

**Industry Code of Practice
for the Minimisation of
Stock Effluent Spillage
from Trucks on Roads**

**National Stock Effluent
Working Group**

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Introduction

The National Stock Effluent Working Group was established by the Road Controlling Authorities' Forum in 1997, to bring together all the appropriate industry groups involved with the movement of stock. The objective was to develop practices and solutions to reduce the amount of effluent falling from stock trucks onto New Zealand roads. The group comprises representatives of Federated Farmers of NZ (Inc), the Meat Industry Association of New Zealand (Inc), the New Zealand Stock and Station Agents Association, the Road Transport Forum, Transit New Zealand, territorial and local government and Lincoln University.

This document has been prepared by a small sub-group of the national group and has been endorsed by their respective industry groups. It is intended that the Code will be implemented immediately by all parties, with a review scheduled to take place early in 2003/4. This review will consider the impact of the Code, the extent of the take-up by the various industry groups, whether further action is required and whether changes to the Code of Practice are required.

Stock Effluent Working Group

Industry Code of Practice for the Minimisation of Stock Effluent Spillage from Trucks on Roads

The discharge of stock effluent from trucks on roads is **not** “someone else’s problem” – it is the responsibility of everybody involved to play their part.

What is the purpose of this code?

- To provide information to groups involved in the *handling and transportation of livestock* (farmers, livestock carriers, meat processing companies, stock and station agents, saleyard operators), those with a *resource management* role (Regional Councils and Territorial Authorities) and *roading controlling authorities* (Transit NZ and Territorial Authorities) on how to reduce the amount of stock effluent deposited on the roads from stock trucks.
- To have voluntary and co-operative industry management of the issue, which will also eliminate the need for compulsory legislation.

Federated Farmers of NZ (Inc), the Road Transport Forum, the Meat Industry Association of New Zealand, the NZ Stock and Station Agents Association, Transit NZ and other road controlling authorities, and Regional Councils are working together to achieve the following objective:

‘To minimise the amount of stock effluent that spills on public roads from stock trucks by efficiently and effectively co-ordinating and managing the standing and transportation of stock, the containment of effluent while in transit and the disposal of collected effluent.’

Why have a Code?

It is no longer acceptable to the general public, regulators, and road controlling authorities to allow significant amounts of stock effluent to be spilt on our roads from stock trucks.

The reasons for this include:

- Environmental concerns (public nuisance and run-off).
- Road safety (slippery roads and dirty windshields).
- New Zealand’s ‘clean green’ image (aesthetics).

What are the benefits of minimising effluent spillage?

Public benefits:

- Improved environmental conditions
- Positive public perception of the industry (New Zealanders and tourists)
- Enhancement of New Zealand's 'clean green' image
- Safer roads
- Better animal welfare

Benefits to farmers and consumers:

- Improved meat quality as stock stress is reduced (stood stock travel better)
- Better prices for clean well-presented stock and improved meat quality at slaughterhouses and saleyards

What are the contributing factors?

The objective of the code can be achieved by managing the three factors contributing to the amount of effluent being spilt onto roads.

Factor:	Influenced by:
Amount of effluent the animals deposit on the truck	<ul style="list-style-type: none"> • Standing time on farm prior to transportation • Pasture / crop / feed conditions stock have been on prior to transportation
Effluent spillage from the truck / vehicle onto the road	<ul style="list-style-type: none"> • Installation of tanks or other containment equipment / devices
Ability to collect and dispose of effluent	<ul style="list-style-type: none"> • Industry acceptance of the principle that the load being delivered includes both the effluent and the stock • Availability of effluent discharge sites at stock destination points (ie. processing plants, saleyards, farms) • Availability of appropriate in-transit dump sites on main stock routes.

Each of these factors can be controlled or managed to some extent by the industry groups involved in the transportation of livestock. This Code outlines the responsibilities of each of the major groups involved: farmers, livestock carriers, and meat processors, operators of saleyards, stock and station agents, regional councils, territorial authorities and road controlling authorities.

