

Hickman JD 1997 Family Trust  
Monitoring Programme  
Annual Report  
2010-2011  
Technical Report 2011-23

ISSN: 0114-8184 (Print)  
ISSN:1178-1467 (Online)  
Document: 936318

Taranaki Regional Council  
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STRATFORD

October 2011



## **Executive summary**

JD Hickman 1997 Family Trust operates a road transport depot located on Waitara Road at Brixton, Waitara, in the Waiongana catchment. The operations at this site mainly involve packaged dairy related products. Goods are stored under roofed catchments with the remaining areas being paved or gravel. The site also has a truck wash facility with waste water draining to sumps and then to the stormwater system. This report for the period July 2010-June 2011 describes the monitoring programme implemented by the Taranaki Regional Council to assess the Company's environmental performance during the period under review, and the results and environmental effects of the Company's activities.

The Company holds one resource consent, which includes a total of six conditions setting out the requirements that the Company must satisfy. This resource consent authorises the Company to discharge stormwater and truck washwater into an unnamed tributary of the Waiongana stream at this site.

The Council's monitoring programme for the year under review included six inspections and two water samples collected for physicochemical analysis.

The monitoring showed that the discharges to water from the site were not having any significant adverse effect on the receiving environment.

During the year, the Company demonstrated a good level of environmental performance and compliance with the resource consents. The site was well managed and there were no unauthorised incidents recorded.

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 describing the monitoring programme associated with the resource consent held by Hickman JD 1997 Family Trust. The Company operates a road transport depot situated on Waitara Road at Brixton, Waitara.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consent held by Hickman JD 1997 Family Trust that relate to discharges of water in the Waiongana catchment. This is the second Annual Report to be prepared by the Taranaki Regional Council to cover the Hickman's water discharge and their effects.

### **1.1.2 Structure of this report**

Section 1 of this report is a background section. It sets out general information about compliance monitoring under the Resource Management Act and the Council's obligations and general approach to monitoring sites through annual programmes, the resource consent held by Hickman, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted at the JD Hickman site.

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 (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, 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 Company 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 Background and process description

This site was originally the Brixton Dairy Factory until it shut down and the discharge resource consent was transferred in 1994 into Hickman JD 1997 Family Trust. The site has wastewater pipes that were used to take milk factory wastes to the Tate Road ocean outfall. As the owner/occupier was unable to confirm the status of the ocean outfall pipeline it is assumed by Council officers that this pipe has been blocked off as a part of the decommissioning of the site as a dairy factory complex.

The site is now used for road transport operations and storage, mainly involving packaged dairy related products. Goods are stored under roofed catchments leaving the remaining areas similar to a roading surface with respect to stormwater discharges.

The site has a truck wash facility with the waste water draining to sumps and then to the stormwater system.

The site also has a truck workshop area and an area to steam clean vehicle parts. This area drains to a series of three interceptor sumps where grease/oil/hydrocarbons are collected and removed offsite prior to the wash water then being directed to the stormwater system.



Photograph 1 JD Hickman site

## 1.3 Resource consent

### 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.

During the period under review, Hickman JD 1997 Family Trust held water discharge permit **1281-3** to cover the discharge of stormwater and truck washwater from a road transport depot into an unnamed tributary of the Waiongana Stream. This permit was issued by the Taranaki Regional Council on 13 May 2002 under Section 87(e) of the Resource Management Act. It is due to expire on 1 June 2014. There are six special conditions attached to this consent.

Condition 1 states that this consent shall be conducted in accordance with the information submitted in support of the application and to ensure that the conditions of this consent are met at all times.

Condition 2 states that at all times the best practicable option shall be adopted to prevent or minimise any adverse effects on the environment.

Condition 3 states the limits for pH, suspended solids and total recoverable hydrocarbons in the discharge as follows:

<b>Component</b>	<b>Concentration</b>
pH	6.5-8.5
Suspended solids	100g/m <sup>3</sup>
Total recoverable hydrocarbons	15g/m <sup>3</sup>

Condition 4 states the discharge shall not cause any visual changes, any objectionable odour, render the fresh water unsuitable for consumption by farm animals, or any significant adverse effects on aquatic life beyond the mixing zone extending 25 metres downstream.

