Appendix I

**Resource consents held by
Ngati Ruanui Holdings,
Dawson Falls Lodge and DoC**

TRK992296



**TARANAKI
REGIONAL
COUNCIL**

PRIVATE BAG 713
47 CLOTON ROAD
STRATFORD
NEW ZEALAND
PHONE 0-6-765 7127
FAX 0-6-765 5097

DISCHARGE PERMIT

**Pursuant to the RESOURCE MANAGEMENT ACT 1991
a resource consent is hereby granted by the
Taranaki Regional Council**

Name of
Consent Holder: **DEPARTMENT OF CONSERVATION
PRIVATE BAG 3016 WANGANUI**

Renewal
Granted Date: **30 June 1999**

CONDITIONS OF CONSENT

Consent Granted: **TO DISCHARGE UP TO 2 CUBIC METRES/DAY OF DOMESTIC
EFFLUENT FROM VARIOUS RECREATIONAL FACILITIES
WITHIN THE EGMONT NATIONAL PARK BY SOAKAGE TO
GROUNDWATER VIA SEPTIC TANKS OR SOAK HOLES AT
VARIOUS LOCATIONS**

Expiry Date: **1 June 2016**

Review Date[s]: **June 2004 and June 2010**

Site Location: **VARIOUS [SEE BELOW]**

Legal Description: **VARIOUS [SEE BELOW]**

Catchment: **VARIOUS [SEE BELOW]**

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

SITE LOCATION	LEGAL DESCRIPTION	CATCHMENT	GRID REFERENCE
BROADCASTING CORPORATION LIMITED INSTALLATION (HEN & CHICKENS/TAHURANGI SITE)	PT BLK XIV EGMONT SD	MAKETAWA	P20:036-124
CIVIL AVIATION INSTALLATION (AIRWAYS CORPORATION, JACKSONS LOOKOUT)	PT BLK XIV EGMONT SD	WAINGONGORO	P20:051-099
DAWSON FALLS PUBLIC TOILETS	PT BLK II KAUPOKONUI SD	KAUPOKONUI	P20:053-083
DEPARTMENT OF CONSERVATION HOUSE (PEMBROKE ROAD)	PT BLK IV KAUPOKONUI SD	PATEA	Q20:126-086
DEPARTMENT OF CONSERVATION WORKSHOP (BARCLAY ROAD)	PT BLK IV KAUPOKONUI SD	PATEA	Q20:126-086
KONINI LODGE	PT BLK II KAUPOKONUI SD	KAUPOKONUI	P20:052-084
LUCY'S GULLY PICNIC AREA	SUB 4 OAKAURA DISTRICT	WAIMOUKU	P19:915-282
MANGANUI LODGE (STRATFORD MOUNTAIN CLUB)	PT BLK XIV EGMONT SD	MANGANUI	P20:042-106
MANGANUI PUBLIC SHELTER	PT BLK XIV EGMONT SD	MANGANUI	P20:042-106
MANGAORAKA PICNIC AREA	PT BLK X EGMONT SD	WAIONGANA	P20:061-178
MOUNTAIN HOUSE DAY SHELTER	PT BLK XV EGMONT SD	TE POPO	P20:068-104
NORTH EGMONT CAMPHOUSE	PT BLK XIV EGMONT SD	WAIONGANA	P20:044-143
NORTH EGMONT PUBLIC TOILETS (2)	PT BLK XIV EGMONT SD	WAIONGANA	P20:045-145
NORTH EGMONT VISITORS CENTRE	PT BLK XIV EGMONT SD	WAIONGANA	P20:045-145
RAHIRI COTTAGE	PT BLK VII EGMONT SD	WAIONGANA	P20:066-196
STRATFORD FIELD CENTRE	PT BLK IV KAUPOKONUI SD	PATEA	Q20:126-086
STRATFORD PLATEAU TOILETS	PT BLK XIV EGMONT SD	WAINGONGORO	P20:049-103
TAHURANGI LODGE (TARANAKI ALPINE CLUB)	PT BLK XIV EGMONT SD	MAKETAWA	P20:034-134
TELECOM INSTALLATION (CARRINGTON ROAD)	PT SEC 10 CAPE SD	NGATUMOKI	P19:934-204
WARWICK BROWN SKI SHELTER (STRATFORD MOUNTAIN CLUB)	PT BLK XIV EGMONT SD	MANGANUI	P20:042-105

General conditions

- a) That on receipt of a requirement from the General Manager, Taranaki Regional Council (hereinafter the General Manager), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That 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) That 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. THAT the design, operation and maintenance of the septic tank and soakage holes shall be to the approval of the General Manager, Taranaki Regional Council.
2. THAT the discharge shall not be shown to adversely effect the microbiological quality of surface water.
3. THAT the septic tank and soakage pits shall not cause offensive or objectionable odour in the opinion of an enforcement officer of the Taranaki Regional Council.

