

**Code of Recommendations  
and Minimum Standards for the  
Sea Transport of Sheep from New Zealand**

**Code of Animal Welfare No. 2**

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## Preface

The codes of recommendations and minimum standards for the welfare of animals have been prepared by the Animal Welfare Advisory Committee (AWAC), which was established in 1989 by the then Minister of Agriculture to advise him on matters concerning animal welfare.

AWAC consists of members from the following backgrounds: the farming community, animal welfare groups, the veterinary profession, animal behaviour and the Ministry of Agriculture and Fisheries. It also includes the chairman of the National Animal Ethics Advisory Committee, an independent chairman and, up until February 1991, a philosopher.

Extensive consultation takes place with industry and other interested groups in the development of codes.

This *Code of Recommendations and Minimum Standards for the Sea Transport of Sheep from New Zealand* was endorsed as a national code at the committee meeting held on 8 May 1991.

The purpose of this code is to optimise the quality of management of sea transport of sheep from New Zealand, establish and maintain acceptable welfare standards and reduce mortality associated with the assembly, shipping and discharge phases of the operation below 1%.

The codes of recommendation and minimum standards which have been endorsed by AWAC are:

*Code of Recommendations for the Welfare of Circus Animals and Information for Circus Operators.*

The codes of welfare may be revised to take into account changes in practices of animal management and knowledge of animal welfare.

## 1. Introduction

The importance of animal welfare considerations is becoming increasingly recognised for the keeping and farming of animals, both in New Zealand and internationally.

Farming and other animal use practices which once may have been deemed acceptable are now being reassessed and modified to more readily fit the changing world we live in. High animal welfare standards are, therefore, not only important legally but also have direct economic benefits and ensure international market access.

In behavioural terms, sheep can be described as defenceless, vigilant, visually alert, tight-flocking, follower-responsive, wool-covered ruminants that evolved within a mountain grassland habitat.

The transportation of large numbers of sheep over long distances under shipboard conditions presents a considerable challenge to the behavioural adaptation of such an animal species. It requires careful quality management with expert supervision at all times to allow sheep to be transported in socially stable groups which are adapted to the assembly, voyage and discharge environments.

The following code has been and will continue to be developed to assist exporters to maintain welfare standards. It should be read in conjunction with the marine standards as set out by the Ministry of Transport.

*(Note – The Australian Marine Orders governing the sea transport of sheep have been reviewed to comply with New Zealand requirements. These will be finalised in early 1992 after public discussion. Where this code of welfare differs from the Australian Marine Orders, the standards in this code of welfare take precedence.)*

## 2. Legislation

It is an offence under the Animals Protection Act 1960 to cause unnecessary pain or unnecessary distress to any animal. The breach of a code provision, whilst not an offence in itself, can nevertheless be used in evidence as tending to establish the guilt of anyone accused of causing suffering under the Act.

## 3. Pre-Assembly Phase

### 3.1 Sheep Selection on the Farm

Only sheep that are healthy, fit to travel and suitable for shipment should be selected by the exporter or the exporter's agent to go to the feedlot.

### 3.2 Health

It is **recommended** that sheep be treated for internal parasites within the 7 day period before delivery to the feedlot.

It is **recommended** that sheep be vaccinated against clostridial diseases according to the manufacturer's specifications and using good vaccination techniques.

Where scabby mouth is present in the flock of origin, sheep should be vaccinated and have developed immunity against scabby mouth by the time of arrival at the feedlot.

## 4. Assembly Phase

- 4.1 The sheep should arrive at the feedlot in a suitable condition to minimise stress and to ensure a good start to the preparation for shipping. The principal factors to be considered are general health, ability to resist or be protected from cold and heat stresses, and, in the case of lambs, weaning.
- 4.2 Sheep are to be trucked to the feedlot site according to the recommendations set down in the *Code of Minimum Standards for Livestock Welfare during Road Transport*, Aglink FPP 892, 1988.
- 4.3 On arrival, only sheep with a body score of three or more and which are healthy, fit and injury-free, or can be readily rendered so, are to be admitted.
- 4.4 Sheep will not be admitted with a wool length of greater than 2.5cm, unless they can be shorn on the feedlot.
- 4.5 Shearing is to be managed to minimise cold stress, and the sheep are to be provided with sufficient shelter for the prevailing conditions.
- 4.6 Lambs **must** have been weaned at least 4 weeks prior to arrival at the feedlot.

