



# Guidance Document

## Livestock Export by Sea: Guidance for Cattle

1 September 2022

## Title

Guidance Document: Livestock Export by Sea: Guidance for Cattle

## About this document

This document outlines guidance for export of cattle by sea.

## Document history

Version Date	Section Changed	Change(s) Description
26 June 2013	Guidance Material for the Transport of Cattle by Sea	N/A
7 December 2021	Livestock Export by Sea: Guidance for Cattle	Update to align with ASEL 3.1 and to incorporate continuous improvements
1 September 2022	Sections 5.3, 6.10, 6.12, 6.13 and 8.6. Appendix 1 and 2.	Update to incorporate continuous improvements

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# 1 Purpose

Livestock consignments exported from New Zealand require an Animal Welfare Export Certificate (AWEC). Each AWEC contains a set of conditions that outline mandatory requirements around the preparation, transportation and management of the animals that are exported.

The purpose of this document is to outline the likely conditions (requirements) that an AWEC will contain and provide guidance around how to meet those conditions.

This document only applies to cattle exported by sea and does not apply to other species nor any other mode of export.

The conditions in an AWEC deal with the management of animals during preparation for export, during their journey and the 30-day period following their arrival. It also includes the reporting requirements for exporters prior to, during and following the voyage.

## 2 Background

This guidance document has been developed by the Ministry for Primary Industries (MPI) in consultation with external stakeholders (including exporters, pre-export isolation operators and onboard voyage personnel) and aims to align New Zealand requirements with international best practice. It includes references to animal welfare, animal products, and maritime legislation (specifically the Animal Welfare Act 1999 (AWA), the Animal Products Act 1999, the Agricultural Compounds and Veterinary Medicines Act 1997 and the Maritime Rules).

The following physical, health, and behavioural needs of animals, appropriate to the species, environment and circumstances of the animal, in section 4 of the AWA 1999 have been considered during the development of this guidance material:

- proper and sufficient food and water
- adequate shelter
- opportunity to display normal patterns of behaviour
- physical handling in a manner which minimises the likelihood of unreasonable or unnecessary pain or distress
- protection from, and rapid diagnosis of, any significant injury or disease.

Any animal welfare concerns including animal ill-treatment or cruelty should be reported to MPI (phone 0800 00 83 333 or [animalwelfare@mpi.govt.nz](mailto:animalwelfare@mpi.govt.nz)).

Considerations specific to export consignments are outlined in Part 3 of the AWA including the AWEC application requirements (section 42), subsequent application considerations (section 43) and associated conditions (section 45).

This document incorporates improvements across aspects of animal welfare as well as the wider export process after the sinking of the Gulf Livestock 1 in September 2020. Following this incident an independent review was commissioned and produced the Heron Report that included recommendations to implement improvements throughout the livestock export process. These recommendations form part of the current MPI Livestock Continuous Improvements Work Programme that is working to develop and deliver changes to improve animal welfare for cattle that are exported by sea from New Zealand.

As part of a wider review of livestock exports, the New Zealand government made the decision to ban the export of cattle, sheep, deer and pigs by sea after a transition period of two years. This will come into force on 30 April 2023.

In the interim the Livestock Continuous Improvements Work Programme will continue to progress a variety of work to improve the animal welfare of animals exported from New Zealand.

### 3 Definitions

<b>Ad libitum</b>	Continuous availability (as applied to food or water) in sufficient quantities to provide animals with choice regarding frequency and quantity of consumption
<b>Adverse weather</b>	Climatic conditions that may negatively impact on animal health and welfare, including but not limited to rain, wind, snow, hail, humidity, high or low temperatures, storms, cyclones, and drought
<b>Animal Products Act 1999 (APA)</b>	New Zealand Animal Products Act 1999
<b>Animal welfare</b>	The ability for an animal to cope with the conditions in which it lives (as described in the World Organisation for Animal Health (OIE) Terrestrial Animal Health Code 2019)
<b>Animal Welfare Act 1999 (AWA)</b>	New Zealand Animal Welfare Act 1999
<b>Animal Welfare Export Certificate (AWEC)</b>	An animal welfare export certificate issued under section 46 of the Animal Welfare Act 1999
<b>Animal Welfare Export Certificate application</b>	An application made to the Director-General of the Ministry for Primary Industries for an Animal Welfare Export Certificate under section 42 of the Animal Welfare Act 1999
<b>Animal Welfare Export Certificate conditions</b>	The conditions imposed by the Director-General of the Ministry for Primary Industries under section 45 of the Animal Welfare Act 1999 when granting an Animal Welfare Export Certificate
<b>Animals appropriate for export</b>	Animals that comply with the requirements set out in this document as well as the importing countries' requirements and all New Zealand legislation
<b>Australian Certificate for the Carriage of Livestock (ACCL)</b>	The document issued by the Australian Maritime Safety Authority under Marine Order 43 (Cargo and cargo handling-livestock) 2018
<b>Australian Marine Safety Authority (AMSA)</b>	The authority established by the <i>Australian Maritime Safety Authority Act 1990</i>
<b>Australian Standards for the Export of Livestock (ASEL)</b>	The Australian standard that outlines the requirements for the export of livestock from Australia
<b>Authorised Person</b>	A veterinarian with delegated authority under the Animal Products Act 1999 to sign official assurances (Export Certificates) and to sign, under delegated authority from the Animal Welfare Act 1999, Animal Welfare Export Certificates
<b>Body condition score (BCS)</b>	A scoring system used to classify the condition of animals, based on the assessed amount of fat and/or muscle covering the body
<b>Class</b>	A category of cattle that may be used for grouping similar animals by sex, age, weight, breed, whether they have been castrated, pregnancy status or another characteristic
<b>Code of Welfare</b>	A New Zealand code of welfare issued under section 75 of the Animal Welfare Act 1999
<b>Consignment</b>	A group of cattle that are being prepared for export or have been exported
<b>Day</b>	A 24-hour period from midnight to the following midnight; this is used for voyage reporting purposes
<b>Director-General</b>	The Chief Executive of the Ministry for Primary Industries

<b>Director of Maritime New Zealand</b>	The person who, for the time being, is the Director of Maritime New Zealand, under section 439 of the Maritime Transport Act 1994
<b>Disembarkation</b>	The unloading of livestock at a destination port; this commences when the first animal is unloaded and finishes when the last animal has been unloaded
<b>Eligibility document</b>	A document issued by a Recognised Person confirming the eligibility of cattle for export in terms of meeting general export and Overseas Market Access Requirements.
<b>Embarkation</b>	The loading of livestock at a New Zealand port; this commences when the first animal is loaded and finishes when the last animal has been loaded
<b>Feed / fodder</b>	Food for consumption by livestock including, but not restricted to chaff, hay, pellets and grain
<b>Final destination</b>	The facility where the animals are due to 'complete' their purpose for example for breeding
<b>Health status</b>	Status of an animal relating to disease, injury or other factor
<b>Heifer</b>	A young female bovine until completion of first lactation
<b>Hospital pen</b>	A designated area on each deck where animals can be segregated for monitoring, treatment or recovery from illness or injury
<b>Line</b>	Grouping of animals of a similar type by sex, weight, pregnancy status, or breed
<b>Livestock</b>	Cattle, sheep, pigs and deer
<b>Loading plan</b>	A written plan that includes information regarding the voyage where space allocation requirements are outlined according the class, sex, weight, pregnancy status of the animals
<b>Marine Order 43</b>	Marine Order 43 (Cargo and cargo handling-livestock) 2018
<b>Marine Surveyor</b>	A person who holds a current Certificate of Surveyor Recognition under the Maritime New Zealand Rules
<b>Maritime Rules Part 24C</b>	New Zealand Maritime Rules Part 24C: Carriage of Cargoes – Specific Cargoes made under the Maritime Transport Act 1994
<b>Mortality rate</b>	The number of deaths divided by the total number of animals then multiplied by 100
<b>Notifiable incident</b>	An event that has the potential to cause serious harm to the health and welfare of the cattle
<b>Official assurance</b>	A certificate issued by the Authorised Person that which states that the livestock meet the requirements of the importing country
<b>Overseas Market Access Requirements (OMAR)</b>	Requirements set out by the importing country
<b>Permit for the carriage of livestock</b>	A permit issued by the Marine Surveyor as specified in section 36 of the Maritime Transport Act 1994 and Maritime Rule Part 24C
<b>Pre-export isolation (PEI)</b>	An approved facility where animals are housed prior to export
<b>Recognised Person</b>	A person recognised under section 103 of the Animal Products Act 1999 for the purpose of performing specified functions and/or activities. In the context of this standard, this refers to anASUREQuality or VeritAg veterinarian managing the consignment during pre-export preparation