Who are the other responsible parties involved?

There are many parties involved other than NSEWG.

- A. Those Directly Involved with the Handling and Transportation of Stock:
- Farmers
 - Livestock Carriers
 - Agents (Stock Agents and Meat Processing Company Agents)
 - Saleyard Operators and Owners
 - Meat Processors
- B. Those Indirectly Involved:
- Regional Councils and Territorial Authorities (in their resource management role)
 - Road Controlling Authorities (Transit NZ and territorial authorities)

As an example, the successful operation of two effluent dump sites in South Waikato was developed and funded jointly by Transit NZ, Environment Waikato and the South Waikato District Council.

What are the basic principles?

The basic principles to be applied are:

- i) **Stock is stooed before it is transported.**
- ii) **Simple and appropriate methods to collect and dispose of effluent from trucks delivering stock are used.**
- iii) **A co-ordinated approach is in place to control this problem by good communication between *all those directly and indirectly involved with the handling and transportation of stock, and the management and disposal of effluent.***
 - Those *directly* involved with the handling and transporting stock: Farmers, Livestock Carriers, Agents, Saleyard Operators and Meat Processors.
 - Those *indirectly* involved: Regional Councils, Territorial Authorities and Road Controlling Authorities.

A. Farmers' Responsibilities and Guidelines

i. Farmers' Responsibilities

Basic Principles

- i) Stock is stood before it is transported.
- ii) Simple and appropriate methods to collect and dispose of effluent from trucks delivering stock are used.
- iii) A co-ordinated approach is in place to control this problem by good communication between *all those directly and indirectly involved with the handling and transportation of stock, and the management and disposal of effluent.*

1. Prepare stock for transportation

- Standing of stock before they are transported will significantly reduce the amount of effluent that needs to be disposed of at destination points.
- The best way of reducing the need to collect effluent from stock being transported is to arrange for the stock to be stood before being transported.
- Dry feed such as hay, grain or meal can be used where standing stock is difficult and/or stock are being transported long distances.

Standing Stock

Prepare stock for transport by standing off pasture / crop, but with access to water. This step has the most potential to minimise stock effluent. The amount of time stock should be stood off feed prior to transport is usually 4 - 8 hours.

The appropriate number of hours, in excess of 4 hours, will depend on:

- *condition and type of feed* stock have been on prior to transportation. The supply of dry feed can be used to reduce effluent while still providing the stock with food;
- *transit time* (longhaul transport requires extra preparation);
- the *purpose* of the transportation (slaughter, store, farm to farm);
- the time they will be off feed at *destination*; and, where appropriate,
- the *time* of slaughter.

Effluent Reduced

Standing stock reduces the amount of effluent taken on to the truck by a substantial amount (*by up to two thirds for cattle*), depending on conditions outlined above. Records should be kept to confirm that standing has taken place (see notes below on Declaration Cards).

Minimal Effect on Carcass Weight

Standing stock off feed for the times recommended prior to transport has minimal effect on their carcass weights, and therefore prices received, (*see graph on page 6*). Also, they arrive in better condition. Some meat processing companies pay premiums for clean, well presented, stock.

To achieve this, farmers need:

- Adequate notification of when stock will be picked up
- Stock to be picked up at the time specified (within reasonable limits)
- Appropriate facilities for the standing of stock

Farmers transporting their own stock *should* apply the same standards of preparation and transport as used by commercial carriers.

2. Receive effluent from stock being delivered

Farmers should take responsibility for the receipt and disposal of effluent collected on trucks *from the stock being delivered* on to their property – that is the effluent comes with the stock.

