

**REGIONAL STOCK TRUCK
EFFLUENT
DISPOSAL STRATEGY
FOR TARANAKI**

September 2001

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1. Introduction

1.1 Purpose

This document is entitled 'Regional Stock Truck Effluent Disposal Strategy for Taranaki' (this Strategy). The purpose of this Strategy is to set out the strategic and planning framework for avoiding or minimising stock truck effluent discharges onto roads in the Taranaki region.

1.2 Scope

This Strategy sets out the agreed process, policies and methods to be implemented by the Taranaki Stock Truck Effluent Working Party (the Working Party) to avoid or minimise stock truck effluent discharges onto roads in the Taranaki region. This document is a non-statutory document.

This Strategy has been developed to address objectives and policies in the Regional Land Transport Strategy for Taranaki¹ (RLTS) relating to stock truck effluent. Objective 8.2.6 of the RLTS is *“to avoid and mitigate any adverse effects from land transport, on the environment”*. Specifically, Policy 8.2.6.6 is to *“promote the fitting of effluent holding tanks in stock trucks and encourage appropriate effluent receiving facilities to be built at abattoirs, sale yards and, where necessary, on state highways and local roads and/or in association with wash down facilities”*.

The Working Party has produced two reports to address the problem of stock truck effluent discharges in the Taranaki Region. In 1994 and 1997 respectively, the Working Party produced the reports 'Taranaki Regional Stock Truck Effluent Discharge System'² and 'Stock Truck Effluent Disposal Review'³. From these two reports, a regional strategy was developed and implemented by members of the Working Party. Since 1997, changes have occurred in relation to stock truck effluent discharges therefore the review and preparation of this Strategy is timely.

Recent changes in the meat processing industry have resulted in dramatically increased numbers of livestock being transported into Taranaki from outside of the region. As a result of the increased movement of stock trucks on the region's roads, particularly state highways, there is an increased frequency of discharge of effluent from stock trucks. Discharges of stock truck effluent affect road safety, environmental quality and human health.

Although progress has been made by all parties since 1994 to reduce the amount of stock truck effluent discharged onto Taranaki roads, increased stock movement has necessitated a review of the current approach to managing stock truck effluent. This Strategy reviews the 1994 and 1997 approaches and identifies methods to further reduce the problem of stock truck effluent discharges.

¹ Taranaki Regional Council. 2000: Regional Land Transport Strategy for Taranaki. Taranaki Regional Council.

² Works Consultancy Services. 1994: Taranaki Region Stock Truck Effluent Discharge System. Works Consultancy Services Limited.

³ Taranaki Regional Council. 1997: Stock Truck Effluent Disposal Review. Taranaki Regional Council

Methods identified include construction of in-transit stock truck effluent disposal facilities, construction of disposal facilities (which may include washdown facilities) at end point destinations, and fitting effluent holding tanks to all livestock transporting vehicles. This Strategy also fulfils Transfund New Zealand's requirement that stock truck effluent disposal sites are identified in a regional strategy (Programme and Funding Manual Policy 7.4.31).

1.3 Structure

This Strategy contains eleven sections.

Section 1 introduces this Strategy and outlines the purpose, scope, and structure.

Section 2 outlines the background and Taranaki context to stock truck effluent issues in the region. This section sets out the issues in relation to recent changes in stock truck effluent discharges in the region.

Section 3 outlines the current issue and problem of stock truck effluent discharges in Taranaki. Current practices and behaviours are outlined.

Section 4 outlines the statutory roles and responsibilities of all parties in Taranaki that have a bearing on the control of effluent discharged from stock trucks.

Section 5 presents an overview of this Strategy outlining the strategic framework for addressing stock truck effluent issues in the Taranaki region. The detail with respect to the component parts for implementing this Strategy is presented in subsequent sections.

Section 6 contains the policy and methods to promote the standing of stock prior to transportation.

Section 7 contains the policy and methods to promote the provision of disposal facilities at meat processing facilities.

Section 8 contains the policy and methods to promote the provision of disposal facilities at saleyards.

Section 9 contains the policy and methods to promote the provision of disposal facilities at cartage companies.

Section 10 contains the policy and methods to promote the provision of effluent holding tanks on stock trucks.

Section 11 contains policies and methods to address stock truck effluent disposal in-transit. Criteria for selecting sites are outlined, and three in-transit stock truck effluent disposal sites have been identified.

2. Background

2.1 Taranaki Stock Truck Effluent Working Party

The Taranaki Stock Truck Effluent Working Party (the Working Party) was established in 1993 to address and report on the issue of stock truck effluent discharges onto roads in the Taranaki region. The Working Party is comprised of organisations with functions, roles and responsibilities that have a bearing on the control of effluent discharged from stock trucks. The Working Party is comprised of representatives from New Plymouth District Council, South Taranaki District Council, Stratford District Council, Transit New Zealand, Taranaki Regional Council, Western Central District Road Transport Association, and Federated Farmers.

Members of the Working Party have been continuing to address the issue of discharges of stock truck effluent onto Taranaki roads since the Working Party's inception in 1993. The Working Party has produced two reports: 'Taranaki Regional Stock Truck Effluent Discharge System' (1994); and 'Stock Truck Effluent Disposal Review' (1997).

2.2 The Taranaki Regional Stock Truck Effluent Discharge System Report

From the Taranaki Regional Stock Truck Effluent Discharge System report (the 'TRENDS report') the regional approach to address stock truck effluent issues was first developed and subsequently implemented. In brief, the regional approach to address stock truck effluent issues comprised of:

- a) encouraging farmers to 'stand' stock prior to transportation to minimise the amount of effluent being collected in stock truck holding tanks; and
- b) ensuring all cartage companies, meat processors and saleyards in the region provide adequate effluent disposal facilities to enable stock trucks to discharge holding tanks at their end source; and
- c) constructing stock truck effluent in-transit facilities to enable stock trucks to discharge holding tanks in-transit.

2.3 Stock Truck Effluent Disposal Review Report

In 1997 a review was undertaken into the effectiveness of measures adopted to address the issue of discharges of effluent from stock trucks. The review is outlined in the report titled 'Stock Truck Effluent Disposal Review'. The report noted, from 1994 to 1997, that parties had made significant progress on implementing the above approach. Meat processors and cartage companies had constructed or upgraded on-site stock truck effluent disposal and treatment facilities. Effluent tanks were now fitted to the majority of stock truck and trailer units in Taranaki and investigations had been carried out in relation to the construction of in-transit effluent disposal sites. Saleyards had however failed to provide adequate on-site stock truck effluent disposal and treatment facilities.

Following investigations into the construction of in-transit stock truck effluent disposal facilities in the Taranaki region, the 1997 report noted that the anticipated

benefits would not justify the cost of constructing such facilities. The report noted that in-transit disposal facilities were only necessary on long haul transportation routes while, in 1997, most stock movement in Taranaki only involved short distances. The report further noted the potential high cost of constructing in-transit stock truck effluent disposal facilities (estimated construction costs per site of \$250,000, plus per annum operating costs of \$20,000), accordingly the construction of such facilities was deferred.

2.4 Changes since 1997

Since the 1997 report, circumstances pertaining to stock truck effluent have altered in the region and this Strategy outlines the Working Party's amended approach to addressing the problem of stock truck effluent discharges onto Taranaki roads. Three matters have changed in the region since 1997 that have necessitated this review to address the problem of stock truck effluent:

- Firstly, there has been an increase in stock being brought into the Taranaki region from outside of the region;
- Secondly, since 1997 the estimated construction costs (and annual operating costs) of an in-transit facility has been revised downwards from \$250,000 to \$80,000-\$100,000; and
- Thirdly, Transfund New Zealand have developed a funding policy for the provision of in-transit stock truck effluent disposal facilities (refer Appendix I) which, coupled with the substantially reduced anticipated cost of constructing in-transit facilities, now makes construction of in-transit facilities in Taranaki cost-effective.

Prior to 1997, most herd movement in Taranaki was associated with the movement of herds within the region, rather than from other regions into Taranaki. Accordingly, distances travelled were relatively small and the large number of local trucks with holding tanks minimised the amount of effluent being spilt on the roads.

Since 1997, restructuring within the meat industry has seen a significant increase in the amount of livestock being transported into the region from other regions. Between 1993/94 and 1999/2000 the amount of cattle processed in the region increased by between 34 and 48%. As a result of the increase of livestock being transported into the region, stock trucks are travelling longer distances with the potential for effluent holding tanks to become full before end destinations are reached.

In 2000, Transfund developed a funding policy that states that, for a stock effluent disposal site to be eligible for funding, the site must be part of an agreed regional or national strategy. This Strategy addresses the requirement of sites being part of an agreed regional strategy.

3. Stock Truck Effluent Issues

3.1 Effects of stock truck effluent discharges

The discharge of stock truck effluent onto roads and roadsides has the potential to adversely affect the safety of road users, cause adverse effects on human health, animal health, the environment, and give rise to nuisance odours. The discharges can result in negative public perceptions and experiences (by both New Zealanders and tourists).

Spillage of stock effluent from trucks onto roads is a significant problem for road users because of the amount spilt and its offensive nature. Stock truck effluent discharges increase road safety hazards for motorists, including cyclists and motorcyclists, due to slippery road surfaces, and reduced visibility and offensive odours when spilt onto windshields.

There is the potential for adverse environmental effects resulting from the dumping of stock truck effluent onto roadsides during cartage. The effluent may enter water bodies as a result of run-off and adversely affect water quality with the potential to alter in-stream habitat and ecology. Discharges also reduce aesthetic values associated with New Zealand's 'clean green' image.

Health and safety problems for animals and people can result from stock truck effluent spillage on roads and illegal dumping on roadsides. Among the various disease organisms that can be transmitted to both livestock and humans from direct exposure to stock effluent (raw manure) are:

- Viral infections
 - cowpox
- Fungal infections
 - ringworm
- Bacterial infections
 - tuberculosis
 - tetanus
 - brucellosis
 - leptospirosis
 - salmonellosis
 - streptococcus staphylococcus
- Parasites
 - beef tapeworms
 - various intestinal worms of cattle and sheep

The raw manure is not inevitably infectious, however it does represent a potential infection source. The diseases generally require a specific entry pathway to the host animal, eg. grazing ingestion of worm eggs or exposure of an open wound to infected urine for leptospirosis transmission to humans.

Three factors contribute to the amount of effluent being spilt onto roads. The factors are:

- the volume of effluent animals deposit on the truck. This is influenced by the amount of time the stock is stood off pasture prior to transportation, the type of pasture/crop/feed conditions stock have been on prior to transportation and farmer attitude;
- the number of stock being transported; and

- the ability of trucks and industry to collect and dispose of effluent.

3.2 Volume of effluent

Raw manure (faeces and urine) is the principal matter collected from animal transportation on stock trucks. In dry conditions holding tanks will contain raw undiluted manure, while in wet weather there will be some dilution from rainwater. Discharge of diluted effluent is not considered to be as significant a road safety, health and environmental problem as undiluted effluent.

Typical values for some key parameters of fresh manure are given in Table 1. Values are typical figures only. In the context of trucked animals this would be variable with type of food and length of standing stock off pastures (holding off food or 'conditioning').

As noted in Table 1, the amount and strength of raw manure collected in holding tanks is considerable. For example, effluent from a truck load of dairy cattle could have a BOD of up to 17,000 g/m³ and a total nitrogen concentration of 4100 g/m³. Clearly, spillages or the deliberate discharge of holding tanks to land has the potential for adverse environmental effects should there be runoff to surface water.

Table 1 Typical Values of Freshly Voided Manure Characteristics¹

Animal Parameter	Dairy Cow Pasture rations	Dairy Cow Harvested Rations [other than pasture] ²	Sheep
Animal mass ³ kg	500.00	500.00	50.00
Raw mature (RM) (urine faeces) kg/day	54.00	40.00	2.00
Bulk density kg/litre	1.00	1.00	1.10
Faeces, % RM	54.00	60.00	50.00
Total solids (TS) kg/day % TS	4.40 8.10	4.20 10.50	0.38 19.00
Volatile Solids (VS) kg/day % TS	3.20 73.00	3.40 81.00	0.31 82.00
Biochemical oxygen demand (BOD) kg/day % TS	0.98 22.00	0.68 16.00	0.03 8.40
Chemical oxygen demand (COD) kg/day % TS	4.30 98.00	3.60 86.00	0.03 68.00
Total nitrogen kg/day	0.24	0.16	0.02
Total potassium kg/day	0.03	0.03	0.00
Total calcium kg/day	0.31	0.11	0.01

- Notes: 1. These values have been extracted from many sources. There is significant variation.
 2. Rations other than pasture, such as maize, silage, hay. Primarily overseas data.
 3. Assume all parameters proportional to animal mass. Adjust values accordingly for animals of mass not included in the table.