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<b>Registered veterinarian</b>	A person who is registered under Australian or New Zealand law as a veterinarian, veterinary practitioner or veterinary surgeon
<b>Stockperson</b>	A person who has been approved by MPI. Approved stockpersons will be documented as part of the conditions that may be imposed, under section 45 of the Animal Welfare Act 1999, as part of the AWEC for the particular voyage
<b>Vessel agent</b>	Local representative of the vessel owner that organises and coordinates the port call
<b>Voyage</b>	The period of time from when the first animal is loaded onto the vessel until the last animal has been unloaded at the destination port in the importing country
<b>Welfare declaration</b>	A declaration signed by a Recognised Person that is provided to an Authorised Person, confirming animal welfare requirements have been met

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## 4 General Information

### 4.1 Application

This document must be read alongside all relevant New Zealand legislation that is applicable to the export of cattle by sea. Consignments must also adhere to all stipulations of the importing country in the relevant overseas market access requirements (OMAR) (<https://www.mpi.govt.nz/export/export-requirements/omars-for-live-animals-semen-and-embryos/>).

### 4.2 Requirements

This section outlines the requirements that applicants must adhere to when submitting an animal welfare export certificate (AWEC) application as well as the obligations MPI must observe when reviewing it.

#### 4.2.1 Application for animal welfare export certificate

Section 42(2) requires applications to be provided in full at least 20 working days prior to the intended date of export. Importantly, if MPI has queries related to the content of the application or any missing information this must be provided prior to the 20-day deadline. To avoid delays and facilitate timely processing, applications should be submitted two calendar months prior to the date of export.

#### 4.2.2 Consideration of application

Section 43(1) of the Animal Welfare Act 1999 requires that the Director-General of the Ministry for Primary Industries (MPI) must, in considering any application for an AWEC, have regard to such of the following matters as are relevant:

- a) the manner in which the welfare of any animals previously exported by the applicant was attended to on the journey between New Zealand and the country to which they were exported:
- b) the capability, skills, and experience of the applicant in relation to the export of animals:
- c) the species or type of animal and the number of animals proposed to be exported:
- d) the ages, and the physiological state, of the animals proposed to be exported:
- e) the mode of transport proposed and the facilities provided:
- f) the length and nature of the journey proposed:
- g) the susceptibility of the animal to harm and distress under the conditions of transport proposed:
- h) any New Zealand requirements in relation to the export of the animal:
- i) any requirements of the country into which the animal is being exported:
- j) any relevant international standard:
- k) the date on which it is intended that the animal leave New Zealand:
  - i) any regulations made under section 183C relating to the export of animals:
  - ii) New Zealand's reputation as a responsible exporter of animals and products made from animals:
- l) any other matters that the Director-General considers relevant to the welfare of the animal.

Section 43(2), requires that the Director-General of the Ministry for Primary Industries (MPI), in considering any application for an AWEC, may have regard to the following matters:

- a) the post-arrival conditions for the management of the animals in the importing country:
- b) the manner in which the welfare of any animals previously exported by the applicant was attended to during—
  - i) the 30-day period commencing on the date of their arrival in the importing country; or
  - ii) any lesser period after their arrival that the Director-General thinks fit.

### 4.2.3 Conditions

In granting an application for an AWEC, section 45(1) lists a set of conditions that may be imposed as part of this process. Accordingly, the following conditions are included on the vast majority of AWECs. Each of these is linked to specific information in this document for reference.

- (1) the vessel is inspected by an MPI veterinarian before and after the loading of the animals [s 45(1)(a)] ([Section 8.1](#))
- (2) the preconditioning or nutritional management of the animals during the pre-export period must result in cattle that are adapted to the shipboard diet [s 45(1)(b)] ([Section 6.9](#))
- (3) animals that meet any of the criteria for rejection (Table 1) have been removed from the group and will not be exported [s 45(1)(c)] ([Section 6.12](#))
- (4) the animals have been certified as fit to travel [s 45(1)(c)] ([Section 6.12](#))
- (5) an animal health certificate has been issued [s 45(1)(d)] ([Section 5](#))
- (6) the animals are loaded onto the vessel in accordance with stocking density requirements [s 45(1)(e)] ([Section 8.6](#))
- (7) the animals are accompanied by the personnel as nominated and accepted by MPI [s 45(1)(f)] ([Sections 10.1-10.2](#))
- (8) food and water are provided by the applicant to the animals while they are on board the vessel, in accordance with requirements [s 45(1)(i)] ([Sections 8.7-8.8](#))
- (9) facilities are provided to the animals in accordance with the requirements in [Appendix 2](#) [s 45(1)(j)] and [Section 8.9](#)
- (10) the applicant provides a daily report on the way in which the animals were managed on each day of their journey, commencing on the day the first animal is loaded and until the last animal is unloaded [s 45(1)(la)] ([Section 11.3](#))
- (11) the applicant arranges for the voyage veterinarian to provide a report on their activities to manage the animals on each day of the journey, commencing on the day the first animal is loaded and until the last animal is unloaded [s 45(1)(la)] ([Section 11.3](#))
- (12) the applicant provides a report on the way in which the animals were managed during their journey [s 45(1)(la)] ([Section 11.3](#))
- (13) the applicant provides a report on the welfare of the animals during the 30 days after their arrival in the importing country [s 45(1)(lb)(i)] ([Section 11.3](#))
- (14) the applicant provides the MPI veterinarian with a copy of the voyage instructions ([Section 5.3](#)) as well as the loading plan ([Section 5.7](#)) and proof that these have been accepted by the Master of the vessel [s 45(1)(m)]
- (15) the MPI veterinarian receives confirmation from a Marine Surveyor or Maritime New Zealand that the vessel is compliant with Part 24C of the New Zealand Maritime Rules [s 45(1)(m)] ([Section 8.1](#))
- (16) the competent authority of the importing country does not have any unresolved objections at the time of the export [s 45(1)(m)] ([Section 5](#))
- (17) the animals are transported to the port in accordance with New Zealand animal welfare requirements [s 45(1)(m)] ([Section 7](#)).

### 4.2.4 Animal welfare export certificate decision

After consideration of an application, under section 44, the Director-General will decide whether to grant or refuse the application and specify the conditions that will be required. This decision is communicated to the applicant in writing.

## 4.2.5 Additional information

Exporters who adhere to the guidance in this document will be well placed to assure MPI that controllable risks to animal welfare have been effectively managed.