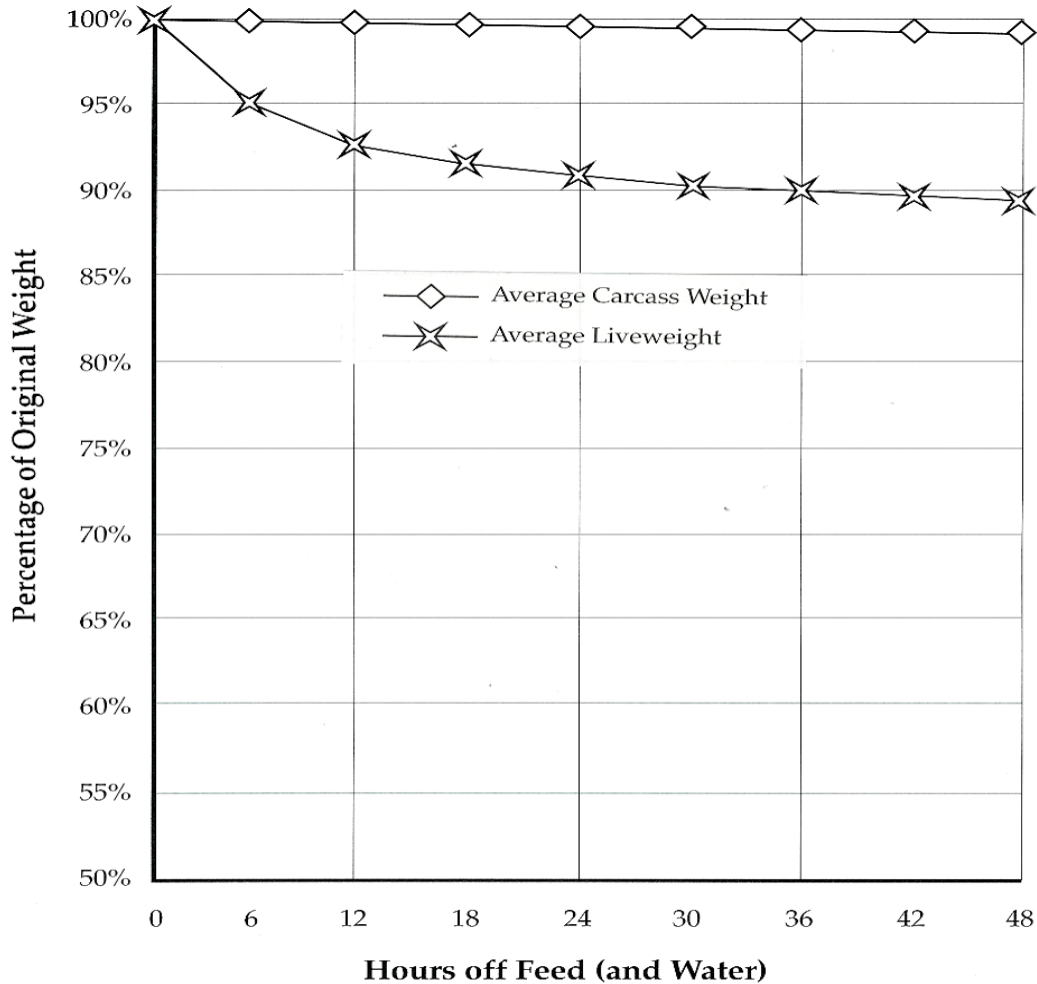
3. Declaration Cards

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, and animal remedies companies.

The following factors should be considered for inclusion on the declaration card:

- Time taken off pasture / feed
- Time arranged for stock to be picked up
- Actual time stock picked up

Effect of Fasting Typical Live Weight and Carcass Weight Loss



NOTES:

These losses are average losses that occurred in trials involving animals that were deprived of **both feed and water**. With careful management, including the provision of water, the likelihood of any significant liveweight loss is reduced.

Source: Compilation of trials carried out by Ruakura Agricultural Research Centre and a Literature Review by Dr Jennifer R Whythes, Livestock and Meat Authority of Queensland Australia.

ii. Guidelines for Farmers

1. Farmers' ability to accept effluent

Farmers have a significant ability to minimise the amount of effluent that needs to be collected by trucks and therefore disposed of at destination points.