Source: Works Consultancy Services Limited, 1994

3.3 Stock numbers being transported

Taranaki is a dairying province with well-established meat processing and saleyard industries. Accordingly, at different times of the year there is a large number of livestock being transported on Taranaki roads. These stock movements are primarily associated with the movement of dairy herds and the transport of stock to end point destinations. The stock truck effluent problem in the Taranaki region has escalated in recent years as stock transport needs and movement has changed in the industry. The changes are attributed to an increase in dairy herds and herd sizes in the region, and a significant increase in the movement of stock from outside of the region, into the region.

The meat processing industry in New Zealand has undergone significant restructuring in recent times. A consequence of the restructuring is that there are fewer meat processing facilities operating, and those that are operating are processing stock from a wider area. Table 2, Table 3 and Table 4 show trends in cattle, bobby calf, and sheep numbers processed in the Taranaki region from 1993/94 to 1999/2000.

As noted in Tables 2 and 3, the meat processing companies which process cattle slaughtered more stock in 2000 than in 1993. Regionally, more beef and bobby calves are being slaughtered, with an increase of between 34 and 48% for beef, and 60% for bobby calves since 1993. Meat companies estimate that stock numbers processed in Taranaki will increase in the future. All meat processors source stock from outside the region, mainly from Hawke's Bay, Manawatu, Wanganui, Taumaranui, Waikato/King Country and Wairarapa.

As noted in Table 4, sheep numbers being processed in Taranaki have halved. Richmond Ltd (Waitotara) has undergone the greatest reduction in sheep processing with the commencement of bobby calf processing. Affco underwent national restructuring in 1997 that saw it close its sheep processing operations in Taranaki.

Table 2 Beef numbers being processed by meat processing companies

Company	1993/94	1996/97	1999/2000
Affco ⁴	31,500*	35,000	0
Richmond Ltd (Hawera)	120 – 150,000	140 – 170,000	159,000
Riverlands Eltham	54,000	75,000	147,000
Taranaki Abattoir Company (1992) Limited	5,000	7,000	7,500
Richmond Ltd (Waitotara)	0	0	0
Total	210-241,500	257-287,000	313,500

*Affco supplied a total processing figure of 99,000, however, based on the 1996/97 figures, the amount was split 32%/68%.

Source: Taranaki Regional Council Annual Monitoring reports and company representatives.

⁴ Affco Waitara announced the closure of their meat processing plant on 15 December 1997.

Table 3 Bobby calf numbers being processed by meat processing companies

Company	1993/94	1996/97	1999/2000
Affco ¹	67,500*	75,000	0
Richmond Ltd (Hawera)	0	0	0
Riverlands Eltham	0	0	48,000
Taranaki Abattoir Company (1992) Limited ²	0	0	7,500
Richmond Ltd (Waitotara)	0	0	52,000
Total	67,500	75,000	107,500

*Affco supplied a total processing figure of 99,000, however, based on the 1996/97 figures, the amount was split 32%/68%.

Source: Taranaki Regional Council Annual Monitoring reports and company representatives.

Table 4 Sheep numbers being processed by meat processing companies

Company	1993/94	1996/97	1999/2000
Affco	389,349	0	0
Taranaki Abattoir Company (1992) Limited	0	13,000	18,000
Richmond Ltd (Waitotara) ⁵	755,000	1,019,000	591,000
Total	1,144,349	1,129,000	609,000

Source: Taranaki Regional Council Annual Monitoring reports and company representatives.

The amount of cattle, bobby calves and sheep processed at meat processing facilities in Taranaki equates to the movement of approximate 9,290⁶ truck and trailer units per year. Of the approximately 9,290 unit movements in the Taranaki region, the majority of livestock movement is cattle with 7,850 units, sheep movement is approximately 220 units and bobby calves is approximately 1220 units (based on unit holding rates of approximately 40 cattle, 500 bobby calves and 500 sheep).

The increased movement of stock into the region is associated with favourable prices being paid at meat processors, and the closure of some meat processors.

3.4 Farmer practices

Farmers' behaviour prior to stock being transported influences the amount of effluent requiring disposal in-transit or at the destination point. Farmers' willingness or ability to 'stand' stock off pasture prior to transportation represents the single best method to reduce the amount of effluent collected in holding tanks.

Animals that are stood off pasture, but with access to water, for a period prior to transportation, excrete less effluent during cartage. If standing stock is difficult and/or stock is being transported long distances, dry feed such as hay, grain or meal can be fed prior to travel. Less effluent collected in holding tanks enables

⁵ Richmond Ltd (Waitotara) underwent rationalisation and an extended maintenance period during the 1999/2000 season that resulted in fewer sheep numbers being processed.

⁶ Calculated based on full truck and trailer units.

trucks to travel greater distances before holding tanks require emptying, and therefore there is less likelihood that there will be spills or the need to dump during cartage.

Research has also found that standing stock off feed for the recommended time prior to transportation has minimal effect on carcass weights, and therefore prices received, as shown in Figure 1⁷. Standing stock off pasture also reduces stock stress (less animal bruising), and results in improved meat quality with the stock arriving in better condition.

In 1999, the National Stock Effluent Working Group⁸ produced the ‘Industry Code of Practice for the Minimisation of Stock Effluent Spillage from Trucks on Roads’⁹ (Code of Practice). The Code of Practice outlines farmers’ responsibilities, and guidelines for farmers, with respect to stock truck effluent. As outlined in the Code of Practice, farmers are responsible for preparing stock for transportation, and for the receipt and disposal of effluent collected on trucks from the stock being delivered on to their property. The National Stock Effluent Working Group recommended that stock be stood off feed prior to transport for a period between four to eight hours.

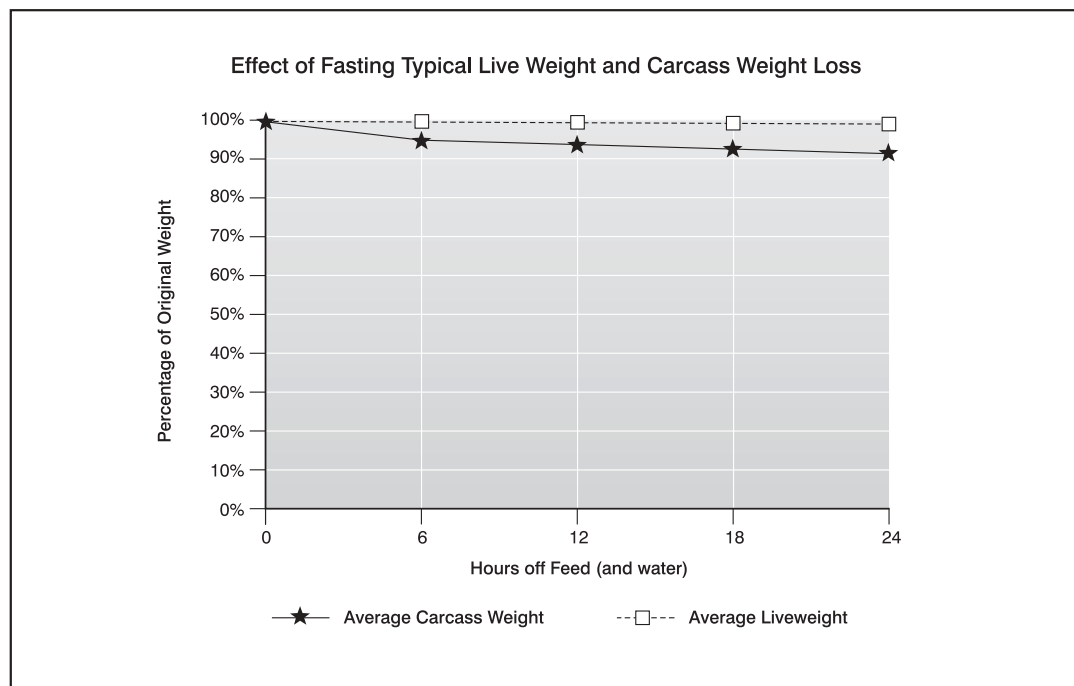


Figure 1 Effect of Fasting Typical Live Weight and Carcass Weight Loss

⁷ Wythes, J. R. 1991: Handling and Transport of Beef Cattle. A literature Review. Livestock and Meat Authority of Queensland, Queensland.

⁸ The National Stock Effluent Working Group comprises of representatives of Federated Farmers of NZ [Inc], the Meat Industry Associated of NZ [Inc], the New Zealand Stock and Station Agents Association, the Road Transport Forum, Transit New Zealand, territorial and local government and Lincoln University.

⁹ National Stock Effluent Working Group, 1999: Industry Code of Practice for the Minimisation of Stock Effluent Spillage from Trucks on Roads.

The Taranaki Regional Council produced the booklet 'A guide to regional plans in Taranaki for dairy, sheep and beef farming activities' (2000). The booklet advises farmers of requirements in regional plans with respect to stock truck effluent. Farmers are advised that effluent from stock trucks can be disposed of on their property by disposal to either a farm dairy effluent treatment system or by discharge to land where the discharge does not result in any effluent entering water. Guidelines for farmers regarding standing of stock off pasture prior to transportation are also recommended based on recommendations in the National Stock Effluent Working Group's Code of Practice.

Many farmers have taken on board the recommendations of the National Stock Effluent Working Group and are standing stock off pasture for the recommended period. However, to enable farmers to stand stock off pasture for the recommended time period stock agents must provide farmers with adequate notice. At present, not all stock agents provide adequate notice to farmers.

A small number of farmers are not receptive to standing stock off pasture for the recommended time due to concern that carcass weight will reduce, and therefore a lower price will be received. Research has proven that this concern is ill founded because, as mentioned above, standing stock off pasture improves their condition at destination. To ensure that farmers stand stock off pasture for the required time, stock agents and truck operators must give sufficient warning of anticipated stock collection time.

Some farmers are not receptive to accepting effluent from stock trucks collecting or delivering stock to their property. Farmer concerns are centred on the potential for spread of diseases and environmental impacts. However, regional plans and the Resource Management Act 1991 [RMA] permit farmers to accept and dispose of effluent from stock trucks on to their property provided the effluent does not enter water. Therefore, farmers must be more amenable to disposing of effluent delivered to their property.

3.5 Provision of stock truck effluent disposal facilities and effluent holding tanks

Many meat processors and/or abattoirs (hereafter referred to collectively as meat processors), saleyards and other stock drop off points do not have adequate wash down or effluent disposal facilities, therefore stock trucks often have no facilities to empty effluent holding tanks on arriving at their destination. Subsequently, effluent may be spilt onto roads on the return journey or disposed of inappropriately.

In the Taranaki region there are three major and several minor saleyards, four meat processors, and nine major and one minor cartage companies.

The three major saleyards in the region are located at Hawera, Inglewood and Stratford (Figure 2). Minor saleyards are located at Opunake, Rahotu and Waverley. Despite the efforts of working party members, no saleyard in the region has on-site facilities to allow stock trucks to discharge effluent from holding tanks. Until recently, Taranaki Farmers and Wrightson's (saleyard

owners) advised that they have been investigating rationalisation options, which included construction of suitable disposal facilities at the rationalised saleyards. However, to date, rationalisation has not occurred and Taranaki Farmers and Wrightson's appear to be no further advanced than they were in 1994. Progress must now be made to provide stock truck effluent disposal facilities at all major saleyards in the region.

All three major meat processors in the region have stock truck effluent disposal facilities (including washdown facilities) (Figure 3). Taranaki Abattoir Company (1992) Limited, a relatively minor meat processing facility in the region with respect to volume of stock

received, currently has no disposal or washdown facilities. The 1997 report stated that the Taranaki Regional Council would closely scrutinise stock truck effluent disposal at Taranaki Abattoir Company, and would investigate the provision of such a facility. Since 1997, the Taranaki Regional Council has investigated construction of disposal facilities on site but due to site constraints and the relatively small amount of stock received at the site, the Council has concluded that stock truck effluent disposal facilities are not currently required at Taranaki Abattoirs.