Similarly, MPI acknowledges that there are likely to be ways of managing particular risks to the welfare of exported cattle that are not covered in this document. Any exporter using these means would be well advised to engage with MPI early in the process of preparing an export consignment, to ensure that there is agreement on how the assurances MPI requires prior to issuing an AWEC will be provided.

Lastly, all parties should be aware that there are certain factors (eg sudden change in the animal health status of New Zealand, sudden change in the importing country's trade policy or events of a force majeure nature), which can preclude the issuing of an AWEC on the intended day of export, even if the exporter has strictly adhered to the requirements outlined in this document. Under section 45(2), the Director-General can add to, or amend, the conditions imposed.

This document will be reviewed and updated on a continuous basis until the ban of livestock export by sea comes into effect on 30 April 2023. Any amendments that are of a material nature will not be made until consultation has been undertaken.

## 4.3 Responsibilities

The export of cattle by sea is undertaken by several different people or groups. The responsibility for animal health and welfare changes depending on who is carrying out various parts of the process. This responsibility is often shared between multiple people; for example, the Master of the vessel holds responsibility for the animals during the voyage however the veterinarian and stockpersons also share the responsibility for ensuring the animals' health, welfare and behavioural needs are met during transit. Notwithstanding this the exporter remains accountable for the welfare of the animals during the entire process.

The exporter must provide details to the Master, onboard veterinarian and stockpersons of anything that may affect the future health and welfare of the cattle. This includes any notifiable incident that may have occurred during the pre-export preparation period and any relevant instructions for the care of the cattle during the voyage.

Additional information regarding responsibilities is provided below. It should be noted that these lists are not exhaustive but should be used to provide context for those preparing cattle for export by sea.

### 4.3.1 Domestic Transport Company

The domestic transport company is responsible for transporting the cattle within New Zealand in accordance with New Zealand animal welfare requirements (including contingency plans). Importantly, the exporter remains responsible for engaging suitable domestic transport companies and ensuring that they transport the cattle in a safe and appropriate manner.

### 4.3.2 Exporter

The exporter is accountable for the well-being and welfare of the animal throughout the entire process, regardless of who is providing any individual aspect of care to the animals. They are also responsible for being properly prepared to fill their role through the end of the export process. Additionally, they are required to adhere to (and ensure adherence to) all the conditions outlined in the AWEC as well as to follow all instructions provided by the Recognised Person and MPI. Moreover, the exporter is responsible for a range of other aspects around the export consignment including but not limited to:

- ensuring the vessel is appropriately inspected, certified, in good condition and is fit for purpose to safely transport and manage the cattle on board during the voyage
- ensuring the vessel has adequate numbers of competent crew members to care for the cattle during the voyage
- having knowledge of the final destination of the cattle
- selecting cattle appropriate for the final destination
- making a timely and complete application to MPI for an AWEC
  - complete applications must be received a minimum 20 working days prior to the date of export. To avoid delays and facilitate the timely processing applications should be submitted two calendar months prior to the date of export
  - this timeframe includes any follow up questions regarding information in the application (including information that is missing)
  - incomplete applications will not be processed until they are completed in full
  - incomplete applications will likely lead to delays in processing and costs associated with these delays will be the responsibility of the applicant
- obtaining an AWEC from MPI
- notifying the Recognised Person and Authorised Person as soon as possible of the intended export, and any issues requiring special consideration
- establishing a communication plan and ensuring that it is followed
- ensuring compliance with all AWEC conditions
- ensuring the facilities at the port are suitable so that the cattle can be loaded safely and efficiently
- ensuring that only eligible cattle are loaded onto the vessel
- ensuring contingency plans are in place, as described in [Section 5.3.3](#) of this document
- providing or obtaining declarations requested by the Recognised Person and Authorised Person in a proactive and timely manner
- ensuring the animals are transported within New Zealand in accordance with New Zealand animal welfare requirements
- ensuring stocking densities meet MPI requirements
- ensuring there are adequate provisions on the vessel before departure (including feed, water and veterinary supplies) and that stockperson(s) and an onboard veterinarian have been engaged
- ensuring that the cattle meet the importing country/countries' requirements, are loaded in accordance with the approved loading plan, and meet all other specifications of this document
- ensuring that a voyage report is sent to MPI within 5 days of the completion of the voyage
- reporting any incident that occurs during the export process that could compromise animal welfare to MPI
- reporting notifiable incidents
- being actively engaged with MPI in the instance of consignment rejection
- ensuring the Master is fully aware of their responsibility for animal welfare during the voyage.

#### 4.3.3 Master (of the vessel)

The Master (of the vessel) is responsible for:

- the vessel loading configuration
- ensuring the safety of the vessel, crew and cargo during the voyage, including loading and unloading
- the tending, feeding and watering of the cattle at all times during the voyage
- ensuring the crew of the vessel is of sufficient number, skill, and experience to be able to assist the stockperson(s) and veterinarian during the voyage as required
- ensuring contingency plans are in place, as described under [Section 5.3.3](#) of this document.

#### 4.3.4 Ministry for Primary Industries (MPI)

MPI is responsible for:

- regulating the export process to ensure risks are managed
- assessing the AWEC application and making a decision whether to grant or refuse the application including specifying AWEC conditions
- verifying that the cattle are fit for transport prior to loading and that both the importing country's requirements and the conditions of the AWEC have been met or provisions are in place to ensure they can be met.

#### 4.3.5 Maritime New Zealand (MNZ)

MNZ is responsible for the inspection of vessels to ensure that the appropriate standards are met for safety, security, environmental protection and crew welfare.

#### 4.3.6 Onboard Veterinarian & Stockpersons

The veterinarian and stockpersons accompanying the shipment are responsible for the health and welfare of the cattle throughout the voyage, including loading and unloading. Specifically, veterinarians are responsible for diagnosis and treatment whereas the stockpersons are responsible for the management of daily animal husbandry activities.

#### 4.3.7 Pre-export Isolation Operator (PEI)

The PEI operator is responsible for:

- ensuring compliance with the MPI Official Assurance Programme
- overseeing the health, welfare and nutritional requirements of the animals during their time at the PEI facility
- overseeing the management of animals entering the facility and the movement of animals within the farm
- ensuring proper management of animal records
- working with the Recognised Person(s) and Authorised Person(s) to facilitate their verification activities at the facility.

#### 4.3.8 Recognised Person

The Recognised Person is responsible for verifying the following animal welfare specifications during the pre-export preparation period and providing a declaration to the Authorised Person confirming compliance. These include:

- yard and loading facilities
- physical perimeter barriers/fencing
- supply of fodder and water
- stocking density
- dietary pre-conditioning to the onboard diet
- age
- pregnancy status
- weight of the cattle prior to load out
- fitness for travel, including the removal of cattle meeting any of the rejection criteria in [Table 1](#) prior to transport to the port
- eligibility according to export requirements including the OMAR
- identification and quantities of cattle transported to the port.

### **4.3.9 Shipping Management Company**

The shipping management company is responsible for the commercial decisions and operations of the vessel, including the crew on the vessel. The exporter remains responsible for contracting suitable vessels including appropriate crew for the safe transport of cattle.

### **4.3.10 Vessel Owner**

The vessel owner is responsible for ensuring that the vessel is appropriately designed, constructed, equipped, maintained and certified to carry cattle as cargo.

## 5 Consignment Planning

The following section outlines the required documentation that must be organised for each cattle by sea export consignment.

### 5.1 Official Assurance

Cattle consignments must adhere to the requirements set out in the Official Assurance Programme (OAP). The requirements must be met before the cattle are loaded; importantly, they apply to all vessels involved in the transport of cattle from New Zealand and at all stages of the export process.