In order to play their part in minimising the spillage of stock effluent from trucks onto roads, farmers also need to accept the effluent that has been collected by the truck while transporting stock to their farms.

It is envisaged that the amount of this effluent will be relatively small (at the very most 400 litres). The amount involved will be small when the stock have come from saleyards and / or have been stood before they were picked up.

The principle involved is that farmers accept responsibility for the receipt and disposal of effluent that has been collected *from the animals being delivered while they were on the truck/trailer*.

- In cases of mixed loads, sellers of stock, transport operators and farmers should negotiate how effluent from mixed loads will be disposed of.
- There may be unusual circumstances where it is impractical for an individual farmer to allow the disposal of stock effluent on his / her property.
 - In such situations, prior arrangements should be made by the farmer receiving the stock with the transport operator, with regard to the appropriate disposal of effluent from that stock.
 - If these arrangements have not been made the effluent, collected from the animals being delivered, may be disposed of at the farm receiving the stock.

2. Possible Farm Destination Disposal Methods

There is a range of methods that farmers could employ to dispose of stock effluent from trucks at point of destination. The method used by farmers will largely depend on their individual situation; their equipment and existing facilities, their farm management system, and the frequency and quantity of stock unloaded.

Farmers should refer to their local regional council for advice on policy and rules relating to on-farm disposal of stock effluent from trucks for their particular region.

On farms where large numbers of stock are regularly trucked, effluent disposal facilities will need to be capable of handling greater volumes of effluent.

3. Possible disposal sites

(Subject to the requirements of the local Regional Council)

- i) Spread on to a paddock / waste area.
- ii) Dairy farm effluent ponds.
- iii) For larger or more frequent movements of stock a small effluent pond system could be installed nearby the unloading point.
- iv) If a power supply is available a small irrigation pump and system could be used to disperse the effluent onto the surrounding land. As in number iii), this would only be needed for larger or more frequent movement of stock.
- v) A shallow open trench could be located beside an access way. The trench would need to be long and deep enough so that the effluent could dry up and soak away or be mechanically removed.

4. Possible Collection Methods/Ideas

- i) Funnel / Collection Receptacle placed under effluent tank outlet.

Farmers could build a simple collection receptacle, connected to a flexible hose, which can be placed under the effluent tank's outlet tap to collect the effluent while the truck / trailer is unloading the stock.

- ii) A front end loader or moveable container / trailer could be used to collect effluent directly from the truck's holding tank.
- iii) The effluent tanks could be emptied directly from the truck on to a paddock or appropriate area of land.

B. Livestock Carriers' Responsibilities

Basic Principles

Basic Principles

- i) Stock is stood before it is transported.
- ii) Simple and appropriate methods to collect and dispose of effluent from trucks delivering stock are used.
- iii) A co-ordinated approach is in place to control this problem by good communication between *all those directly and indirectly involved with the handling and transportation of stock*, and the management and disposal of effluent.

- These requirements are the responsibility of *all* involved with transporting stock on the road – including commercial carriers *and private vehicles*.
- Those who operate stock cartage vehicles should have the ability to *contain effluent* from stock transported on all trucks and trailers used to transport livestock and ensure that spillage is minimised.
- In most cases containment of effluent will require the fitting of effluent tanks. Effluent holding tanks should be fitted if other containment devices are ineffective.
- Livestock carriers should be able to deliver both the stock, and the effluent from that stock being delivered, at all destinations.
- Where appropriate, and available, vehicle drivers should make use of in-transit stock effluent dump sites.
- Stock transport operators should ensure they obtain sufficient notice of transport requirements so they can:
 - plan their work
 - comply with planned pickup schedules
- When stock transport operators are responsible for communicating pick up times they should provide their clients with sufficient notice so that the stock can be mustered and stood for the appropriate period of time before being picked up.