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

Condition 6 is a review provision.

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 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 the Hickman JD 1997 Family Trust 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 JD Hickman site was visited 6 times during the monitoring period. With regard to the consent for the 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.

#### **1.4.4 Chemical sampling**

The Taranaki Regional Council undertook sampling of the stormwater discharge from the site and the water quality upstream and downstream of the discharge point and mixing zone.

The Hickman discharges were sampled on one occasion, and the sample analysed for pH, suspended solids, hydrocarbons and temperature. The unnamed tributary of the Waiongana Stream was sampled on one occasion, and the sample analysed for pH, suspended solids and temperature.

## 2. Results

### 2.1 Water

#### 2.1.1 Inspections



**Photograph 2** JD Hickman truckwash

During the 2010-2011 monitoring period six scheduled inspections of the Hickman's site were conducted by an officer of the Taranaki Regional Council. The following was found during the inspections.

#### **16 August 2010**

The inspection was conducted in fine weather conditions. All the stormwater drains were inspected and were visually free of hydrocarbons. The oily water separator was also inspected and was working well. The truck wash was not in use at the time of inspection.

#### **8 December 2010**

The inspection was conducted in fine weather conditions. All the stormwater drains on the site were inspected and were dry. The truckwash was not in use at the time of inspection. A biodegradable detergent is used in the truck wash. The site was tidy and complying with resource consent conditions at the time of inspection.

#### **6 April 2011**

The inspection was conducted following wet weather. All the stormwater drains on the site were inspected and were visually free of hydrocarbons. The truckwash was not in use at the time of inspection. Samples were collected of the stormwater discharge and the receiving waters.

### 18 May 2011

The inspection was conducted following overnight rain. All the stormwater drains on the site were inspected and were visually free of hydrocarbons. The truckwash was not in use at the time of inspection. The site was tidy and was complying with resource consent conditions at the time of inspection.

### 13 June 2011

The inspection was conducted in fine weather conditions after a rain event. All the stormwater drains on the site were inspected and were visually free of hydrocarbons. The truckwash was in use at the time of inspection. The oily water separator was working well at the time of inspection.

### 30 June 2011

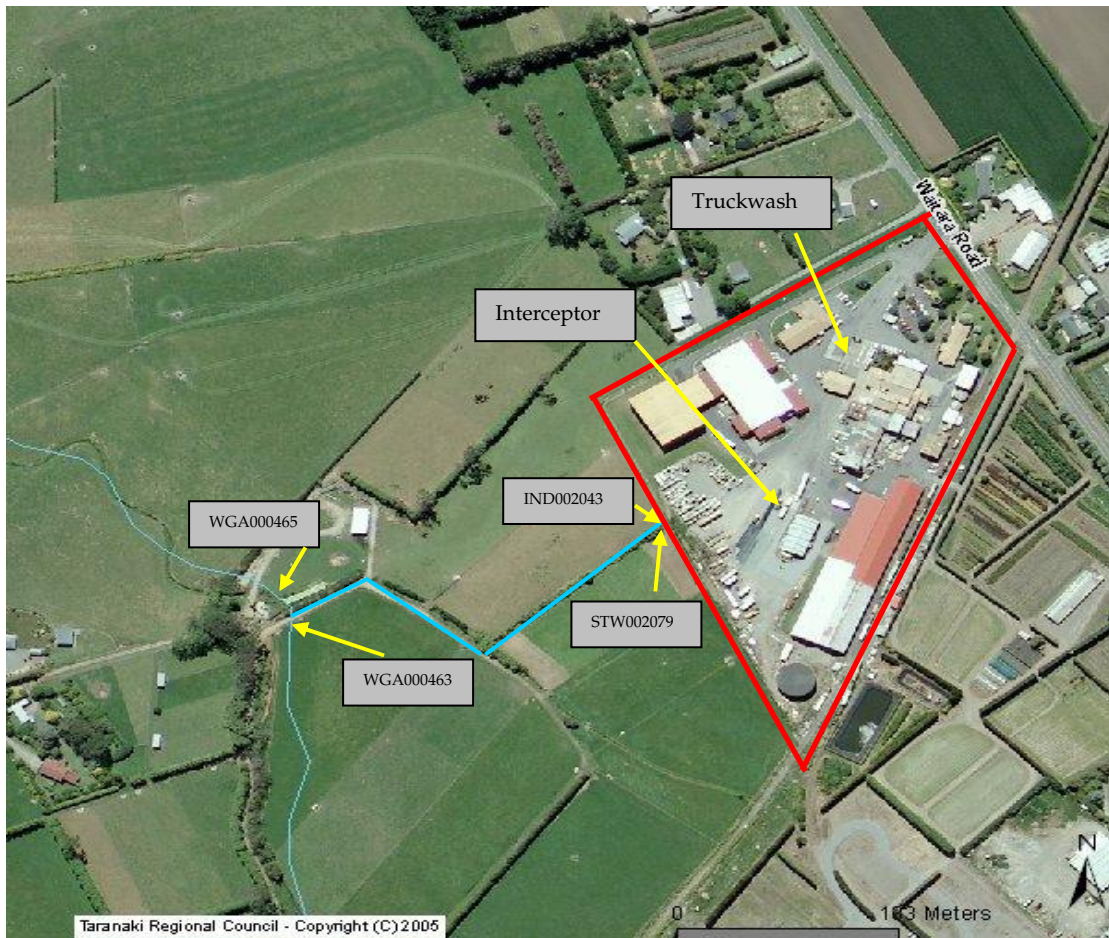
The inspection was conducted in wet conditions. All the stormwater drains on the site were inspected. The stormwater drain between the truck wash and the office block appeared slightly oily. The stormwater drains at the rear of the site were visually free of hydrocarbons and the stream was flowing clear. The truckwash was not in use at the time of inspection. Trucks were unloading dry materials on the sealed area of the site. The diesel pump area was tidy. Site was tidy at the time of inspection.