TRK992296

4. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or June 2010, for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of this 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 15 June 1999

For and on behalf of
TARANAKI REGIONAL COUNCIL



DIRECTOR—RESOURCE MANAGEMENT

TRK995056



DISCHARGE PERMIT

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

PRIVATE BAG 713
47 CLOTON ROAD
STRATFORD
NEW ZEALAND
PHONE 0-6-765 7127
FAX 0-6-765 5097

Name of Consent Holder: DAWSON FALLS MOUNTAIN LODGE LIMITED
P O BOX 91 STRATFORD

Renewal Granted Date: 30 June 1999

CONDITIONS OF CONSENT

Consent Granted: TO DISCHARGE UP TO 4 CUBIC METRES/DAY OF DOMESTIC SEWAGE BY SEPTIC TANKS AND SOAKAGE TO GROUNDWATER IN THE VICINITY OF THE KAUPOKONUI RIVER AT OR ABOUT GR: P20:053-083

Expiry Date: 1 June 2017

Review Date[s]: June 2005 and June 2011

Site Location: DAWSON FALLS LODGE, EGMONT NATIONAL PARK,
MANAIA ROAD, KAPONGA

Legal Description: SEC 6 BLK II KAUPOKONUI SD

Catchment: KAUPOKONUI 355.000

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

TRK995056

General conditions

- a) That on receipt of a requirement from the General Manager, Taranaki Regional Council (hereinafter the General Manager), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That 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) That 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. THAT the design, operation and maintenance of the septic tanks and soakage system shall be to the approval of the General Manager, Taranaki Regional Council.
2. THAT the discharge shall not be shown to adversely affect the microbiological quality of surface water in the Kaupokonui River.
3. THAT the septic tank and soakage system shall not cause offensive or objectionable odour in the opinion of an enforcement officer of the Taranaki Regional Council.
4. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2005 and/or June 2011, for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of this 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 30 June 1999

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
www.trc.govt.nz

Please quote our file number
on all correspondence

Name of
Consent Holder: Ngati Ruanui Holdings Operating Company Limited
P O Box 594
HAWERA 4640

Consent Granted
Date: 30 June 1999

Conditions of Consent

Consent Granted: To discharge up to 4 cubic metres/day of domestic sewage
from septic tanks by irrigation onto land in the vicinity of the
Patea River at or about (NZTM) 1697133E-5648255N

Expiry Date: 1 June 2016

Review Date(s): June 2004, June 2010

Site Location: Mountain House Lodge, Egmont National Park, Pembroke
Road, Stratford

Legal Description: Secs 2 & 3 Blk XV Egmont SD

Catchment: Patea

Consent 5062-1

General conditions

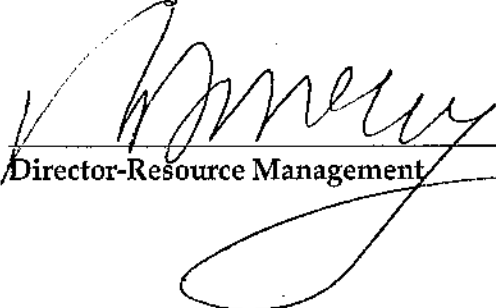
- a) That on receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) That 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. That the design, operation and maintenance of the septic tanks and soakage system shall be to the approval of the General Manager, Taranaki Regional Council.
2. That the discharge shall not be shown to adversely affect the microbiological quality of surface water in the Patea River.
3. That the consent holder or the consent holder's agent shall erect suitable signage adjoining the irrigation area to indicate a possible risk to human health.
4. That the septic tank and soakage system shall not cause offensive or objectionable odour in the opinion of an enforcement officer of the Taranaki Regional Council.
5. That the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or June 2010, for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of this 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.

Transferred at Stratford on 18 June 2010

For and on behalf of
Taranaki Regional Council


Director-Resource Management