### 5.2 Animal Welfare Export Certificate

Under section 40 of the AWA Animal Welfare Act 1999 it is an offence to export animals from New Zealand other than under the authority, and in accordance with the conditions, of an AWEC. Application forms can be sourced from the MPI website or applicants can contact [livestockexportsbysea@mpi.govt.nz](mailto:livestockexportsbysea@mpi.govt.nz).

Where a condition of an AWEC, placed on a specific consignment, provides for an action which is contrary or different to the information provided in this document then the AWEC condition prevails.

The export of cattle for slaughter is prohibited by the Animal Welfare (Export of Livestock for Slaughter) Regulations 2016 unless consent has been provided by the MPI Director-General.

Under section 42(2)(d) of the AWA, complete applications must be received at a minimum of 20 working days prior to the date of export. This timeframe includes any follow up questions regarding information in the applications as well as any missing information. Incomplete applications will not be considered and will likely lead to delays in processing; costs associated with these delays will be the responsibility of the applicant. To avoid delays and to facilitate timely processing applications should be submitted two calendar months before the scheduled date of export. Additionally, MPI has requested that exporters provide a 6-month forecast regarding upcoming consignments.

### 5.3 Voyage Instructions

A written set of voyage instructions must be prepared by the exporter in conjunction with all responsible parties. The voyage instructions should be developed as early as possible and before the cattle enter pre-export preparation, or at least 30 days prior to the scheduled export, whichever is longer.

The voyage instructions must include the information described in sections 5.3.1 – 5.3.4 to ensure effective communication between parties before, during and after the export.

The voyage instructions must be provided to all responsible parties including the Master of the vessel. Additionally, the exporter must provide evidence to the Authorised Person that the Master has received and accepted the voyage instructions.

The voyage instructions must also be submitted during the AWEC application process.

#### 5.3.1 Roles & Responsibilities

The voyage instructions must specify the roles and responsibilities of the exporter (or delegate), the onboard veterinarian, the stockpersons, the Master, the vessel crew members as well as the relevant government and port authorities.



Additionally, information around required meetings throughout this process (prior to, during and after export) (including date, time, attendee expectations and agenda) should be included.

Information regarding reporting expectations must be outlined. This includes the following reports:

- daily report
- voyage report (at the conclusion of the voyage)
- 30-day post-arrival report.

### 5.3.2 Loading Arrangements

The voyage instructions must also include the following information around loading animals onto the vessel:

- security arrangements for both the port and vessel
- worker number and competency as well as worker health and safety to carry out animal loading activities prior to departure.

### 5.3.3 Contingency Plans

Contingency planning is important to ensure that adverse events are dealt with quickly, practically, and effectively by the appropriate people. Contingency plans must accompany the voyage instructions, and be made available for inspection, when requested.

Contingency plans must be included where the exporter has specified how potential risks would be managed as well as how to contact him/her/them (24 hours a day/7 days a week) in the event of an emergency (name, primary phone number, secondary phone number, email address) and a secondary contact (name, primary phone number, secondary phone number, email address) in the event that the primary contact cannot be reached.

The exporter is responsible for preparing contingency plans describing the actions that the relevant parties will take in the event of:

- cattle being unable to be loaded at the port of departure from New Zealand
- outbreak of a disease, which has been specified as one for which New Zealand country freedom is required by the importing country, during the voyage
- other notifiable incidents.

The Master is responsible for preparing contingency plans describing the actions that the relevant parties will take in the event of:

- mechanical breakdown of the vessel during the journey
- feed or water shortage or contamination during the voyage
- illness or incapacity of the veterinarian or stockperson(s) accompanying the vessel
- extreme weather conditions during the voyage
- delay in unloading the cattle or inability of the overseas port to accept the animals upon arrival.

### 5.3.4 Written Instructions for Animal Care

The voyage instructions must include a management plan that provides information around the day-to-day management of the cattle in order to maintain suitable levels of animal welfare during the voyage. These should be included in a standard operating procedure and must include:

- specific requirements to meet the needs across breed, sex, age, reproductive status, quantity, weight, size as well as any requirement to maintain export preparation and those of the importing country,

- a feeding and watering plan that includes the type of feed as well as frequency of feeding and watering, and specific details must be provided if water cannot be provided ad libitum,
- a cleaning and maintenance plan, including the use and management of bedding,
- a plan for the day-to-day management of the animals, including the frequency of inspection, reporting, and treatment of disease and injuries,
- information regarding euthanasia procedures for any animal that is experiencing significant welfare compromise due to illness, injury or other event, at any point during the voyage, including during loading and unloading,
- a heat stress management plan.

Exporters must inform the on-board veterinarian in writing of the following actions to be taken should the wet bulb temperature in the animal hold reach 28°C;

- the heat stress management plan that was submitted during the AWEC application process will be initiated to cool the cattle, if deemed necessary by the on-board veterinarian,
- additional reporting is to be submitted as part of the daily requirement for the on-board veterinarian to report back to MPI.

The Written Instructions for Animal Care must be sighted and agreed upon by the on-board veterinarian and head stockperson prior to the departure of the vessel. MPI will verify that this has occurred during the AWEC application process.

## 5.4 Notice of Intention to Load Cattle

The exporter must submit a notice of intention to load cattle under clause 24C.18(1)(b) of the Maritime Rules, to a Marine Surveyor no less than 48 hours before the vessel is available for inspection.

This notice must include:

- the name of the vessel
- the date and port where the vessel will be available for inspection
- a description of the cattle to be carried (including the number and estimated average weight of the cattle by class)
- details of the proposed voyage including:
  - estimated passage time including loading and unloading
  - any intermediate stop-over ports for replenishing fodder and freshwater and/or discharging cattle.
  - the final destination.

## 5.5 Record of Equipment & Arrangements

MPI requires that all vessels intending to transport cattle from New Zealand have a Record of Equipment and Arrangements, based on the format found in the Australian Maritime Safety Authority's Marine Orders Part 43, which can be found at <http://www.amsa.gov.au/vessels/standards-regulations/marine-orders/>.

The Master must produce the Record of Equipment and Arrangements, and any supporting information, at the request of a Marine Surveyor or Authorised Person.

## 5.6 Permit for the Carriage of Livestock

Section 36 of the Maritime Transport Act 1994 and Maritime Rule Part 24C requires the Master of a vessel to carry livestock in accordance with the terms of a permit issued to the Master by the Marine Surveyor at the time of export, stating:

- the type and number of livestock that may be carried
- matters that the Marine Surveyor considers necessary to ensure the safety of the vessel
- matters that the Marine Surveyor considers necessary to ensure the welfare of the livestock requirements for inspection of the vessel considered necessary for ensuring compliance with the permit.

## 5.7 Loading Plan

Prior to animals being transported to the vessel for departure the exporter must provide a loading plan that has been approved by the Master and the Marine Surveyor. The load plan provides specific details about the loading and location of the cattle on board the vessel. The Authorised Person may use the loading plan to verify that sufficient space has been allocated for the cattle on the vessel.

The loading plan must include:

- a description of the available pen space (not including areas reserved for hospital pens nor areas that may be used to store feed or bedding at the beginning of the voyage) according to the Record of Equipment and Arrangements (as described in [Section 5.5](#))
- a description of the available pen layout including specific information around the consignment, hospital pen areas
- consignment information including the number of animals and class allocated per pen ([Section 8.6](#))
- the Marine Surveyor may also require additional information such as the fodder/bedding loading plan, vessel stability, port rotation and discharge sequence arrangements.