All ten cartage companies in Taranaki have fitted, or have purchased and are waiting to fit, effluent holding tanks to truck and trailer units. All cartage companies have adequate stock truck effluent disposal facilities at their yards. Locations of cartage companies are shown in Figure 4. Although the majority of truck and trailer units based in Taranaki have effluent holding tanks fitted, the problem of spillage from units without holding tanks based outside of the region remains (certainly the complaints to the Regional

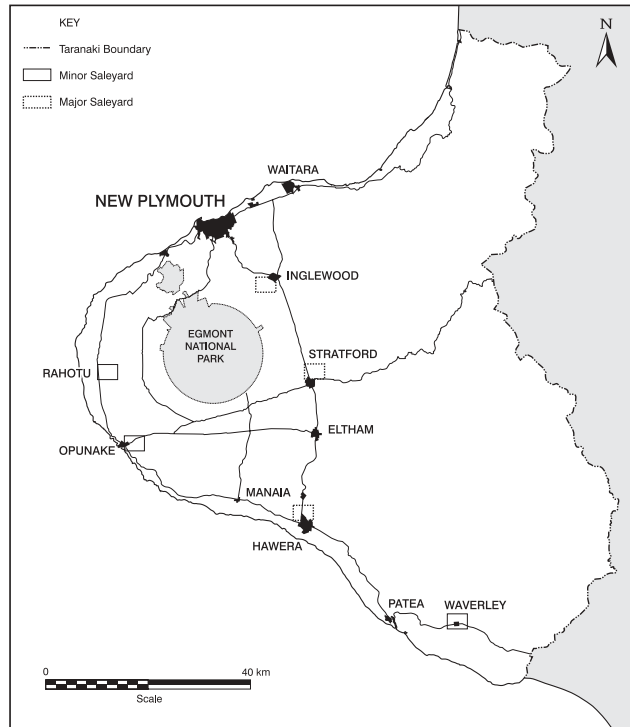


Figure 2 Saleyards in Taranaki

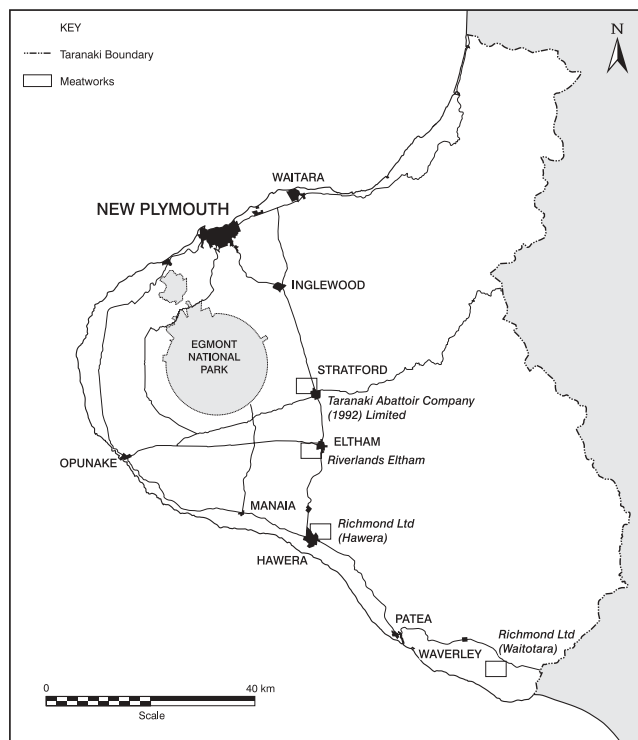


Figure 3 Meat Processors in Taranaki

Council reflect badly on certain transport firms from outside Taranaki). All cartage companies in Taranaki have either fitted effluent holding tanks to their trucks and trailers, or have purchased and are in the process of fitting holding tanks. Compared to other regions, Taranaki has a very high number of stock truck

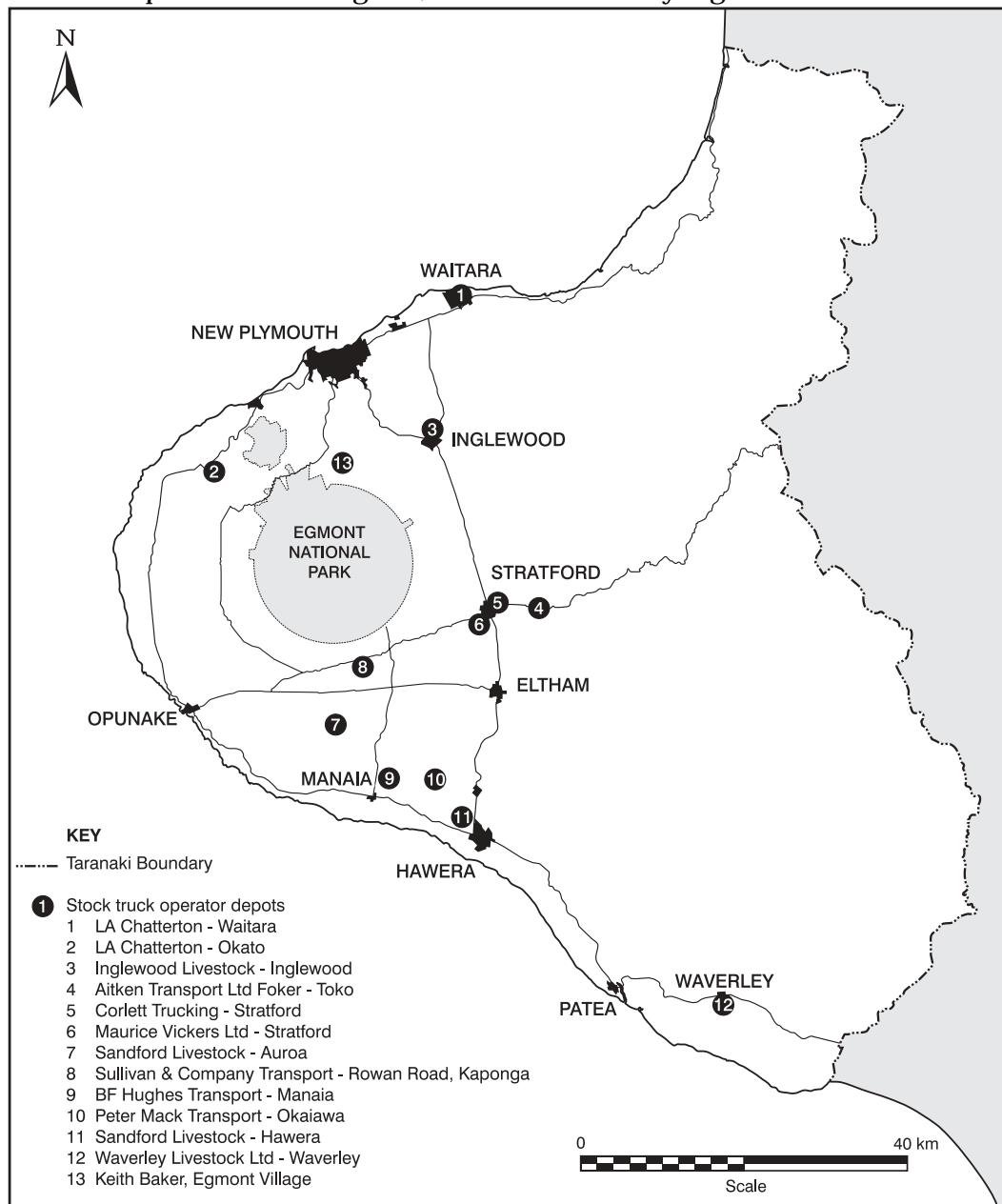


Figure 4 Cartage Companies in Taranaki

and trailer units fitted with effluent holding tanks following the introduction of the Road Transport Association's quality assurance scheme in 1997. Compared to 100% in Taranaki, in the Manawatu-Wanganui region, it is currently estimated that approximately 81% of stock trucks and 99% of trailers¹⁰ are fitted with effluent holding tanks (based on a survey of transport operators undertaken in the

¹⁰ Willis, B H. 2001: Management of Stock Truck Effluent in the Manawatu-Wanganui Region Prepared for horizons.mw. B H Willis, Dannevirke.

Manawatu District in 1998). In 1994 Environment Waikato¹¹ reported that 49% of stock trucks and 54% of trailers were fitted with effluent holding tanks and these figures are estimated to have increased to 70% in 2001¹². With the increase in movement of stock from outside of the region, into the region, there is still a considerable number of livestock carrying units without effluent holding tanks entering Taranaki, and therefore there is a considerable amount of effluent discharged onto roads.

Although the cartage companies and meat processors provide effluent disposal facilities, the problem of effluent disposal at the destination point, particularly at saleyards where no facilities are provided, remains.

¹¹ Environment Waikato, 1994: Stock Truck Effluent Control Study. Environment Waikato, Hamilton.

¹² McMaster, B. 2001: Letter dated 8 March 2001 from Bill McMaster, Environment Waikato, to Taranaki Regional Council.

4. Parties involved in managing stock truck effluent issues

Parties involved with handling and transporting stock are responsible for controlling the amount of stock truck effluent spilt onto roads. Parties directly responsible are federated farmers, farmers, agents (stock agents and meat processing company agents), livestock carriers, saleyard operators and owners, and meat processors.

Regional councils, territorial authorities and road controlling authorities are indirectly involved with managing stock truck effluent discharges.

4.1 Parties directly involved

4.1.1 Federated Farmers

Federated Farmers of NZ (Inc), have been actively involved in the preparation and provision of advocacy and advice to farmers regarding eliminating and reducing stock truck effluent spilt to roads.

Federated Farmers are a member of the National Stock Effluent Working Group and a member of the Taranaki Stock Truck Effluent Working Party. In accordance with the Code of Practice, Federated Farmers has been actively advocating the standing of stock off pasture for a period four to eight hours prior to transportation.

Federated Farmers are also actively involved in the development of 'Stock Declaration Cards' (the Cards). The Cards record the arranged time for stock to be picked up, the time that stock is stood off pasture, and the actual time that stock is picked up. The role and format of the Cards is currently being considered by the Meat Industry Standards Council, and also involves meat companies, the stock and station industry, Ministry of Agriculture and Forestry, the Animal Health Board, the Meat Board, and animal remedies companies.

4.1.2 Farmers

Prior to stock transportation, the stock owner and/or the owner's agent is ultimately responsible for ensuring that stock is adequately prepared for transportation by standing the stock off pasture. The Code of Practice also states that farmers should take responsibility for the receipt and disposal of effluent collected on trucks from the stock being delivered onto their property (Section A, I. 2.). Farmers must allow the effluent from stock trucks to be disposed on their properties either by disposal to a farm dairy effluent treatment system; or discharge to land where the discharge does not result, or be liable to result, in any of the effluent entering water.

Farmers' responsibilities, and guidelines for farmers to achieve their responsibilities, are outlined in the Code of Practice. Farmers' responsibilities with

respect to Regional Council requirements, are also outlined in 'A guide to regional plans in Taranaki for dairy, sheep and beef farming activities'¹³.

Although farmers have been advised that they must receive and dispose of effluent collected from animals delivered to their property, some farmers are not receptive to accepting stock truck effluent due to the potential for the introduction and spread of disease.

Most farmers stand stock off pasture for four to eight hours prior to transportation. Farmers are taking responsibility to ensure that the amount of effluent collected in holding tanks is minimised.

4.1.3 Stock agents

Stock agents, including meat processing company agents and stock purchasers, are responsible for communicating with clients the requirements for standing stock, transporting stock and receiving stock.

Stock agents must ensure that arrangements for stock collection are finalised well in advance and that farmers are adequately notified (directly or via the transport operator) of stock collection times to allow farmers to stand stock for at least four hours prior to transportation.

4.1.4 Livestock carriers

Cartage companies are responsible for collecting and containing effluent from stock on all trucks and trailers used to transport livestock. Effluent holding tanks are fitted to vehicles to collect effluent and to ensure that spillage is minimised. All cartage companies in the Taranaki region have equipped their vehicles, or have purchased and will fit vehicles, with effluent holding tanks. However, there is an issue with cartage companies from outside of the region entering this region that do not have effluent holding tanks fitted. Currently it is estimated that approximately 81% of stock trucks and 99% of trailers are fitted with effluent holding tanks in the Manawatu-Wanganui region¹⁴. In the Waikato region it is estimated that 70% of truck and trailer units have effluent holding tanks fitted¹⁵. Therefore, although 100% of livestock transporting vehicles in Taranaki have, or will soon have, effluent holding tanks fitted, the problem remains with stock trucks from neighbouring regions entering the region without effluent holding tanks.