## 2.1.2 Results of discharge monitoring

Chemical water quality sampling of the discharge from the Hickman site was undertaken on one occasion during the 2010-2011 period. The samples were collected on 6 April 2011. Table 1 presents the results. The location of the sampling site is shown below in Figure 1. No samples were collected from the truckwash discharge as it was not discharging at the time of inspection (TRC site code IND002073)

**Table 1** Results for discharge monitoring from the JD Hickman site (TRC site code STW002079)

Parameter	Units	Consent Limit	6 April 2011
Suspended Solids	g/m <sup>3</sup>	100	14
Temperature	Deg. C	-	14.3
Hydrocarbons	g/m <sup>3</sup>	15	4.6
pH		6.5-85	7.1



**Figure 1** Location of the JD Hickman site and associated sampling sites

### 2.1.3 Results of receiving environment monitoring

Chemical water quality sampling of the receiving environment was undertaken in conjunction with discharge monitoring on 6 April 2011. The results are presented in Table 3 and the sampling sites are shown above in Figure 1.

**Table 2** Results of receiving environment monitoring in relation to the JD Hickman site

Parameters	Units	02 February 2010	
		Upstream (site WGA0004663)	Downstream (site WGA000465)
Suspended Solids	g/m <sup>3</sup>	5	13
Temperature	Deg. C	13.7	15.9
pH		6.8	6.7

The results indicate that the discharge was having no significant effect on the water quality of the tributary and was in compliance with applicable consent conditions at the time of sampling. (No testing for HC's was undertaken)

## **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 JD Hickman 1997 Family Trust.

### 3. Discussion

#### 3.1 Discussion of site performance

Inspections of the Hickman JD 1997 Family Trust site during the 2010-2011 period found that the site was well managed and the stormwater system was maintained to a satisfactory standard.

A contingency plan for the site is yet to be submitted to the Taranaki Regional Council as per special condition 5 of the resource consent.

This was being followed up by Council officers at the end of the period under review.

#### 3.2 Environmental effects of exercise of consent

Results of samples collected of both the discharges and the receiving waters were within limits prescribed by the consents and indicated that the discharge was not having a significant effect on the water quality of the unnamed tributary of the Waiongana Stream.