C. Meat Processors'/Operators of Saleyards'/Stock Purchasers' Responsibilities

Basic Principles

- i) Stock is stood before it is transported.
- ii) Simple and appropriate methods to collect and dispose of effluent from trucks delivering stock are used.
- iii) A co-ordinated approach is in place to control this problem by good communication between *all those directly and indirectly involved with the handling and transportation of stock*, and the management and disposal of effluent.

- All parties have a responsibility to communicate with their clients on requirements for stock effluent management, including standing stock, transporting stock and receiving stock.

This includes:

- Advising farmers of the appropriate standing times
- Informing farmers of the benefits of standing stock:
 - cleaner animals
 - less stress on animals
 - that carcass weight loss is minimal
 - improved animal welfare
- Implementation of farm quality assurance programmes
- Financial rewards / incentives for standing stock and presenting clean stock
- Meat processing companies and saleyards should have, and make available, facilities to receive and appropriately dispose of stock effluent from stock being delivered to their premises.
- Effluent dump sites should be designed and located to minimise inconvenience and time lost to livestock carriers. Effluent disposal facilities should be easy to use.
- Purchasers of stock and their agents should ensure that arrangements are finalised well in advance and that their clients are notified, directly or via the transport operator, so that their clients are able to stand their stock for the appropriate period before being transported.

D. Regional Councils', Territorial Authorities', and Road Controlling Authorities' Responsibilities

Basic Principles

- i)** Stock is stood before it is transported.
- ii)** Simple and appropriate methods to collect and dispose of effluent from trucks delivering stock are used.
- iii)** A co-ordinated approach is in place to control this problem by good communication between *all those directly and indirectly involved with the handling and transportation of stock*, and the management and disposal of effluent.

Regional councils and territorial authorities should:

- work with those people involved with the handling and transportation of stock and with roading authorities to help promote the Basic Principles of this Code.

Regional councils and road controlling authorities should:

- work with the industry to establish, where and if appropriate, the most suitable siting of in-transit dumps while minimising the number and cost of such in-transit dump sites, should they be required.

Road controlling authorities should:

- consider the effect of road design on the ability of stock cartage vehicles to contain stock effluent when building and repairing roads.

In their role as resource management authorities, regional councils should:

- work with farmers in the development of solutions for the safe on-farm disposal of effluent from stock trucks recognising the relatively small quantities that should be involved.
- in particular, regional councils should consider ways to minimise regulation when preparing policies and rules that will affect the on-farm disposal of stock effluent from trucks in their region. Such disposal could be provided for as a “permitted activity” (with conditions if necessary).

Summary

Farmers should stand stock off feed.

Livestock carriers should contain effluent within the vehicles.

Destination points should have facilities to receive and dispose of the effluent.

Regional councils, territorial authorities, and road controlling authorities should co-operate with farmers, stock transport operators, stock yard operators, stock agents, and meat processors to assist with the success of this voluntary Code of Practice.

In-Transit Dump Sites

On the basis of the above principles being implemented, in-transit dump sites will only be necessary on long haul stock transportation routes.

References:

The following contain some reference to or information on the stock effluent problem.

- *Code of Recommendations and Minimum Standards for the Welfare of Animals Transported within New Zealand* (and amendments) – November 1994 (amendments May 1996) – available from the Animal Welfare Advisory Committee, c/- Ministry of Agriculture, PO Box 2526, Wellington.
- Road Transport Forum NZ (Inc) CARTA Stock Crate Code for Transport of Livestock, available from Tom Cloke, Executive Officer, CARTA, PO Box 66, New Plymouth.
- *Code of Practice for the Manufacture and Use of Stock Crates on Heavy Vehicles*, New Zealand Standard 5413:1993. Available from Standards New Zealand, Freepost 1573, Private Bag 2439, Wellington. (Telephone (04) 498 5991).
- Resource Management Act 1991 and local Regional Plans.
- Transport Act 1962.