Stock truck operators should ensure that they have sufficient notice of transport requirements so they can plan work and comply with planned pick-up schedules.

¹³ Taranaki Regional Council. 2000. A guide to regional plans in Taranaki for dairy, sheep and beef farming activities. Taranaki Regional Council.

¹⁴ Willis, B H. 2001: Management of Stock Truck Effluent in the Manawatu-Wanganui Region Prepared for horizons.mw. B H Willis, Dannevirke.

¹⁵ McMaster, B. 2001: Letter dated 8 March 2001 from Bill McMaster, Environment Waikato, to Rhonda Bigham, Taranaki Regional Council.

This will ensure operators allow appropriate time for farmers to stand stock off pasture.

During transportation any effluent generated in-transit is the responsibility of the stock truck operator. Cartage companies should be able to deliver both the stock, and the effluent generated from that stock, at all destinations.

A truck operator can be prosecuted for discharging or spilling effluent onto the road, roadside or into a water body, therefore it is in the best interests of the operator to ensure that sufficient notice is provided to farmers of collection times.

Stock trucks returning to cartage company yards may have full effluent holding tanks, which, if not emptied, can cause odour, aesthetic, and water quality problems on site. Such environmental effects are addressed under the RMA and cartage companies are required to install facilities to dispose of effluent from stock trucks. All cartage companies in Taranaki have licensed effluent disposal facilities in yards.

4.1.5 Saleyard operators

Saleyards may have stock trucks arrive at their site with full effluent holding tanks, which, if not emptied, can cause odour, aesthetic and water quality problems on site. Such effects are addressed under the RMA and may require saleyards to provide and make available facilities to receive and appropriately dispose of effluent from stock delivered to their site.

In both the 1994 and 1997 reports Working Party members identified a need for effluent disposal facilities at all saleyards. Taranaki Farmers and Wrightson's, the saleyard owners in the region, have been apparently pursuing rationalisation since 1994 and it was envisaged that, at the conclusion of rationalisation, effective stock truck effluent disposal facilities would be provided. Despite the 1997 report identifying that provision of effluent disposal facilities are required at saleyards, no progress had been made with respect to the provision of facilities to date.

The Working Party has identified that all major saleyards, namely Hawera, Inglewood and Stratford, require stock truck effluent disposal facilities on site. No major saleyard has constructed stock truck effluent disposal facilities, however Taranaki Farmers have obtained discharge permits to discharge wastewater from its saleyards at Stratford and Inglewood. Minor saleyards, namely Opunake, Rahotu and Waverley, do not require stock truck effluent disposal facilities, although they are required to adequately dispose of any contaminated stormwater from the site.

In conjunction with stock agents, saleyard operators must encourage farmers to stand stock off pasture prior to transportation. Farmers should be informed of the benefits of standing stock (for example, clean stock, reduced animal stress, minimal carcass weight loss, and improved animal welfare).

4.1.6 Meat Processors

Meat processors are responsible for communicating requirements for standing stock, transporting stock and receiving stock, with clients. Processors should advise farmers of the appropriate time period for standing stock off pasture prior to transportation. Farmers should be informed of the benefits of standing stock (for example, clean stock, reduced animal stress, minimal carcass weight loss, and improved animal welfare). Processors could develop and implement financial rewards/incentives for standing stock and presenting clean stock.

Stock trucks arriving at meat processors, being an end point destination, may have full effluent holding tanks, which, if not emptied, can cause odour, aesthetic and water quality problems on site. Such effects are addressed under the RMA and meat processors may be required to provide and make available facilities to receive and appropriately dispose of stock effluent from stock being delivered to their sites.

The three major meat processing facilities in the region have stock truck effluent disposal facilities on site. However, although facilities are provided, there is scope for improvement of access and receiving of stock truck effluent delivered to the site. Taranaki Abattoir Company (1992) Limited has no stock truck effluent disposal or washdown facilities on site due to the small size of the company and small amount of stock truck effluent received on site.

4.2 Parties indirectly involved

No single organisation is totally responsible for addressing stock truck effluent issues in Taranaki. There is no legislation specific to stock effluent, nor is there an enforcement regime currently capable of satisfactorily addressing problems arising from stock truck effluent discharges from moving vehicles. Notwithstanding that, there are key parties indirectly involved with roles and responsibilities for stock truck effluent issues.

4.2.1 New Zealand Road Transport Forum

The Road Transport Forum is a non-statutory organisation responsible for advocating and advising the interests of the transport industry. The Road Transport Association is a member of the Working Party. In 1991 the Road Transport Association introduced a voluntary program for fitting effluent holding tanks to stock truck and trailer units. Further, in 1997, a quality assurance scheme was introduced for stock truck operators whereby effluent holding tanks are mandatory equipment.

4.2.2 District Councils

District Councils are the road controlling authorities for local roads, and subsequently they are responsible for maintenance of local roads. District

Councils also have statutory responsibilities for addressing litter in their district. All three district councils in the region are members of the Working Party.

Set out below is the principal statutes that apply to district councils in relation to stock truck effluent issues.

Local Government Act 1974

Part XXI of the Local Government Act 1974 pertains to roads (other than state highways) and in section 357, penalties for damage to roads) states that:

- (1) *Every person commits an offence who, not being authorised by the [district] council or by or under any Act -...*
- (f) *Wilfully or negligently causes or allows any oil, or any liquid harmful to sealed or paved road surfaces or likely to create a danger to vehicles on such surfaces, to escape on to any road having a sealed or paved surface; or...*
- ... and is liable to a fine not exceeding [[\\$1,000]] and, where the offence is a continuing one, to a further fine not exceeding [[\\$50]] for every day on which the offence has continued and may be ordered to pay the cost incurred by the council in removing any such encroachment, obstruction, or matter, or in repairing any damage caused as aforesaid:*
- Provided that no fine shall be imposed unless the information is laid by authority of the council or by an officer thereof.*

This section imposes the same duty and responsibilities as the Transit New Zealand Act 1989, except it applies to roads other than state highways. Any such person is liable to a fine, imposed by an officer of the relevant district council.

Transit New Zealand Act 1989

District councils are required to prepare district roading programmes under section 42H of the Transit New Zealand Act 1989. These programmes contain outputs and objectives to be achieved by each output and capital project, relating to local roading and land transport safety. A district roading programme must not be inconsistent with any national land transport strategy, or any relevant regional land transport strategy, that is in force at the time of preparation of the programme. Contributions made through district council district roading programmes are used as a method to implement any regional land transport strategy having effect in respect of that district (the 'Regional Land Transport Strategy for Taranaki, 2000').

Litter Act 1979

Under the Litter Act 1979 every person who deposits any litter in or on any public place and leaves it there, commits an offence. Particular emphasis is accorded to litter which is of a nature likely to endanger any person or cause physical injury or disease or infection to any person coming into contact with it.

'Public Place' includes every motorway, road or street. 'Litter' includes any water matter.

Every district council and Transit New Zealand (being public authorities) may appoint Litter Control Officers who may already be employees. Stratford District

Council has an appointed litter control officer. In addition, there are a number of persons, who, by virtue of their office, are automatically empowered as Litter control officers, eg. every member of the New Zealand Police. Any officer appointed to such a position is authorised to enforce the provisions of the Act and may intervene to prevent the deposit (or attempted deposit) of litter in any public place.

Any district council, having appointed any such officer, may adopt the provisions of sections 13 and 14 of the Act which apply in respect of infringements. Those committing any such offence can be served with an infringement notice. In addition, under section 15(1)(a) of that Act, depositing litter is likely to be a strict liability offence. The person littering could escape prosecution by showing that they took all reasonable steps to ensure that the offence did not occur. Offenders can be fined \$500 as individuals, or \$2000 as corporate bodies.

Every public authority, whether alone or acting jointly for the purposes of this Act with another public authority or authorities, may make bylaws to give effect to the provisions of this Act.

Resource Management Act 1991

Under section 31 of the Resource Management Act, district councils are responsible for control of the use and development of land. District councils can include rules in their district plans requiring that a land use consent be obtained for stock truck effluent receiving facilities and relating to adverse effects or in relation to .

New Plymouth District Council is the only district council in the region to include rules in its District Plan relating to the requirement for stock truck effluent receiving facilities. The New Plymouth District Plan requires stock truck effluent receiving facilities to be established for any site that receives more than 850 head of stock in any one month, therefore, pursuant to this rule, the Inglewood saleyard must construct stock truck effluent receiving facilities.

4.2.3 Transit New Zealand

Transit New Zealand operates under the Transit New Zealand Act 1989, which establishes the main statutory framework for the control of effluent discharge from stock trucks on state highways. The Act is aimed at protecting roads and truck operators on roads. Section 51 [Penalties for damage to roads, bridges, etc] of the Act states that:

- (2) *Every person commits an offence who, without written permission of the Authority (in the case of a State Highway) or of the Minister (in the case of a road under the minister's control), ...*
 - (e) *Causes or allows any water, tailings, or sludge, or any offensive matter, to flow from any vehicle ... on to a road, or into ditch or drain associated with the road, whether or not on the road; or*
 - (f) *Causes or allows any material or thing to fall on to a road from any vehicle to the danger or lawful road users; or*

(g) Wilfully or negligently causes or allows any substance harmful to sealed or paved road surfaces, or likely to create a danger to vehicles on such surfaces, to escape on to any road having a sealed or paved surface ...

... and is liable on summary conviction to a fine not exceeding \$1000 and to a further fine not exceeding \$50 for each day or part of a day during which the offence is continued.

(3) Every person who commits an offence, be ordered by the Court to pay the cost incurred by the Authority or the Minister in removing any such encroachment, obstruction, hazard, disfigurement, or matter, or in repairing and such damage.

(4) A fine shall not be imposed, and an order for payment or costs incurred shall not be made, under this section unless the information or complaint is laid –
(a) by authority of the Authority or of the Minister or the Commissioner; or
(b) by an officer of the Authority or an employee of the Ministry or a traffic officer of a constable.

The concept and wording of stock truck effluent discharges to state highway roads and roadsides is best captured by section 2(e) of the Act. This section applies whether the discharges are deliberate or negligent. Any complaint of the above nature must be made by the authority of Transit New Zealand, Minister of Transport or an officer of the same.

4.2.4 Transfund New Zealand Limited

Under section 42A of the Transit New Zealand Act, Transfund New Zealand is required to prepare each year, a National Roothing Programme including land transport outputs and capital projects, and associated funding for that financial year. The National Roothing Programme reflects recommendations made by Transit New Zealand in its State Highways Programme, regional councils in their regional programmes and territorial authorities in their district roading programmes.

Regional programmes prepared by regional councils under section 42F of the Act may contain outputs relating to land transport safety, passenger transport services and administration.

Territorial authorities, under section 42H of the Act, prepare district roading programmes. These programmes contain outputs relating to local roading and land transport safety.

In November 2000, Transfund New Zealand approved an addition to Chapter 7 of its Programme and Funding Manual, specifically Policy 7.4.31 'Stock Truck Effluent Disposal Sites (Appendix I). In the policy, Transfund undertakes to partially fund the construction and maintenance of the stock effluent in-transit disposal site and any associated roading works.

4.2.5 Taranaki Regional Council

The Taranaki Regional Council is the facilitator of the Working Party. The Council also has responsibilities under the Resource Management Act 1991 and the Land Transport Act 1998. The Taranaki Regional Council has the following roles and responsibilities:

Resource Management Act 1991

Under section 15 of the Resource Management Act the Taranaki Regional Council is responsible for the control of the discharge of contaminants into or onto land and water.

Section 15 of the Resource Management Act states:

- “(1) No person may discharge any –*
- (a) Contaminant (eg. stock truck effluent) or water into water; or*
 - (b) Contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) entering water...*

unless the discharge is expressly allowed by a rule [in a regional plan and any relevant proposed regional plan], a resource consent, or regulations.”

Under the Resource Management Act, the Taranaki Regional Council has prepared the Regional Fresh Water Plan for Taranaki. Pursuant to that Plan the discharge of stock truck effluent to land, where it will not reach any waterway, is permitted. However, the discharge of stock truck effluent directly to water, or onto land where it may reach water, is not permitted.