#### 3.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the year under review is set out in Table 2.

**Table 2** Summary of performance for Consent 1281-3 to discharge stormwater and truck washwater from a road transport depot into an unnamed tributary of the Waiongana Stream

Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Exercise methodology	Inspections of activities and treatment systems	Yes
2. Best practicable options to minimise effects	Inspections of the treatment system and the receiving waters	Yes
3. Limits on contaminants in the discharge	Sampling	Yes
4. Limits on effects in the receiving waters	Sampling	Yes
5. Provide and maintain a contingency plan to the Council	Inspections and liaison and receipt of Company reports	No
6. Consultation over significant proposed changes	Liaison during visits. No significant changes undertaken during year	Yes
Overall assessment of consent compliance and environmental performance in respect of this consent		<b>Good</b>

During the 2010-2011, the Company demonstrated a good level of environmental performance, although compliance with the resource consents should be improved. A contingency plan for the site must be submitted to the Taranaki Regional Council.

The site was well managed and there were no unauthorised incidents recorded in relation to the Hickman site.

### **3.4 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, the programme remains unchanged. A recommendation to this effect is attached to this report.

## **4. Recommendations**

1. THAT monitoring of consented activities at Hickman JD 1997 Family Trust in the 2011-2012 year continue at the same level as in 2010-2011.

## Glossary of common terms and abbreviations

The following abbreviations and terms are used within this report:

g/m <sup>3</sup>	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
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
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
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
Temp	temperature, measured in °C (degrees Celsius)
UI	Unauthorised Incident
UIR	Unauthorised Incident Register – contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan

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

## **Bibliography and references**

Dyer, M. Officer report – JD Hickman, May 2002.

Taranaki Regional Council, 2010, Hickman JD 1997 Family Trust Monitoring Programme  
Annual Report 2009-2010, Technical Report 2010-29

## **Appendix I**

**Resource consents held by  
Hickman JD 1997 Family Trust**





PRIVATE BAG 713  
47 CLOTEN 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: J D Hickman 1997 Family Trust  
P O Box 7151  
NEW PLYMOUTH

Consent Granted  
Date: 13 May 2002

**Conditions of Consent**

Consent Granted: To discharge stormwater and truck washwater from a road transport depot into an unnamed tributary of the Waiongana Stream at or about GR: Q19:157-420

Expiry Date: 1 June 2014

Review Date(s): June 2008

Site Location: Old Brixton Dairy Factory Complex, Waitara Road, Brixton, Waitara

Legal Description: Lot 1 DP 12537 Lot 1 DP 18913 Blk III Paritutu SD

Catchment: Waiongana

## Consent 1281-3

### General conditions

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

### Special conditions

1. The exercise of this consent shall be conducted in accordance with the information submitted in support of the application and to ensure that the conditions of the consent are met at all times.
2. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any adverse effects on the environment.
3. The following concentrations shall not be exceeded in the discharge effluent:

<b>Component</b>	<b>Concentration</b>
pH (range)	6.5-8.5
suspended solids	100 gm <sup>-3</sup>
total recoverable hydrocarbons [infrared spectroscopic technique]	15 gm <sup>-3</sup>

This condition shall apply prior to the entry of the treated stormwater into the receiving waters of the unnamed tributary, at a designated sampling point approved by the General Manager, Taranaki Regional Council.

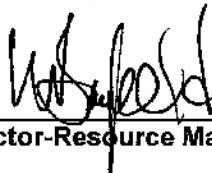
4. After allowing for reasonable mixing within a mixing zone extending 25 metres downstream of the discharge point, the discharge shall not give rise to any of the following effects in the unnamed tributary:
  - a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
  - b) any conspicuous change in the colour or visual clarity;
  - c) any emission of objectionable odour;
  - d) the rendering of fresh water unsuitable for consumption by farm animals;
  - e) any significant adverse effects on aquatic life.

Consent 1281-3

5. The consent holder shall provide and maintain a contingency plan to the Taranaki Regional Council, outlining measures and procedures to be undertaken to prevent the spillage or accidental discharge of contaminants in the stormwater catchment, and measures to avoid, remedy or mitigate the environmental effects of such a spillage or discharge.
  
6. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2008, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 13 May 2002

For and on behalf of  
Taranaki Regional Council



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Director-Resource Management