## 6 Animal Preparation & Pre-Export Isolation

Pre-export isolation facilities (PEI) must adhere to requirements under the MPI Official Assurance Programme for the export of live animals. Additional information around this programme and its requirements can be found in the [Code of Practice: Pre-Export Quarantine and Isolation](#).

The transport of cattle to PEI must be undertaken according to the [Code of Welfare Transport within New Zealand](#).

Prior to transport to the port, cattle must be kept in accordance with the [Code of Welfare Dairy Cattle](#) and the [Code of Welfare Sheep and Beef Cattle](#) at dedicated PEI facilities.

### 6.1 Body Condition Score upon entry to PEI

Within 30 days prior to transport from the farm to PEI the recognised agency must reject animals with a body condition score below 4 on the 1-10 dairy scale.

### 6.2 PEI Loading and Unloading Facilities

PEI loading and unloading facilities must be constructed, maintained and operated, to allow the steady and safe transfer of cattle. As a minimum, they must be:

- fitted with side panels of sufficient strength and height to prevent the escape of cattle
- fitted with non-slip surfaces that are suitable for cattle
- fitted with a closing arrangement at the point of entry to the yards or truck
- free of any protrusions.

During loading and unloading, cattle must be moved in such a way the minimises the risk of pain, injury or distress. They should be supervised by competent stockpersons at all times throughout the loading and unloading process.

Cattle should be moved with the least amount of force possible. The use of flags and backing boards is preferred to goads or electric prodders. The Animal Welfare (Care and Procedures) Regulations 2018, specifies that electrical prodders may only be used on the muscled areas of the animal's hindquarters or forequarters for no more than one second continuously and the animal must have sufficient room to move away from the prodder (regulation 48). Additionally, striking or prodding animals in any sensitive area (eg udder, anus, genitals, eyes) is prohibited (regulation 49).

### 6.3 Physical Perimeter Barriers

Fittings and internal surfaces including fences, chutes, restraint facilities, gateways, and holding yards must be constructed, and maintained, to minimise the possibility of distress or injury to the cattle (including the potential for animals to escape). These facilities must be inspected regularly and repaired when faults are identified.

### 6.4 Shelter

During the quarantine period in PEI, cattle need to be provided with adequate protection (eg windbreaks, shade, shelter, water sprinklers) from adverse climatic conditions to minimise risks to animal health or welfare as a result of exposure to heat or cold.

## 6.5 Drainage & Effluent Removal

Facilities must be constructed in such a way to effectively manage drainage where surface water and livestock effluent are directed away from animal areas. The system must be free draining to ensure that the overall surface remains firm. Surfaces around feed and water troughs must be managed (evenly graded) to readily shed water. Resting surfaces must be soft and have sufficient drainage and be kept in a sufficiently clean state so that the cattle can lie on them comfortably for as long as they choose. If surfaces are wet cattle may not spend sufficient time resting and ruminating. As such, appropriate resting areas are essential for cattle to meet their behavioural needs. Useful recommendations around suitable lying areas can be found in the guidance document ([Expected Outcomes for Animal Welfare](#)) that has been developed by the Winter Grazing Action Group.

## 6.6 Stocking Conditions

Cattle must be housed in such a way that they can lie down freely without risk of injury, move freely around the paddock (to escape any bullying by dominant cattle) and easily access feed and water.

Cattle in PEI facilities must be housed according to the following requirements:

- they must not be mixed with other species nor different classes of animal
- cattle of different pregnancy status or health status must not be housed together
- younger animals must be separated from older animals
- animals of a dissimilar size must not be housed together.

Additionally, bulls and heifers must always be kept separate in PEI facilities.

## 6.7 Water

All cattle must have constant access to a daily supply of drinking water that is palatable and suitable for livestock. This must be of sufficient quantity for the number of animals present. The water delivery system must be reliable and designed in such a way to prevent spoilage, inspected daily and maintained to meet the daily demand. It must also be positioned apart from bedding and fodder sources to prevent fouling. In the event of a water delivery system failure, immediate remedial action should be taken to ensure that daily water requirements are met.

The above requirements do not apply when animals are being loaded, unloaded, during transport to PEI nor transport to the port.

## 6.8 Fodder

While at PEI facilities animals will be exposed to dietary conditions like those they will experience during export; this ensures that they are adapted to the shipboard diet (as described in [Section 6.9](#)).

All selected fodder must be fit for purpose as described in the ACVM (Exemptions and Prohibited Substances) Regulations 2011.

All cattle must receive, at minimum, maintenance rations of food and nutrients to meet their physiological requirements and minimise metabolic and nutritional disorders. Feeding is managed so that any injury and/or conditions resulting in ill health, as a consequence of the fodder or feeding methods, are minimised.

Feeding systems must be managed in such a way to prevent spoilage. This includes regular monitoring, at least once every 24 hours, and the correction of deficiencies as they are identified.

Fodder must be stored appropriately so as to maintain its nutritional value. It must also be adequately protected from adverse weather, pests and any other external contaminants.

## 6.9 Feed Pre-Conditioning

Cattle in PEI need to be preconditioned ready for live export which includes the feed content, roughage, and dry matter. The preconditioning of cattle for export is required in the last seven days in PEI building to the targets as detailed below prior to loadout. Feed content should be a minimum of 75% of that found in a typical shipping pellet.

Pellet Nutrient Profile	
Nutrient	Range
Dry Matter	87 - 95%
Energy	8 - 12MJME/kgDM
Crude Protein	10 - 13% of dry matter
Neutral Detergent Fibre	40-65% of dry matter
Salt	Maximum of 0.25%

Roughage/fibre is to be a minimum of 20% of the animal's total diet using hay/straw or similar supplement, with a neutral detergent fibre content of >50% of dry matter.

The purpose of the preconditioning diet is that it is as close to the shipping diet as is feasible and ensures a diet with high fibre and dry matter content. This preconditioning also ensures the cattle's faeces are of a firm consistency at loading to ensure the underfoot conditions on board the vessel are optimal.

## 6.10 Pregnant Cattle

Export heifers are to be mated according to industry best practice for age and size, as set out by DairyNZ and Beef & Lamb NZ (at minimum 15 months old and 60% of their mature liveweight).

At loading for export, heifers must not be more than 5 months pregnant. Cattle that are pregnant may not depart from New Zealand between 1 May and 31 October (inclusive) on a voyage that crosses the equator.

Mated heifers are to be considered pregnant unless they are tested and confirmed not detectably pregnant at least five weeks after mating on-farm. All cattle that have been late mated will be considered pregnant and as such they must be provided with 15% additional space during export.

Any cattle found to be >100-110 days pregnant at arrival or induction to PEI must be removed from the consignment.

Pregnancy testing at the PEI must be carried out by a veterinarian that is approved by MPI to perform pregnancy diagnosis and foetal aging on cattle for export at PEI facilities. The veterinarian must meet all the following criteria below and as stated in the 'Nominated Veterinarians for Pregnancy Testing Form' ([Appendix 1](#)):

- has received one on one training in both manual palpation and ultrasound diagnosis of pregnancy and assessment of reproductive structures with a senior veterinarian for a minimum of 3 seasons
- has at least 3 years' experience as a qualified cattle veterinarian
- has performed accurate diagnosis of pregnancy and foetal aging by ultrasound in a minimum of 10,000 head of cattle in total

- has been regularly audited through peer assessment by a senior veterinarian within the practice for a minimum of 50 head of cattle per season
- has been made aware of the implications of incorrect pregnancy diagnosis in the context of export cattle.