## 5. Preparation Phase

### 5.1 Aim

During the preparation phase:

- Sheep **must** be conditioned to a diet similar to that which they will be offered on board ship. It is also important to feed them from troughs and offer drinking water in a similar manner to that used on the ship.
- Disease control **must** be implemented.
- Crowding stress **must** be prevented by managing stock densities. Individual sheep which cannot adapt must be removed.

### 5.2 Disease Prevention and Control

Disease control should be directed at the prevention of certain predictable infectious diseases, treatment for others, particularly parasitic conditions, and the removal of animals which do not, or are not likely to, respond to treatment.

It is **recommended** that sheep should be treated by a foot bath suitable for the treatment and prevention of footrot and footscald when necessary.

Where the sheep have to be vaccinated, this should be done according to the manufacturer's specifications using good vaccination techniques.

Sheep entering the feedlot **must** be free of the clinical signs suggestive of scabby mouth.

### 5.3 Feeding

Sheep **must** be fed at least at maintenance level. It is recommended that feed in pelletised or another concentrated form should contain the levels of nutrients outlined below.

It is **recommended** that lambs be fed at greater than maintenance levels.

#### Hard feed

It is **recommended** that hard feed should be pellets which are highly palatable and which don't crumble excessively.

It is recommended that pelletised or other concentrated feeds should contain:

- dry matter greater than 85%
- organic matter greater than 90% of dry matter
- crude protein greater than 10% of dry matter
- crude fibre greater than 30% and a minimum modified acid detergent fibre (MADF) content of 15% of dry matter (the minimum fibre particle length should be about 0.5cm)
- metabolisable energy greater than 9 MJ/kg of dry matter
- digestibility greater than 60 g or organic matter per 100 g of dry matter
- mineral ash at 8-10% of dry matter
- sodium at 0.1-0.2% of dry matter
- a grain content of not more than 50%

It is recommended that a period of 7 clear days be allowed to permit the sheep to become conditioned to hard feed. **During the 7 day period, the sheep must have been fed on nuts alone for the 96 hours immediately prior to the loading of the ship.** The sheep must not be fed anything other than nuts within the 96 hour period unless MAF has been consulted and has approved alternative feeds.

#### Feeding habits

Shy-feeders **must** be removed.

It is **recommended** that sheep be introduced to trough feeding. If they are being fed *ad lib* or where the troughs contain food for up to 15 hours per day, 2-5 cm of trough space per sheep should be allowed. Where smaller amounts of feed are offered at set feeding times, there should be at least 20 cm of trough space per sheep.

It is **recommended** that when feed troughs are used, they should be covered to protect the feed from rain and placed on a concrete slab to prevent pugging of the ground.

#### 5.4 Watering

It is **recommended** that drinking water be provided using a similar system to that which will be used on board ship.

Where troughs are used for the supply of water it is **recommended** that at least 1.5 cm of space per sheep be allowed and that the water supply rate be sufficient to keep water in the trough.

Water troughs **must** be well maintained to avoid spillage and must be kept free of faecal contamination.

Adequate palatable water **must** be available at all times for all the sheep on the feedlot.

#### 5.5 Management

Sheep **must** be grouped according to breed, class, sex and size. Within mobs, the weight range should not exceed 10 kg.

All sheep **must** be checked by an experienced stockman at least once per day. Appropriate action must be taken to establish the cause of any distress and attempts made to remedy it.

Veterinary advice **must** be sought if the cause of any ill health is not immediately obvious.

Handling and holding facilities **must** be sufficient to ensure that the animals can be handled and observed properly.

### 6. Shipping Phase

#### 6.1 Preparation for Loading

Only sheep which are healthy and fit to travel will be loaded on to a ship. Animals **must** be inspected by Ministry of Agriculture and Fisheries (MAF) staff before embarkation. Appropriate inspection facilities are required.

A veterinarian recognised by the Chief Veterinary Officer **must** accompany each slaughter sheep shipment.

An operational humane killer or another means of humanely destroying sheep **must** be carried and be readily available to the stockmen in charge of the shipment.

#### 6.2 Loading

Lame animals must be removed prior to loading.

Sheep with a wool length greater than 2.5 cm will not be eligible for loading.