In circumstances where discharges occur on the road or the roadside, and where that discharge may enter water, the Taranaki Regional Council can take enforcement action including prosecution action. Of note, however, the Taranaki Regional Council is not empowered to stop vehicles.

In accordance with the Taranaki Regional Council's statutory responsibilities under the Resource Management Act, the Council already licenses meat processors and cartage companies and will be addressing saleyards. Through the monitoring of resource consent conditions, the Council ensures that those organisations receiving large amounts of stock truck effluent are adequately treating and disposing of that waste.

In addition to the Council's regulatory powers under the Resource Management Act, the Council uses a variety of non-regulatory methods to meet its statutory responsibilities with respect to water quality and stock truck effluent issues. These include facilitating the Working Party and the provision of advice and information such as guidelines.

Land Transport Act 1998

The Taranaki Regional Council is further required to prepare a land transport strategy for the region under the Land Transport Act 1998. Section 175 of the Act

requires that every regional land transport strategy identify the most desirable means of responding to the future land transport needs of the region in a safe and cost effective manner.

The Regional Land Transport Strategy for Taranaki (2000) outlines objectives and methods used to meet land transport needs in the Taranaki region. An objective of the Strategy is to avoid and mitigate any adverse effects from land transport on the environment. Policies 8.2.6.6 and 8.2.6.13 are as follows:

“Promote the fitting of effluent holding tanks in stock trucks and encourage appropriate effluent receiving facilities to be built at abattoirs, sale yards and, where necessary, on state highways and local roads and/or in association with truck wash down facilities.”

“Promote the fitting of effluent holding tanks in stock trucks and encourage use of ...where these options can avoid or mitigate adverse environmental effects of land transport and where they are, or could be, practical for alternatives to roading”.

The effect of the Strategy is that the actions of the Land Transport Safety Authority, Transfund New Zealand, Transit New Zealand, Commissioner of Police and Ministry of Transport are not to be inconsistent with the regional land transport strategy.

Transit New Zealand Act 1989

The Regional Council may prepare a regional programme under section 42F of the Transit New Zealand Act 1989 to obtain funding for outputs relating to land transport safety. One of the primary methods for implementing Regional Council responsibilities in the Regional Road Transport Strategy for Taranaki, 2000, is through preparation of the Regional Programme.

5. The Strategy Overview

This Strategy proposes six key measures to address the problem of stock truck effluent spillage onto roads in the Taranaki region. The measures include:

- standing stock four to eight hours prior to transportation;
- the provision of disposal facilities at major meat processing facilities;
- the provision of disposal facilities at major saleyards;
- the provision of disposal facilities at all cartage companies;
- installation of effluent holding tanks on all stock truck and trailer units; and
- construction of a minimum of three in-transit stock truck effluent disposal facilities at selected strategic sites.

Members of the Working Party (namely representatives from the New Plymouth, Stratford and South Taranaki District Councils; Transit New Zealand; Western Central District Road Transport Association; Federated Farmers; and the Taranaki Regional Council) will undertake key roles to address the problem of stock truck effluent discharges onto roads in the Taranaki region. However, the key deliverers of the strategy must be meat processing facilities, and saleyard and cartage company owners who will be responsible for constructing effluent disposal facilities on their sites to ensure disposal of effluent at end-point sources.

6. Promotion of benefits of standing stock

6.1 Policy

1. Minimise the amount of effluent deposited by stock in the truck by standing stock off pasture for four to eight hours prior to transportation.

6.2 Methods

1. Farmers, prior to transporting stock, should stand stock off pasture (but with access to water) for four to eight hours.
2. Meat processors and saleyard operators to coordinate the development of a stock pick up notification system to ensure that farmers are given sufficient notification time to stand stock off pasture to allow animals to clean themselves out, prior to cartage collection.
3. Federated Farmers, Road Transport Association, meat processors and saleyards to provide advice and information in the form of pamphlets, brochures and guidelines, to stock owners.
4. Road Transport Association, Federated Farmers, Taranaki Regional Council, and district council's to develop an education programme to encourage farmers to stand stock off pasture four to eight hours prior to cartage.
5. The Road Transport Industry to encourage stock owners and/or stock agents to stand stock off pasture for four to eight hours prior to cartage.
6. All Working Party members to encourage the Meat Industry Standards Council to develop and implement 'Stock Declaration Cards'.

6.3 Discussion

Method 1 recognises that farmers are in the best position to significantly reduce the amount of effluent generated on trucks while carting stock.

It is estimated that an average dairy cow (500 kg), on an average day, excretes 54 kg of effluent when grazing on pasture (Vanderholm 1984). When the cow is transported, the animal undergoes stress and deposits effluent onto the stock crate deck. Given that each truck and trailer unit holds on average 40 head of cattle, significant volumes of effluent can be generated by stock in-transit. In accordance with the industry Code of Practice it is recommended that stock should be stood off feed prior to transport for four to eight hours. If stock is not stood off-pasture prior to transportation then, dependant upon the weather, stock truck effluent holding tanks could fill up within 5 km to 80 km of travel. Once the holding tank is full, problems associated with stock truck effluent discharged or spilt onto the roads will occur.

Method 2 addresses the need for a system to be in place to ensure that farmers are given enough notification time to stand stock off pasture to allow animals to clean themselves out prior to transportation. On occasion, the failure by farmers to stand stock may be attributed to the lack of notice given to farmers or stock owners by either the truck operator or the stock agent. Stock owners require notification of stock collection times to ensure that sufficient time is allowed to stand stock off pasture.

Method 3 and 4 recognises the need for information and advice and an education programme to be undertaken to encourage standing of stock. Such a programme would emphasise the respective responsibilities of each party and could include a demonstration of financial and animal health benefits accruing to farmers and the meat industry from the standing of stock. Animals may lose up to 5 kg live weight between the pickup location and final destination if the animal has not been stood off-pasture due to animals getting stressed. Meat processing companies do not like 'dirty' animals as this increases their processing costs, for example arising from the processing of dirty pelts, disposing the additional effluent and acquiring the necessary resource consents. Meat processors' animal payout to farmers is generally based on carcass weight, as opposed to live weight, therefore there is no financial gain to farmers not standing stock prior to sending them to meat works (however this is not the case of livestock sales at the saleyards).

Method 5 recognises that the road transport industry, which includes truck operators and the Road Transport Association, can exert a considerable amount of peer pressure on stock owners or their agents to ensure that stock is stood off pasture prior to transportation. It is in the truck operator's interest to ensure that minimal effluent is generated during the trip as any effluent generated is the operator's responsibility and the operator can be prosecuted for discharging or spilling effluent to the road, roadside or a water body under the Litter Act 1979 and the Resource Management Act.

Method 6 recognises that the Meat Industry Standards Council is currently considering introducing Stock Declaration Cards as a record to confirm that standing of stock has taken place. Factors to be considered for inclusion on the Declaration Card is the recording of time stock is taken off pasture/feed, time arranged for stock to be picked up, and actual time stock picked up. The role and format of Stock Declaration Cards is currently being considered by the Meat Industry Standards Council involving meat companies, the stock and station industry, Federated Farmers, Ministry of Agriculture and Forestry, the Animal Health Board, the Meat Board, and animal remedies companies. All Working Party members are encouraged to support this initiative.

7. Provision of disposal facilities at meat processing facilities

7.1 Policy

1. To minimise incidents of stock truck effluent being spilt onto roads by promoting the provision of effluent disposal facilities at all major meat processing facilities in Taranaki.

7.2 Methods

1. Meat processing facility owners to maintain effluent disposal facilities to receive stock truck effluent on site.
2. The Taranaki Regional Council and district councils to require the provision of adequate stock truck effluent disposal facilities at all major meat processing facilities in Taranaki, through the Resource Management Act.
3. The Taranaki Regional Council to monitor the effectiveness of disposal facilities at meat processing facilities in Taranaki.
4. The Taranaki Regional Council and district councils to provide advice, information and technical assistance necessary on appropriate disposal facilities at meat processing facilities, to meet regional and district council requirements.
5. The Road Transport Association to encourage trucking companies to wash down stock trucks immediately following stock delivery at meat processing facilities and advocate for improvement of facilities if not effective.
6. The Taranaki Regional Council, district councils, Transit New Zealand, Federated Farmers and the New Zealand Road Transport Forum to advocate for a review of the legislative framework for preventing stock truck effluent discharges.

7.3 Discussion

Significant restructuring in the meat processing industry in Taranaki in recent years has resulted in fewer meat works operating. There are currently four meat processing facilities (three major) operating in Taranaki. Companies that are operating are processing more stock and are usually going much further afield to source the stock. As a result of the restructuring there has been a significant increase in the number of stock being processed and therefore in the amount of stock truck effluent requiring disposal at the journey end point.

The three major meat processing facilities in the region, namely Riverlands Eltham, Richmond Ltd (Hawera) and Richmond Ltd (Waitotara), provide stock truck effluent disposal facilities (which include washdown facilities). The effluent disposal facilities at all three meat processing facilities require modification to enable better access and efficiency for stock trucks using the facilities. Taranaki

Abattoir Company (1992) Limited, the minor meat processing facility in the region, has no stock truck effluent disposal or washdown facilities, and, due to the small size of the company and small amount of stock truck effluent received, receiving facilities are not required.

Method 1 recognises that all major meat processing facilities in Taranaki, make available, and must continue to maintain, facilities to receive and appropriately dispose of stock truck effluent from stock delivered to their premises. Effluent disposal facilities must be user friendly and therefore designed and located to minimise inconvenience and time loss to livestock carriers.

Method 2 recognises that the Taranaki Regional Council, New Plymouth District Council, Stratford District Council and South Taranaki District Council (through the Resource Management Act) can, by inclusion of rules in district and regional plans, require meat processors to construct stock truck effluent disposal facilities. The Taranaki Regional Council, pursuant to its responsibilities under the Resource Management Act, will monitor the effluent disposal facilities for these companies.

Stock truck effluent spillage onto roads is a hazard that may compromise the safety and efficiency of a district's road transport network. District councils can advocate for the construction of stock truck effluent disposal facilities using the:

- Building Act;
- Transit New Zealand Act; and
- Resource Management Act.

Under section 9 (land use) of the Resource Management Act, district councils can include rules in district plans relating to the construction of stock truck effluent disposal facilities or allow the construction of facilities by issuing a resource consent.

Meat processing companies are also required to obtain a resource consent from the Regional Council to discharge the effluent collected at the facilities. Method 3 provides for the effluent disposal facilities at the companies to be monitored by the Taranaki Regional Council pursuant to its responsibilities under the Resource Management Act.

Method 4 provides for the Taranaki Regional Council and district councils to assist meat processors by providing information, advice and technical assistance on disposal facilities that are appropriate and effective to meet the needs and requirements of meat processors.

Method 5 recognises that the Road Transport Industry must encourage stock truck operators to clean stock trucks prior to collecting stock for transportation, this will ensure that effluent holding tanks have the maximum capacity, and to wash down stock trucks immediately following stock delivery. This, of course, is subject to meat processors providing adequate facilities.

Method 6 recognises that the Road Transport Industry must encourage stock truck operators to wash down stock trucks immediately following stock delivery. This method recognises that meat processors may have disposal facilities that

meet regional and district council requirements, however due to reasons such as design and accessibility, they may not effectively address the needs of truck operators. Members of the Working Party must liaise and advocate with meat processors to ensure that improvements are made to disposal facilities to ensure that all parties needs are addressed.

Legislation presently in place is not specific to stock effluent and no one organisation is ultimately responsible for avoiding or minimising discharges of stock truck effluent. Method 6 provides for Working Party members to continue to promote a review of the legislative framework for preventing stock truck effluent discharges onto roads. A review should include the establishment of an adequate enforcement regime capable of satisfactorily addressing problems arising from stock truck effluent discharges. The review should cover all sectors involved with transportation of livestock, including from the preparation of livestock prior to transportation through to receipt of stock at the destination point.

A brief description of effluent disposal facilities at each of the three major meat processing facilities in Taranaki is set out in Appendix II.

8. Provision of disposal facilities at saleyards

8.1 Policy

1. To minimise incidents of stock truck effluent being spilt onto roads by promoting the provision of effluent disposal facilities at saleyards in Taranaki.