From this, a list of veterinarians approved by MPI to perform pregnancy diagnosis and foetal aging at PEI facilities will be developed. Exporters wanting to use a veterinarian not on this list will need to obtain prior approval from MPI.

The veterinarian carrying out pregnancy diagnosis and foetal aging at the PEI facility must provide the exporter and the Recognised Person with the pregnancy test results from each intended export on a practice letterhead, stating the date and method of testing, and the outcome:

- a negative result is reported as non-detectably pregnant
- a positive result is reported as pregnant alongside the stage of pregnancy (i.e., number of days) at the stated time of testing.

The Recognised Person will assess pregnant cattle eligibility for export by the use of:

- person in charge of animals (PICA) declaration form attesting to the history of joining within the previous 35 days prior to the AQ On-Farm testing visit,
- information supplied by the exporter on the plans to re-test any animals with a history of joining within the 35 days prior to the AQ On-Farm testing date, to be carried out at least 35 days after the AQ On-Farm testing visit (prior to export), and
- the results of a pregnancy test, supplied by an approved experienced veterinarian on practice letterhead, stating the date and method of testing and the outcome.

The Recognised Person will categorise cattle as not pregnant if they are:

- stated as non-detectably pregnant on the pregnancy test results carried out during induction and have not been joined within the 35 days prior to the AQ On-Farm testing visit, or
- stated as non-detectably pregnant following re-testing prior to export (as above).

The Recognised Person will categorise the cattle as pregnant if they are:

- stated as pregnant alongside the stage of pregnancy (i.e., number of days) on the pregnancy test results at induction or following retesting prior to export, or
- stated as not detectably pregnant on the pregnancy test results but have been joined within the 35 days prior to the AQ On-Farm testing visit and have not been re-tested prior to export.

## 6.11 Dehorning

Regulation 31 of the Animal Welfare (Care and Procedures) Regulations 2018 specifies that animals with horns may not be transported in a manner where the animal may seriously injure itself or another animal. Specific rejection criteria regarding animals with horns is outlined in Table 1.

Where dehorning occurs prior to export, dehorning wounds must be given enough time to heal completely before any type of transport including export. If cattle with horns are to be exported, the ends of the horns should be removed, so that the resulting stub is blunt and measures no more than 7.5 cm in length. Pain relief, authorised by a veterinarian for the purpose of these procedures, must be used in accordance with regulation 58 of the Animal Welfare (Care and Procedures) Regulations 2018.

## 6.12 Selection of Cattle for Export

Proper selection of cattle for export is of utmost importance as it underpins successful health and welfare outcomes during (and after transport).

### 6.12.1 Inspection during Pre-Export Preparation

Before being transported to the port, the cattle must be inspected to ensure they are fit for transport and do not meet any of the rejection criteria in Table 1. This inspection is completed on-farm by a Recognised Person (veterinarian), to align with the time frame indicated in the relevant country of destination export certificate.

Determining fitness for travel is a matter of professional judgement by the Recognised Person. Animals that meet any of the rejection criteria outlined in Table 1, or any other condition that could compromise the animal's health and welfare during preparation or transport, will be deemed ineligible for export at the discretion of the Recognised Person and must be removed from the consignment. Arrangements for prompt handling, veterinary care, treatment, euthanasia and/or disposal of these animals must be made and implemented.

**Table 1: Rejection criteria for cattle for export**

Category	Rejection Criteria
<b>General requirements</b>	Failure to meet requirements specified in the export health certificate Animals weighing less than 200 kg (except for Jersey cattle) Jersey cattle weighing less than 180 kg Jersey cattle weighing 180-200 kg with a body condition score below 4.5 Pregnancy status not confirmed as appropriate for export (ie pregnancy 5 months or greater) Dairy-beef cross-breed animals where no evidence has been provided that they are intended for long-term breeding programmes Lactating cattle or those with young at foot Unweaned calves Viral disease (eg infectious bovine rhinotracheitis) Animals showing signs of injury (eg fractures, swelling)
<b>Systemic conditions</b>	Body condition not appropriate for export (ie body condition below 4 (dairy scale 1-10)) Anorexia or lack of appetite Uncoordinated, collapsed, weak Unwell, lethargic, dehydrated Ill-thrift
<b>Musculoskeletal system</b>	Abnormal gait or lameness of any kind Abnormal soft tissue or bony swellings
<b>Gastrointestinal system</b>	Dysentery or profuse diarrhoea Bloat
<b>Nervous system</b>	Abnormal neurological signs indicative of disease or injury (eg head tilt, circling, lack of coordination) Abnormal or aggressive behaviour/animal is intractable or violent



Category	Rejection Criteria
<b>External/skin</b>	<p>Generalised papillomatosis or generalised ringworm or dermatophilosis</p> <p>Swollen, peeling, reddening, scabbing, bleeding or infected skin lesions suggestive of facial eczema</p> <p>Generalised skin disease or infection</p> <p>External skin cancer</p> <p>Visible external parasites</p> <p>Lacerations that penetrate the full thickness of the dermis or are likely to affect the health or welfare of the animal</p> <p>Discharging wounds or abscesses</p> <p>Cutaneous myiasis (flystrike)</p> <p>Abdominal hernia</p> <p>Blood/discharge from reproductive tract (vulva/prepuce)</p>
<b>Head</b>	<p>Blindness in one or both eyes</p> <p>Cancer eye</p> <p>Keratoconjunctivitis (pink eye)</p> <p>Serious eye injury</p> <p>Excessive salivation</p> <p>Purulent nasal discharge</p> <p>Coughing consistent with signs of a contagious or infectious disease</p> <p>Respiratory distress</p> <p>Sharp horns</p> <p>Horns longer than appropriate for export</p> <p>Bleeding horn stumps</p> <p>Woody tongue or lumpy jaw</p>
<b>Other</b>	<p>Mobs with unusual mortalities during pre-export preparation</p> <p>Large disparities in size, age, or other physical or physiological incompatibilities (redraft animals in this case)</p> <p>Animals showing imminent signs of parturition such as, but not limited to, vaginal discharge, relaxation and swelling of vulval tissue</p>

### 6.12.2 Age

The approximate age of cattle can be determined, at the discretion of the Recognised Person, by any of the following means:

- exporter, farmer, or stock agent declaration
- examination of the teeth
- lifetime ID tags
- MINDA app (from Livestock Improvement Corporation database).

### 6.12.3 Weight & Body Condition

The weight of the cattle must be measured as close as possible to the cattle leaving the pre-export facilities to assist with the development of the vessel loading plan. The means of determining weight is at the discretion of the Recognised Person, but gut fill should not be manipulated to deliberately affect liveweight. Upon loading cattle (except for Jersey cattle) must weigh at minimum 200 kg. Jersey cattle must weigh at minimum 180 kg.

Alongside individual animal weight, body condition scoring provides a useful indicator of animal health. Upon loading cattle must have a minimum body condition score of 4 on the dairy scale. Jersey cattle weighing less than 200 kg must have a body condition score of at least 4.5.

#### **6.12.4 Restrictions on Export of Pregnant Cattle between 1 May and 31 October**

Cattle that are pregnant may not depart from New Zealand between 1 May and 31 October (inclusive) on a voyage that crosses the equator.

As guidance, if the cattle have been mated in the 5 weeks prior to entry into PEI, they should be tested again to determine their pregnancy status, within the final week in PEI prior to export.

### **6.13 Drafting Lines of Cattle**

Upon induction into PEI, cattle should be drafted into appropriate groups according to size, weight, age, sex and breed to enable the cattle to establish social bonds where the aim is to ensure that aggression and competition between individual animals is minimised. Creating appropriate groups of cattle at induction, and then retaining these groups as much as possible throughout the export process, is important in order to ensure that established social bonds between the cattle are maintained. This includes retaining the same social groups as much as possible throughout PEI, during transport to port, and during export on the vessel, where animals should be penned with or close to those animals with which they are familiar.