The facilities for ship loading and unloading need to be well designed, constructed and maintained to allow supervised, rapid and safe transfer of sheep from trucks to the ship.

The pens **must** be loaded according to the live weight-based densities in the current Australian standards and must also take account of the following:

- breed (i.e. New Zealand/British)
- length of the voyage
- differences between open and closed decks.

In the interim, loading should be at 5% less than the current Australian standards on open decks and 10% less than the current Australian standards on enclosed decks. An additional 10% of pen space **must** be allowed for lines of horned sheep. As a minimum requirement there **must** be room for all sheep in a pen to lie down at the same time.

At least 48 hours before loading commences, the Ministry of Transport (MOT) and the port veterinarian should be notified, given capacity plans by the ship's owner or agent and advised of the numbers, types and weights of the sheep proposed to be loaded. Loading figures will be adjusted during the loading as required, in consultation with the MOT, before final loading arrangements are approved.

### 6.3 Pens

Internal pen race gates should be closed.

Hospital or spare pen space of 25 m<sup>2</sup> or 0.25% of the available pen space, whichever is greater, should be provided on each deck.

Each pen should contain sheep of the same sex, age group and with a weight range of less than 10 kg.

The pens **must** be secure to prevent escape.

The pen floors should have a non-slip surface.

It is **recommended** that the pens should have kicking plates of at least 300 mm to contain manure and prevent contamination of the food and water troughs.

### 6.4 Ventilation

There should be enough air movement to all areas of the deck on a loaded ship to ensure that the manure pad remains firm.

The specifications must be met with regard to ventilation. Until rectified, any 'dead spots' highlighted as trouble spots on previous voyages should be lightloaded at MAF's discretion.

It is **recommended** that extractor fans be reversible to enable them to be used for input ventilation.

It is **recommended** that the ventilation outlets be adjustable to divert air from decks above the main deck to the hold, if it is not required above the main deck.

## 6.5 Feeding

At least enough food **must** be loaded to meet the maintenance requirements of the animals plus an extra 25% or 3 days rations, whichever is the less, as a safety margin.

Food should be available within 12 hours of the sheep leaving the feedlot.

The fodder should be the same or similar to that in the feedlot conditioning.

Manure **must** not contaminate the food.

The minimum maintenance requirement **must** be fed according to the age and class of the sheep.

Feed trough space should be a minimum of 5 cm/head.

It is **recommended** that the top of the food trough should be about 350 mm (up to a maximum of 440 mm) above the pen floor when sheep less than 12 months old are carried.

It is **recommended** that fodder is always present in the troughs.

## 6.6 Watering

Water should be available within 12 hours of the sheep leaving the feedlot.

The water system **must** have sufficient storage and generation capacity for the voyage length plus 3 days for contingencies and 2 days for discharge. If there is any prospect of shortfall, the ship **must** take on additional fresh water.

Sea water must not be offered to sheep as drinking water, at any dilution.

Water should be offered *ad lib* and **must** be available for a minimum of 2 hours, twice a day.

At least 4 litres per head per day must be available, except that when the maximum ambient temperature during any day of the voyage exceeds 35°C, the minimum daily water requirement shall be 6 litres.

Water trough space **must** be a minimum of 2cm/head.

The water supply **must** be managed so that there is no spillage or leakage from the troughs into the pens to wet the manure pad.

An automatic system filling the troughs to 1/3 – 1/2 full, by flotation valve, is **recommended**.

It is **recommended** that the top of the water trough should be a maximum height of 440 mm above the deck.

Manure **must** be prevented from contaminating the water.

## **6.7 Management**

The manure pad should not become wet during the voyage. Its wetness should be carefully monitored and steps taken to dry out any wet areas. Its integrity reflects a combination of stock density, urination, salt and feed intake, drainage, temperature, humidity, air flow, faecal moisture and water spillage.

The ship **must** be adequately manned to:

- provide food and water to the sheep
- remove sick sheep to the spare pens
- treat or humanely slaughter sick sheep as appropriate
- remove dead sheep
- prevent smothering and water spillage
- keep the aisles clear.

There should be a senior stockman with the appropriate expertise to troubleshoot any problems in the pens and work with the staff to resolve them.

## **7. Discharge Phase**

Every endeavour should be made to ensure discharge commences immediately after arrival.

Discharge should be completed as quickly as is practicable.