8.2 Methods

1. Saleyard owners to construct and maintain effluent disposal facilities to receive stock truck effluent on site at all major saleyards.
2. The Taranaki Regional Council and district councils to require the provision of adequate stock truck effluent disposal facilities at all major saleyards in Taranaki, through the Resource Management Act.
3. The Taranaki Regional Council to monitor the effectiveness of disposal facilities at all major saleyards in Taranaki.
4. The Taranaki Regional Council and district councils to provide advice, information and technical assistance on appropriate disposal facilities at saleyards facilities, to meet regional and district council requirements.
5. Stock truck operators to advocate for improvement where required of disposal facilities at major saleyards.
6. The Road Transport Industry to encourage members to empty effluent holding tanks and clean stock trucks prior to collecting stock for transportation from saleyards and to empty effluent holding tanks and wash down stock trucks immediately following stock delivery at saleyards.
7. The Taranaki Regional Council, district councils, Transit New Zealand, Federated Farmers and the New Zealand Road Transport Forum to advocate for a review of the legislative framework for preventing stock truck effluent discharges.

8.3 Discussion

Currently there are three major saleyards in Taranaki, at Stratford, Inglewood, and Hawera, and several minor saleyards are used on an irregular basis. No saleyard has stock truck effluent disposal facilities, however all saleyards have effluent disposal systems for the disposal of effluent from stock held within the saleyards. These systems generally have the potential to be upgraded to treat stock truck effluent.

Taranaki Farmers and Wrightson's (owner operators of the saleyards in Taranaki) have been considering rationalisation since 1994. Working Party members supported this rationalisation as it was envisaged that stock truck effluent disposal facilities would be installed at saleyards following the completion of

rationalisation. The 1997 report noted that rationalisation of saleyards in Taranaki had not yet occurred and the report recommended that there be provision of effluent disposal facilities at all saleyards. Rationalisation of saleyards has still not occurred. This Strategy again recognises that major saleyards require stock truck effluent disposal facilities, however it also recognises that, because of infrequent use, minor saleyards do not require such facilities but that stock truck effluent can be included with yard effluent. Taranaki Farmers and Wrightson's must become more accountable for the effluent arriving at their sites as a result of livestock carriers going to and from the saleyards, being unable to empty and clean out their effluent holding tanks.

Method 1 recognises that all major saleyards in Taranaki must have, and make available, facilities to receive and appropriately dispose of stock truck effluent from stock delivered to their premises. Effluent disposal facilities must be designed and located to minimise inconvenience and time loss to livestock carriers.

Method 2 recognises that the Taranaki Regional Council, New Plymouth District Council, Stratford District Council and South Taranaki District Council (through the Resource Management Act) can, by inclusion of rules in district and regional plans, require saleyards to construct stock truck effluent disposal facilities. The Taranaki Regional Council, pursuant to its responsibilities under the Resource Management Act, will monitor the effluent disposal facilities for these companies.

Stock truck effluent spillage onto roads is a hazard that may compromise the safety and efficiency of a district's road transport network. District councils can require for the construction of stock truck effluent disposal facilities using the:

- Building Act;
- Transit New Zealand Act; and
- Resource Management Act.

Under section 9 (land use) of the Resource Management Act, district councils can include rules in district plans relating to the construction of stock truck effluent disposal facilities or allow the construction of facilities by issuing a resource consent.

Inglewood and Stratford saleyards have obtained resource consents from the Taranaki Regional Council to discharge their yard effluent. Hawera saleyard does not have resource consents as the discharge occurs to sewer, however the site is monitored. In the future, the Taranaki Regional Council will, when considering any resource consent application, have particular regard to addressing the need for stock truck effluent disposal facilities. This may mean that, for a resource consent to be granted or renewed, provision of stock truck effluent reception, disposal, and treatment at the saleyard will be required. Method 3 recognises that the Taranaki Regional Council, pursuant to its responsibilities under the Resource Management Act, will monitor the effluent disposal facilities for these companies.

Method 4 provides for the Taranaki Regional Council and district councils to assist saleyard operators by providing information, advice and technical assistance on disposal facilities that are appropriate and effective to meet their needs and requirements.

Method 5 recognises that although saleyard operators may have disposal facilities that meet regional and district council requirements, the facilities may not effectively address the needs of truck operators due to reasons such as design and accessibility. Members of the Working Party will liaise and advocate with saleyard operators to ensure that improvements are made to disposal facilities (which may include washdown facilities) to ensure that all parties needs are addressed.

Method 6 recognises that the Road Transport Industry must encourage stock truck operators to empty effluent holding tanks and clean stock trucks prior to collecting stock for transportation, this will ensure that effluent holding tanks have the maximum capacity. Likewise, the Road Transport Association must also encourage stock truck operators to empty effluent holding tanks and wash down stock trucks immediately following stock delivery. This, of course, is subject to saleyards providing adequate facilities.

Legislation presently in place is not specific to stock effluent and no one organisation is ultimately responsible for avoiding or minimising discharges of stock truck effluent. Method 7 provides for Working Party members to continue to promote a review of the legislative framework for preventing stock truck effluent discharges onto roads. A review should include the establishment of an adequate enforcement regime capable of satisfactorily addressing problems arising from stock truck effluent discharges. The review should cover all sectors involved with transportation of livestock, including from the preparation of livestock prior to transportation through to receipt of stock at the destination point.

9. Provision of disposal facilities at cartage companies

9.1 Policy

1. To minimise incidents of stock truck effluent being spilt onto roads by promoting the provision of effluent disposal facilities at all cartage companies in Taranaki.

9.2 Methods

1. Cartage company owners to have and maintain effluent disposal facilities to receive stock truck effluent on site.
2. The Taranaki Regional Council and district councils to advocate for the provision of effective stock truck effluent disposal facilities at all cartage company depots in Taranaki, through the Resource Management Act.
3. The Taranaki Regional Council to monitor the effectiveness of disposal facilities at all cartage companies in Taranaki.
4. The Taranaki Regional Council and district councils to provide advice, information and technical assistance on appropriate disposal facilities at cartage companies facilities, to meet regional and district council requirements.
5. The Road Transport Industry to encourage cartage companies to empty effluent holding tanks and clean stock trucks before stock is collected for transportation, and to empty effluent holding tanks and wash down stock trucks immediately following stock delivery.
6. The Taranaki Regional Council, district councils, Transit New Zealand, Federated Farmers and the New Zealand Road Transport Forum to advocate for a review of the legislative framework for preventing stock truck effluent discharges.

9.3 Discussion

Ten major cartage companies are located within Taranaki. Method 1 recognises that all cartage companies in Taranaki have, and must continue to maintain, facilities to receive and appropriately dispose of stock truck effluent from stock trucks returning to their premises.

Method 2 recognises that the Taranaki Regional Council, New Plymouth District Council, Stratford District Council and South Taranaki District Council (through the Resource Management Act) can, by inclusion of rules in district and regional plans, require cartage companies to construct stock truck effluent disposal facilities. The Taranaki Regional Council, pursuant to its responsibilities under the Resource Management Act, will monitor the effluent disposal facilities for these companies.

Stock truck effluent spillage onto roads is a hazard that may compromise the safety and efficiency of a district's road transport network. District councils can advocate for the construction of stock truck effluent disposal facilities using the:

- Building Act;
- Transit New Zealand Act; and
- Resource Management Act.

Under section 9 (land use) of the Resource Management Act, district councils can include rules in district plans relating to the construction of stock truck effluent disposal facilities or allow the construction of facilities by issuing a resource consent.

Cartage companies are also required to comply with Regional Council requirements regarding discharge of effluent collected at the facilities. Method 3 provides for the consented effluent disposal facilities at the companies to be monitored by the Taranaki Regional Council pursuant to its responsibilities under the Resource Management Act.

Method 4 provides for the Taranaki Regional Council and district councils to assist cartage companies by providing information, advice and technical assistance on disposal facilities that are appropriate and effective to meet their needs and requirements.

Method 5 recognises that the Road Transport Industry must encourage cartage company operators to empty holding tanks and clean stock trucks prior to collecting stock for transportation, and to empty holding tanks and wash down stock trucks immediately following stock delivery. This will ensure that effluent holding tanks have the maximum capacity. This, of course, is subject to provision of adequate disposal and treatment facilities at cartage companies, at other collection points and end point destinations.

Legislation presently in place is not specific to stock effluent and no one organisation is ultimately responsible for avoiding or minimising discharges of stock truck effluent. Method 6 provides for Working Party members to continue to promote a review of the legislative framework for preventing stock truck effluent discharges onto roads. A review should include the establishment of an adequate enforcement regime capable of satisfactorily addressing problems arising from stock truck effluent discharges. The review should cover all sectors involved with transportation of livestock, including from the preparation of livestock prior to transportation through to receipt of stock at the destination point.

A brief description of disposal facilities at cartage companies is provided in Appendix III.

10. Provision of effluent holding tanks on stock trucks

10.1 Policy

1. Minimise the amount of effluent being spilt on Taranaki roads by promoting the provision of effluent holding tanks to all stock truck and trailer units.

10.2 Methods

1. Cartage company owners to install and maintain effluent holding tanks on all stock truck and trailer units.
2. The Road Transport Forum to implement the Quality Assurance Scheme to advocate that effluent holding tanks be installed in all stock truck and trailer units.
3. The Taranaki Regional Council to monitor the effectiveness of effluent holding tanks on stock truck and trailer units.
4. Members of the Working Party to undertake public awareness programmes encouraging the public to report incidents of stock truck effluent spills.
5. The Taranaki Regional Council, district councils, Transit New Zealand, Federated Farmers and the New Zealand Road Transport Forum to advocate for a review of the legislative framework for preventing stock truck effluent discharges.

10.3 Discussion

In 1991 the Road Transport Forum introduced a voluntary programme for fitting effluent holding tanks to stock truck and trailer units. In 1997, the Road Transport Forum introduced a quality assurance scheme for stock truck operators whereby effluent holding tanks are mandatory equipment. Cartage companies involved in the quality assurance programme fitted effluent tanks to all their stock truck and trailer units (generally 300 litre effluent tanks).

In 1994 the TRENDS report recognised that the majority of stock carriers had effluent tanks fitted to their trucks and, at the time, the problem was of how and where to dispose of the effluent. The TRENDS report also recommended that the Ministry of Transport be requested to create, and subsequently enforce, regulations requiring the provision of effluent holding tanks on all classes of vehicle used for stock cartage.

In 1997 the TRENDS report reviewed the percentage of effluent holding tanks fitted to stock trucks and identified that 65% of all stock truck and trailer units in Taranaki had effluent holding tanks fitted. The 1997 report recommended that members of the Working Party promote the provision of effluent holding tanks to all stock truck and trailer units that did not have holding tanks fitted.

It is very pleasing to note that since the 1997 report all ten cartage companies in Taranaki have purchased and fitted, or are waiting to fit, effluent holding tanks to vehicles transporting livestock. Method 1 requires that stock truck and trailer unit owners install effluent holding tanks to all stock truck and trailer units. The installation of effluent holding tanks to stock truck and trailer units is mandatory under the Road Transport Forum's 1997 quality assurance scheme.

Method 2 requires the continuation of the Road Transport Forum's quality assurance scheme for cartage companies to install effluent holding tanks on all stock truck and trailer units.

Method 3 recognises that the Taranaki Regional Council, pursuant to its responsibilities under the Resource Management Act, will monitor the effectiveness of effluent holding tanks.

Spillage of effluent from stock trucks is a significant safety problem for road users, and will continue to be a problem even after in-transit stock truck effluent disposal facilities have been established. Following the establishment of in-transit facilities, Method 4 recognises that road users must be educated and encouraged to report incidents of stock trucks spilling effluent onto roads. The reporting of incidents and the identification of vehicles will help the Road Transport Association and the Taranaki Regional Council to identify those cartage companies and/or vehicles that have not fitted holding tanks. The education and reporting programme should commence following construction of in-transit facilities to enable identification of those operators who are not utilising the facilities.

Legislation presently in place is not specific to stock effluent and no one organisation is ultimately responsible for avoiding or minimising discharges of stock truck effluent. Method 5 provides for Working Party members to continue to promote a review of the legislative framework for preventing stock truck effluent discharges onto roads. A review should include the establishment of an adequate enforcement regime capable of satisfactorily addressing problems arising from stock truck effluent discharges. The review should cover all sectors involved with transportation of livestock, including from the preparation of livestock prior to transportation through to receipt of stock at the destination point.