During the Schedule Check (approximately 1 week prior to transport to the port), the Recognised Person will verify that cattle have been placed in lines with other suitable animals (size, weight, age, sex, breed) and established social bonds.

The following animal weights will be used as guidance during the schedule check:

- for Rising 1-year olds, the range of individual animal weights in each mob should not be more than 50kg (ie the difference between the heaviest and lightest animals should not exceed 50 kg),
- for Rising 2-year olds, the range of individual animal weights in each mob should not be more than 25% of the average weight of animals in the mob (ie the difference between the heaviest and lightest animals should not exceed 25% of the average weight of the mob).

For any mobs of cattle that do not comply with the above requirements; changes may be made at the discretion of the Recognised Person where it is considered appropriate to minimise aggression and competition between animals.

## 7 Transportation to Port

Cattle transported within New Zealand must be moved in accordance with the Code of Welfare Transport within New Zealand 2018 (<https://www.mpi.govt.nz/dmsdocument/46015-Code-of-Welfare-Transport-within-New-Zealand>).

## 8 Vessel Preparation & Onboard Facilities

MPI will consider information from previous voyage reports when determining the adequacy of a vessel as part of the AWEC assessment.

A current Australian Certificate for the Carriage of Livestock (ACCL), issued by the Australian Maritime Safety Authority (AMSA) under Marine Orders Part 43 (for vessels permanently equipped for the carriage of livestock), or an equivalent level of functionality for the livestock support systems acceptable to MPI, must be provided by the Master to MPI to demonstrate that the vessel is well maintained and fit for purpose.

All general fittings, fixtures and objects on a vessel that may come into contact with the cattle or are used to service the cattle must be manufactured, assembled and positioned to avoid causing injuries to the cattle, and should be well-maintained, fit for purpose and visibly clean.

Records, for disinfection and disinsection since last carrying livestock, must be made available for review by the Authorised Person.

Back-up systems must be in place to ensure that the welfare of the cattle can be maintained in the event of disruption to, or breakdown of, primary mechanical feeding, watering, lighting and ventilation systems. The effective maintenance of the power, propulsion and ventilation systems of a vessel rests with the owner and the Master.

### 8.1 Vessel Inspections

Prior to export, the Marine Surveyor and the Authorised Person must inspect the vessel and be satisfied that the relevant requirements of Maritime New Zealand, and the conditions of the AWEC, have been met or provisions are in place for them to be met. Inspections take place prior to, during and upon completion of loading of cattle onto the vessel. Importantly, cattle must not be loaded onto the vessel until the Authorised Person has given permission to load in writing.

#### 8.1.1 Inspection Prior to Loading

The following must be verified on the vessel prior to the loading of cattle and the placement of bedding into the pens:

- the vessel is clean, well-maintained, and fit for purpose, including non-slip floors and the ability to ventilate, illuminate, feed and water cattle under secondary power sources
- feed and water troughs are in the pens, with clean water flowing freely from any automatic watering outlets
- records of vessel disinfection and disinsection since last carrying livestock
- quantities and feed declarations for any of the feed remaining onboard
- records of emptying and cleaning the feed silos
- expected feed and bedding to be loaded
- expected personnel onboard
- veterinary supplies, including the captive bolts and ammunition
- hospital pens are free to hold animals.

#### 8.1.2 Permission to Load

The following information must be provided to the Authorised Person prior to them allowing cattle to load onto the vessel:

- evidence that the exporter will have adequate provisions in place for the cattle during the voyage,

- including feed, water, space, onboard personnel and veterinary supplies
- evidence that the vessel is clean, well-maintained, and fit for purpose, including the ability to ventilate, illuminate, feed and water cattle under secondary power sources
- evidence that the Master has received and accepted the exporter's voyage instructions
- evidence of the Master approving the loading plan
- evidence that the vessel has either had a satisfactory outcome to a focused port state control inspection performed by Maritime New Zealand; or evidence that Maritime New Zealand has assessed the vessel and does not require a focused inspection campaign based on vessel history and previous inspection results
- a written declaration from a Marine Surveyor that the vessel is compliant with Part 24C of the New Zealand Maritime Rules and they have no objections to load the proposed number of cattle onto the vessel
- a signed Eligibility Document issued by the Recognised Person, including a schedule of eligible animals (Note: the number of animals on the ED must not exceed that on the AWEC decision);
- any additional OMAR supporting documents, such as confirmation that the vehicles transporting the cattle to the port have been cleaned and disinfected
- a signed AWEC decision document granting the AWEC from MPI Animal Exports
- a signed welfare declaration from the Recognised Person regarding the animals' fitness to travel, confirmation of weights, pregnancy status, preconditioning and that the competent authority of the importing country does not have any unresolved objections regarding the export.

Permission to load the vessel will be given by the Authorised Person to the exporter and the Recognised Person in writing.

Once cattle are loaded into livestock vessels, they must not be offloaded in New Zealand.

### 8.1.3 Inspection During and after Loading

The following must be verified on the vessel during and after the completion of loading:

- bedding has been placed in all the available pens, including hospital pens
- the cattle are unloaded from the transport vehicles in accordance with the NZ animal welfare requirements
- cattle are handled and loaded onto the vessel in compliance with animal welfare standards
- the cattle are loaded into pens as per the loading plan, so that they are able to lie down and rise without injury
- all cattle can access feed and water troughs, with feed and water is provided as soon as possible after loading
- any cattle that are aggressive, incompatible or do not appear fit for transport or export are identified and treated appropriately by onboard personnel.

### 8.1.4 AWEC and Permit of Carriage of Livestock Issuance

The owner, Master, or agent of the vessel must notify the Marine Surveyor at least six hours before loading is expected to be completed. After loading, a Permit for the Carriage of Livestock (as described in [Section 5.6](#)) may be issued to the Master by the Marine Surveyor.

An AWEC will be issued by the Authorised Person upon confirmation that all the appropriate verification has been completed, documentation has been provided (including a load-out confirmation record from the Recognised Person), and all conditions of the AWEC have been met or provisions are in place for them to be met.

The Director of MNZ or the Director-General of MPI may, on the advice of and with delegated authority to a Marine Surveyor or Authorised Person, require the Master to take additional precautions to ensure the safety

of the crew and/or the cattle. Where additional precautions of a physical nature are required (eg fixtures, fittings, appliances), the Director of MNZ or the Director-General MPI may allow equivalent devices to be used, as long as they are shown to be as effective as those originally required.

The Master must not take the vessel to sea until any additional requirements have been met, the final inspection has been completed, and the AWEC and Permit for the Carriage of Livestock has been issued.

## 8.2 Ventilation

Uniform and adequate air movement must be maintained on all areas of the vessel where cattle are located. This requirement applies at all times including from the beginning of loading and to the end of unloading. There must be sufficient free air space above the heads of the cattle to allow noxious air to move towards the exhaust exits.

Ammonia levels must not exceed 25 parts per million (ppm). As a guide, a level of 10-15 ppm of ammonia in the air can be detected by smell and an ammonia concentration above 25 ppm will cause eye and nasal irritation in people. In general, if the level of noxious gases is uncomfortable to people, it will also be uncomfortable for cattle. If there are areas of the vessel where inadequate air movement may be a risk, additional measures must be taken to ensure that these levels are managed appropriately. If these risks cannot be managed the areas may not be used to house cattle.