11. Provision of in-transit stock truck effluent disposal facilities

11.1 Policies

1. Establish, at strategic locations in the Taranaki region, in-transit stock truck effluent disposal facilities.
2. Promote all appropriate parties to use the in-transit stock truck effluent disposal facilities.

11.2 Methods

1. The Taranaki Stock Truck Effluent Working Party to investigate and identify potential sites for in-transit stock truck effluent disposal facilities.
2. The Taranaki Stock Truck Effluent Working Party to liaise with other regions regarding location of in-transit stock truck effluent disposal facilities.
3. The Taranaki Stock Truck Effluent Working Party to obtain a commitment from all appropriate parties in relation to the construction, maintenance and use of the in-transit stock truck effluent disposal facilities.
4. Transfund New Zealand to approve funding of in-transit stock truck effluent disposal sites as outlined in Chapter 7 of the Programme and Funding Manual, 7.4.31 Stock Truck Effluent Disposal Sites.
5. The relevant road controlling authorities to fund, in conjunction with Transfund New Zealand, construction and maintenance of stock truck effluent disposal facilities.

11.3 Discussion

The increase in stock movement within the region, and from outside of the region, into the region, increases the potential for effluent to be discharged onto Taranaki roads. The spillage of effluent from stock trucks is identified as a road safety and environmental issue in the Regional Land Transport Strategy for Taranaki (2000).

The investigation undertaken by the TREDs report and subsequent investigation by Working Party members addresses the requirement of Method 1. Members of the Working Party are the principal parties responsible for preventing and minimising effluent spillage to roads, and are therefore responsible for identifying strategic locations for the construction of stock truck effluent disposal sites in Taranaki.

In 1994 the Working Party commissioned Works Consultancy Services Limited to produce the TREDs report which investigated potential sites for the provision of stock truck effluent disposal facilities. The TREDs report identified and investigated 35 potential sites for the protection of locations on travel routes into and within Taranaki.

Following the TRENDS report, the Working Party recommended that in-transit stock truck effluent disposal facilities be constructed at two sites protecting the northern and southern transport corridors into Taranaki. The northern site was located south of the Motunui Synfuels Plant. The southern site was located between Patea and Waverley (alternative sites were also identified). The two preferred sites were identified as providing important protection to specific problem areas, being Manawapou Hill and both Mt Messenger and Waitara. Investigation undertaken by the Working Party into construction design and cost estimated that construction costs would be \$250,000 per site plus per annum operating costs of \$20,000. The high potential cost of constructing and maintaining in-transit facilities meant that the Working Party did not proceed with the construction of these facilities and alternative more cost effective policy methods were recommended and implemented.

Since 1997 there has been a significant increase in the amount of livestock being transported into the region from outside of the region, and the estimated construction cost of in-transit facilities has greatly reduced. The increase in livestock transportation has resulted in stock trucks travelling longer distances with the potential for effluent holding tanks to become full before end destinations are reached. The cost of constructing in-transit facilities is now estimated to be \$100,000, with annual operating costs of between \$8,000 and \$12,000, based on designs and costs of in-transit facilities constructed at Allanton, South Island.

Accordingly, the Working Party now considers it necessary to construct stock truck effluent disposal facilities at three locations to protect entrance points and problem areas throughout the Taranaki region. Figure 5 identifies the proposed location of stock truck effluent disposal facility sites. The Working Party has identified two sites: State Highway 43, Stratford; and State Highway 3, Waverley. The Working Party recognises that there is a need for a disposal facility to protect the northern Taranaki region boundary, however no location has been identified to date. The Working Party must undertake further investigation to identify a suitable location in north Taranaki between the State Highway 3 and 3A intersection and the northern regional boundary near Mt Messenger on State Highway 3.

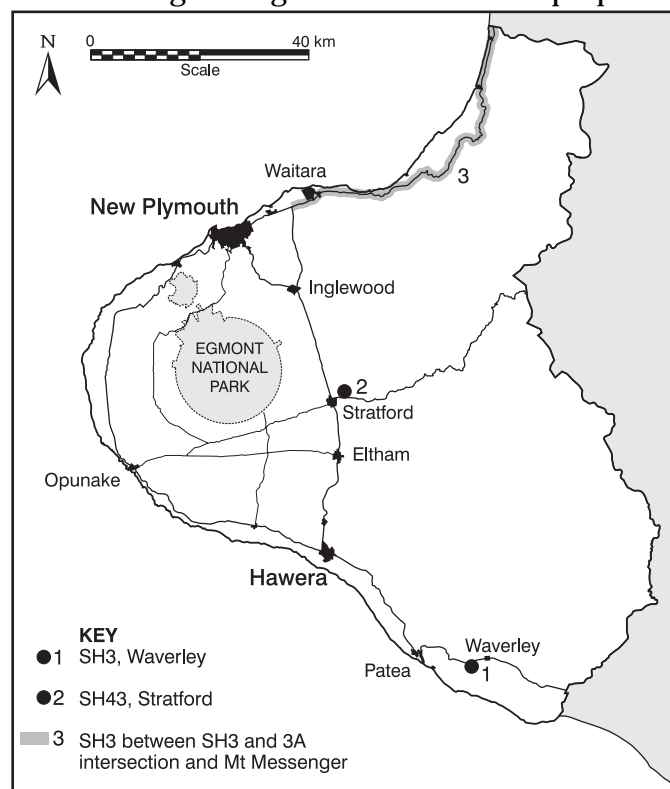


Figure 5 Location of proposed in-transit disposal facilities

Method 2 recognises that the Working Party must work closely with other regions when investigating potential locations for in-transit facilities in Taranaki. This is particularly necessary in the north of the region where the Working Party consider that there is a strong case for an in-transit stock truck effluent disposal facilities at Piopio.

Method 3 recognises that a commitment is required from all parties who will be involved in the construction, maintenance and use of in-transit stock truck effluent disposal facilities, these being members of the Taranaki Stock Truck Effluent Working Party and livestock transportation operators.

The construction of in-transit stock truck effluent disposal facilities must be in accordance with Transfund New Zealand's Chapter 7 Programme and Funding Manual, 7.4.31 Stock Truck Effluent Disposal Sites. Method 4 ensures that the construction of in-transit stock truck effluent disposal facilities complies with the funding policy. Method 5 commits the relevant road controlling authorities to contribute to funding of in-transit stock truck effluent disposal facilities, as set out in Transfund New Zealand's Policy 7.4.31 Stock Truck Effluent Disposal Sites.

The Working Party recommends that at least three in-transit stock truck effluent disposal facilities will initially be required to address problems occurring in-transit with respect to stock truck effluent discharges to Taranaki roads. It is proposed that the three in-transit disposal facilities will initially be required on the main arterial routes to successfully address the problem. The effectiveness of the in-transit disposal facilities will be reviewed with the possibility of further in-transit facilities being constructed in the future. All in-transit stock truck effluent disposal facilities will be constructed in accordance with the following criteria.

11.3.1 Criteria for selecting in-transit sites

Several factors must be considered when looking at where disposal facilities will be located in the Taranaki region. Working Party members, in consideration of where to locate in-transit stock truck effluent disposal facilities, have had regard to protection matters, location factors, and cost issues.

Protection

There are two issues that must be considered when selecting sites for construction of in-transit stock truck effluent disposal facilities. The issues are stock trucks entering the Taranaki region from outside the region and stock trucks travelling within the Taranaki region. When selecting potential sites for in-transit stock truck effluent disposal facilities the Working Party must have regard to the protection of entry points into the region, townships, and problem areas, such as steep inclines, blind spots and windy areas.

Location

Location of potential sites must be selected with regard to the main stock trucking routes. Sites will be located in the most strategic positions to provide a facility for stock trucks travelling from numerous routes. Sites will also be located as close as practicable to the road for ease of access. The sites must be considered in relation to each other to assess how the implementation at one site will change another site's location requirements. The sites must also be considered in relation to inter-

regional issues, specifically where sites are established, proposed, or required outside of the Taranaki region.

Cost

The cost of constructing and maintaining in-transit sites will depend upon site location, type of land, site access, facility design, whether the land needs to be purchased or leased by the road controlling authority, etc. The option of whether suitable land can be utilised must be explored, ie. owned by local authorities or Transit New Zealand. As a guide in-transit facilities have been constructed at Allanton in the South Island, at a capital cost of \$100,000, with annual operating costs of between \$8,000 and \$12,000. This is a positive signal that cost effective disposal facilities can be provided.

11.3.2 Specific site evaluations

SITE A – SH3, WAVERLEY

Site description and map location

The site is located on the southern side of State Highway 3, between the intersection of Peat Road/Ihupuku Road and State Highway 3, and the Waverley Racecourse, map reference Q22: 464-580, see Figure 6.

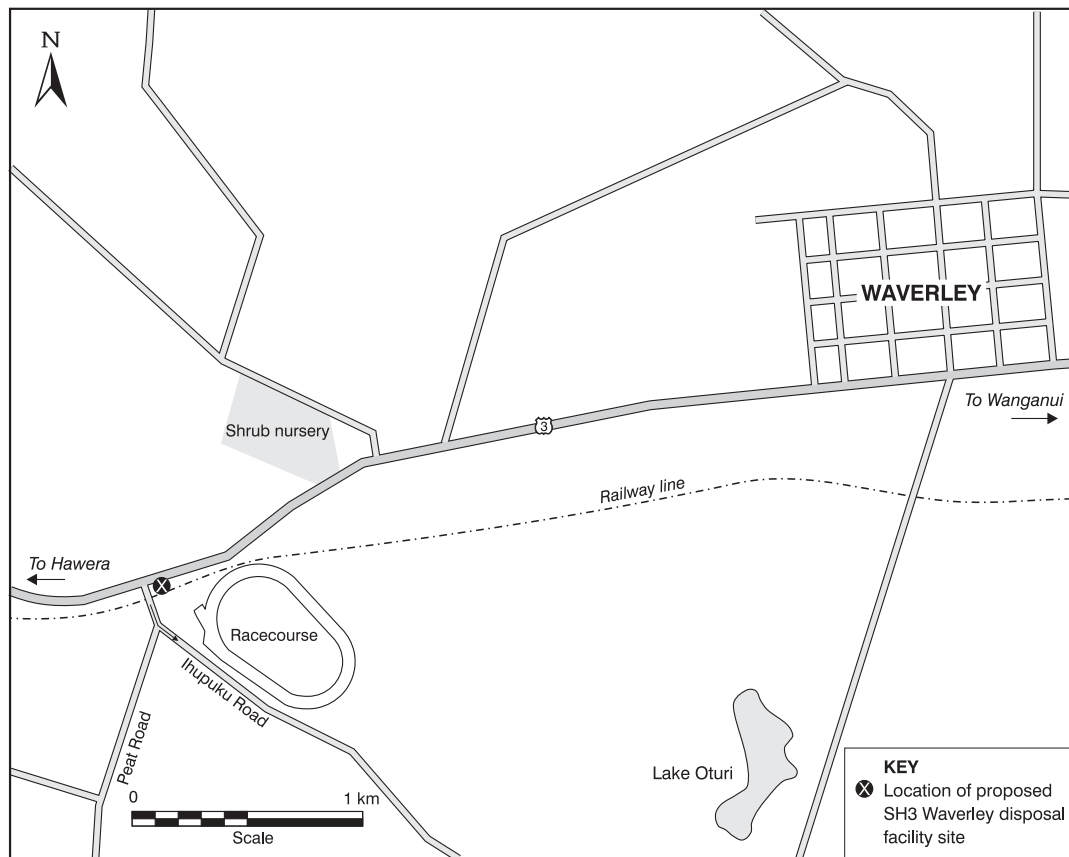


Figure 6 Location of proposed Waverley disposal facility site

Land ownership

Transit New Zealand.

Protected locations

Stock truck effluent disposal facilities on this site will protect the northern and western Taranaki region from discharges of stock truck effluent coming into the region from the south and east.

Attributes of site

Location of the site enables vehicles slowing to enter the site from the Waverley approach, to be readily visible to following motorist. Visibility is also available to trucks exiting the site that are continuing travelling west. Upon exiting the site to continue travelling west, the road is on a down grade which will assist vehicles to reach cruising speed and thus minimise conflict with approaching traffic.

Design and cost of in-transit facility

Design of the facility will be similar to designs for the stock effluent disposal facility constructed at Allanton in the South Island. Effluent will be deposited to holding tanks on site which will be serviced by sucker trucks that will deliver the waste to the Waverley oxidation ponds.

Cross boundary/inter-site considerations

The site will protect entry to the South Taranaki District. The South Taranaki District Council has agreed to meet its share of capital and operating costs associated with the facility.

SITE B – SH43, STRATFORD

Site description and map location

The site is located just off State Highway 43 on Esk Road, near to, or possibly beside, the saleyard area, see Figure 7.

Land ownership

Stratford District Council.

Protected locations

The Stratford urban area and its rural environs would be the principal protected locations. The main concern in Stratford is spillage of effluent at the two roundabouts. A disposal facility at this site will intercept trucks coming from the

east travelling to the west. Townships will also be protected both north and south of Stratford.

Attributes of site

Esk Road is a well formed gravel road that already has adequate manoeuvre room for truck and trailer units because of its association with the saleyards.

Design and cost of in-transit facility

Design of the facility will be similar to designs for the stock effluent disposal facility constructed at Allanton in the South Island. A piped sewerage system is available as an option for the disposal of the effluent.

Cross boundary/inter-site considerations

This site will protect internal sites within the region.

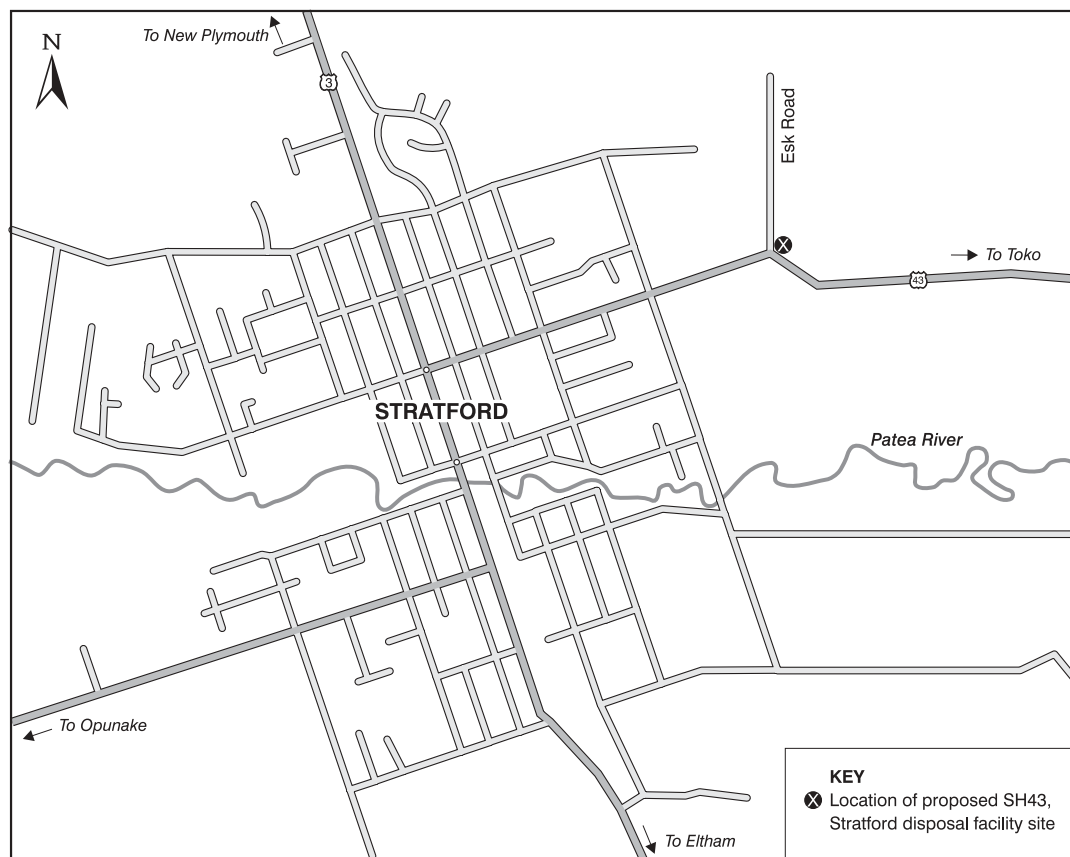


Figure 7 Location of proposed Stratford disposal facility

SITE C – NORTHERN TARANAKI

Site description and map location

A location between State Highway 3 and 3A intersection and Mt Messenger on State Highway 3. A site will be confirmed following consultation and negotiation with all interested parties, and following liaison with the Environment Waikato.

Land ownership

To be investigated.

Protected locations

Townships between the site and Opunake on State Highways 3 and 45, and south bound locations on State Highways 3 and 3A, being Urenui, Bell Block, New Plymouth, Oakura, Okato, Pungarehu, Rahotu, and Inglewood.

Attributes of site

To be investigated.

Design and cost of in-transit facility

Design of the facility will be similar to designs for the stock effluent disposal facility constructed at Allanton in the South Island.

Cross boundary/inter-site considerations

Protection of the north Taranaki and Waikato region boundary and upper half of the region.

11.3.3 Cross boundary considerations

When selecting the location of in-transit stock truck effluent disposal facilities, consideration has been undertaken of inter-regional requirements.

11.3.4 Planning requirements

Construction of in-transit stock truck effluent disposal facilities (the stock effluent capture and treatment options) will require land use consents from the District Council to authorise the use of land. Depending on the treatment system, discharges, either into waterways or onto land, will require discharge permits from the Regional Council. The district councils and Regional Council will assist in the acquisition of resource consents.

11.3.5 Funding formula

The funding of in-transit stock truck effluent disposal facilities will be undertaken in accordance with Policy 7.4.31 Stock Truck Effluent Disposal Sites of Transfund

New Zealand's Programme and Funding Manual, which comprises of the following components:

- Transfund New Zealand, as a result of inclusion in the road controlling authority programme, to pay 50% of construction costs of effluent disposal infrastructure.
- The New Plymouth District Council, Stratford District Council and South Taranaki District Council to pay the balance of construction costs of in-transit stock truck effluent disposal facilities (50%).
- Transfund to pay total cost (100%) of any roading improvement works associated with construction of the site entrance.
- The relevant District Council will provide financial assistance for the maintenance of effluent disposal infrastructure, under the relevant amenity/safety maintenance work category, of the district roading programme at the base rate.
- District councils and Transit New Zealand will include provision for financial assistance for the maintenance of associated roading improvement works in relevant state highway or district roading programme.

12. Recommendations

That members of the Working Party:

1. promote farmers to stand stock off pasture for four to eight hours prior to transportation.
2. initiate an education programme to encourage farmers to stand stock off-pasture four to eight hours prior to cartage.
3. promote the development of 'Stock Declaration Cards'.
4. initiate a review of the legislative framework for preventing stock truck effluent discharges.
5. promote cartage company owners to continue to install and maintain effluent holding tanks on all stock truck and trailer units.
6. promote the provision of adequate and effective stock truck effluent disposal facilities at meat processing facilities.
7. promote the provision of adequate and effective stock truck effluent disposal facilities at major saleyards.
8. promote the provision of adequate and effective stock truck effluent disposal facilities at cartage company yards.
9. promote the provision of information and technical assistance to meat processing companies, saleyards and cartage companies on appropriate and effective stock truck effluent disposal facilities.
10. initiate a public awareness programme to encourage members of the public to report incidents of stock truck effluent spills.
11. note recent trends now necessitate the construction of a minimum of three in-transit stock truck effluent disposal facilities.
12. note two in-transit stock truck effluent disposal facility sites have been identified: State Highway 3 Waverley, and Esk Road, Stratford.
13. note further investigation is required to identify a site for an in-transit stock truck effluent disposal facility on State Highway 3 between the intersection of State Highway 3 and State Highway 3A and Mokau.
14. support Transfund New Zealand's funding policy 7.4.31 Stock Truck Effluent Disposal Sites as outlined in Chapter 7 of the Programme and Funding Manual.
15. note that relevant road controlling authorities, in conjunction with Transfund New Zealand, to fund construction and maintenance of in-transit stock truck effluent disposal facilities.

16. note that a commitment must be obtained from all appropriate parties in relation to the construction, maintenance and use of in-transit stock truck effluent disposal facilities.
17. initiate implementation of all methods identified in this Strategy.

Appendix I

Appendix II

MEAT PROCESSING COMPANIES DISPOSAL FACILITIES

RICHMOND LTD (WAITOTARA)

Richmond Ltd's system is highly efficient and utilises modern technology in dealing with plant effluent. In 1992 the first two stages of a pasture irrigation system designed to treat and dispose of the screened and settled effluent were completed. Two areas adjacent to the plant totalling 7.4 hectares are reticulated. Stage three was commissioned in 1995, which comprised of a 6.0 hectares plateau area south of the plant. An automated control system was installed for control of effluent loadings and spray drift. No stock truck effluent disposal or washdown facilities are provided.

RICHMOND LTD (HAWERA)

Richmond's stock truck effluent washdown facility is well maintained and off the usual transport route. The facility was not designed specifically for stock truck effluent but is used by stock trucks delivering to the plant. The disposal and washdown systems are at the same location which results in delays if the washdown system is in use. The facility experienced minor problems in 1996, which required a new barrier system to be installed to divert potential overflow. Nevertheless, Richmond Ltd provides a service to the carriers. The effluent is incorporated into stockyard washings and treated before it is discharged into the Hawera sewer system.

RIVERLANDS ELTHAM

Riverlands Eltham stock delivery and washdown sites are combined. This limits its current use and slows the off-loading of stock. The disposal of effluent consists of dumping the effluent down a ramp, which can result in effluent being transported off site on vehicle wheels.

TARANAKI ABATTOIR COMPANY (1992) LTD

There is no stock truck washdown facility at Taranaki Abattoirs. Their waste treatment system processes only effluent and wastes generated on site. If the abattoir were to expand its operation they would be required to install a stock truck effluent disposal facility. However, expansion is unlikely to occur due to site limitations and the abattoir being too small to warrant the cost.

Appendix III

CARTAGE COMPANY DISPOSAL FACILITIES

AITKEN TRANSPORT LTD

All truck and trailer units have effluent holding tanks fitted. A stock truck effluent disposal system at the yard consists of holding ponds that are cleaned out four times per year.

L.A. CHATTERTON LTD

All truck and trailer units have effluent holding tanks fitted. The company has a depot in Waitara and Okato. Each depot has a resource consent to discharge of stock truck effluent: the Okato depot discharges stock truck effluent and wastewater from stock truck washdown by spray irrigation onto and into land in the vicinity of an unnamed tributary of the Pitone Stream; and the Waitara depot discharges stock truck effluent and washdown water onto and into land and associated emissions to air at Brown Road, Waitara. The company also discharges some effluent and wastewater into the Waitara town wastewater reticulation system.

INGLEWOOD LIVESTOCK

Inglewood Livestock is made up of the amalgamation of Corlett Trucking's Cordelia Street Stratford site, and Lester Transport Ltd. The company has effluent holding tanks fitted to two truck and trailer units, and one smaller livestock transporting truck. Effluent holding tanks are currently being fitted to a truck and trailer unit and the company will be fitting tanks to the one remaining livestock transporting truck. At the Cordelia Street site, the company has holding ponds for stock truck effluent and wastewater, which are then discharged into the town trade waste system.

PETER MACK TRANSPORT

All truck and trailer units have effluent holding tanks fitted. A stock truck effluent disposal system at the yard is connected to farm oxidation ponds.

MAURICE VICKERS LTD

All truck and trailer units have effluent holding tanks fitted. A stock truck effluent disposal system at the yard consists of holding ponds.

SULLIVAN & CO. CONTRACTING

All truck and trailer units have effluent holding tanks fitted. Stock truck effluent and wastewater is discharged to land by spray irrigation.

SANDFORDS LIVESTOCK

All truck and trailer units have effluent holding tanks fitted. At the Hawera depot there are holding ponds for stock truck effluent disposal and wastewater, at the Skeet Road depot there is a three pond system.

WAVERLEY LIVESTOCK LTD

All truck and trailer units have effluent holding tanks fitted. A stock truck effluent disposal system at the yard consists of holding ponds.

B.F. HUGHES TRANSPORT

B.F. Hughes Transport is not a major livestock transportation company. Effluent holding tanks have been purchased for the companies two truck and trailer units, however they require installation.

KEITH BAKER

Korito Road, Egmont Village.