The Authorised Person and the Marine Surveyor will require the mechanical ventilation to be tested prior to loading the vessel. This is to ensure that the ventilation is operational, including under secondary power sources.

During the voyage, ammonia levels must be measured and recorded daily. This should be done in a variety of pens across decks and areas of the vessel so that a true representative measure is recorded.

## 8.3 Power Sources

In contingency plans (see [Section 5.3.3](#)) vessels must have a primary source of power as well as a secondary solution in the event that the primary system is compromised during the voyage. Power sources must be maintained in good working order at all times and these may be required, by the Authorised Person or Marine Surveyor, to be test-run prior to the loading of the cattle.

## 8.4 Drainage

All areas where cattle are housed must have effective drainage systems in place. This includes where cattle are temporarily relocated to hospital pens or to other areas.

## 8.5 Design & Arrangement of Cattle Pens

The construction and design of all equipment must account for vessel motion, and the effects of the wind and sea which can impose considerable strain on cattle pens, fittings and equipment. As a minimum, cattle pens and adjacent passageways must comply with the construction details specified in Maritime Rule Part 24C. Additional information around the arrangement of cattle pens can be found in the loading plan (see [Section 5.7](#)).

The cattle pens, passageways and equipment on the vessel must be adequately maintained, so that it is in good working order and does not pose a risk to animal welfare. Repairs must be done in a timely manner, with permanent repairs performed at the next available opportunity.

Kick plates should be present on the sides of cattle pens adjacent to alleyways. This is to minimise the loss of bedding from the pens, decrease the ingress of spilled water into the pens and decrease potential injuries to the cattle. Where kick plates are absent the exporter must have a documented management plan to mitigate these issues.

## 8.6 Stocking Density

Subclause 2.2(3) of Appendix 2 of the Maritime Rules Part 24C, requires that a record of the aggregating totals of the weight, and number of cattle, is made available to the Marine Surveyor and Authorised Person during the loading of the vessel. To expedite the loading process, this information should be made available prior to the start of loading. The method used to determine the average weight of the cattle in the consignment is at the discretion of the Authorised Person.

Trough spaces must be evaluated on a per head basis before finalising the number of animals to be housed in each pen; adequate access to trough space must be considered in the required management plan ([Section 5.3.4](#)). Additionally, cattle must be housed in such a way that they can lie down and rise without risk of injury. Various factors including pregnancy status, may indicate that more space per animal is required than that indicated below. Environmental and other factors should also be considered, including voyage length, temperature, and humidity. Pregnant animals must be provided with an additional 15% of space or more.

Animals must be grouped according to body size, weight, sex and breed<sup>1</sup>, so that cattle penned together can reasonably be able to compete for resources in the pen and to minimise aggression between animals. Consideration should also be given to drafting animals of similar physical size as well as weight, at the discretion of the Recognised Person, using the following requirements:

- for Rising 1-year olds, the range of individual animal weights in each mob should not be more than 50kg (ie the difference between the heaviest and lightest animals should not exceed 50 kg),
- for Rising 2-year olds, the range of individual animal weights in each mob should not be more than 25% of the average weight of animals in the mob (ie the difference between the heaviest and lightest animals should not exceed 25% of the average weight of the mob).

One percent (1%) or more of the total pen space used for animals must be made available for use as a hospital pen. This area must be able to be used in a manner which isolates sick or injured animals or shy feeders from the balance of the consignment so they can be protected, treated and monitored more intensely.

Additionally, the distribution of cattle in a vessel must ensure that:

- aggressive, non-compatible, or bullied animals are segregated
- the average floor area per animal is not less than the minimum permissible ([Table 2](#))
- cattle are separated from other species by a barrier that meets the satisfaction of the Authorised Person.

Minimum space allowances required for export cattle are provided in [Table 2](#). Weights that fall between those specified should be rounded up to the next higher weight category.

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<sup>1</sup> Animals of beef breeds with a similar stature may be penned together at the discretion of the Recognised Person and the Authorised Person.

**Table 2. Minimum pen area (m<sup>2</sup>/head) for cattle exported by sea**

Average Liveweight (kg)	Minimum pen area (m <sup>2</sup> /head)	Average Liveweight (kg)	Minimum pen area (m <sup>2</sup> /head)	Average Liveweight (kg)	Minimum pen area (m <sup>2</sup> /head)
180-200	0.990	305	1.308	410	1.707
205	1.007	310	1.323	415	1.727
210	1.023	315	1.337	420	1.746
215	1.039	320	1.351	425	1.766
220	1.055	325	1.364	430	1.785
225	1.070	330	1.378	435	1.805
230	1.086	335	1.392	440	1.824
235	1.102	340	1.406	445	1.844
240	1.117	345	1.419	450	1.863
245	1.132	350	1.433	455	1.883
250	1.148	355	1.446	460	1.902
255	1.163	360	1.460	465	1.922
260	1.178	365	1.473	470	1.940
265	1.193	370	1.486	475	1.961
270	1.207	375	1.502	480	1.980
275	1.222	380	1.520	485	2.000
280	1.237	385	1.539	490	2.019
285	1.251	390	1.558	495	2.039
290	1.266	395	1.613	500	2.060
295	1.280	400	1.668		
300	1.294	405	1.688		

## 8.7 Water

The provision of water must be appropriate for the breed, weight, age and physiological status of the cattle. Adequate clean and palatable water must be available at all times, to all cattle, throughout the voyage. Voyage length (including loading and unloading) and weather conditions should also be considered when calculating the amount of water required for a voyage. The vessel's watering system must have sufficient storage and generation capacity to provide water for the duration of the voyage at a rate of at least 12% of liveweight per animal per day. An additional reserve of at least 3 days must be carried by the vessel.

The following monitoring principles must be employed to ensure that the vessel's freshwater production equipment is performing adequately:

- freshwater production facilities must have an alarm system, connected to a central monitoring panel, which is activated upon failure of the facilities
- daily testing at the point of exit from the freshwater production facilities must be supplemented by random checks of all water troughs throughout the voyage
- testing must be performed at the point of water provision to measure salt content
- the pattern of testing must ensure that all troughs are tested regularly
- the testing, and results, must be documented.



In assessing the quantity of water the vessel can provide, allowance may be made for the amount of fresh water that can be generated by the vessel's equipment during the voyage, subject to the agreement of the Marine Surveyor.

It is recommended that automatic fresh-water systems, if used, should be constructed to minimise spillage, and must prevent the return of water from a receptacle to the freshwater tank.

## 8.8 Fodder

The exporter must prepare a fodder plan for the period while the animals are on board the vessel including the provision of food appropriate for the breed, weight, age, physiological status of the cattle. This plan must also take into account expected environmental conditions (eg temperature, humidity). Cattle feed requirements should be calculated based on daily requirements for metabolisable energy (ME) and crude protein (CP). Feed must be fit for purpose as described in the ACVM (Exemptions and Prohibited Substances) Regulations 2011.

The fodder plan must provide fodder at a rate of at least 2.5% of liveweight per animal per day on an as fed basis for the estimated duration of the animals on the vessel (which includes all loading and unloading days well as expected delays and contingencies – see below).

A minimum 5% of the required feed must be roughage (eg chaff and/or hay); however, this may be increased up to 10% depending on such factors as the fibre length of the loaded pellets, the number of pregnant animals.

The fodder plan must justify the amount of roughage chosen for the particular consignment, taking into account the overall nutritional plan and physiological needs of the animals, including information on how roughage is used alongside pelleted feed.

A contingency is required to be carried to maintain the animals in the event of an unforeseen delay. The contingency for an average voyage to China is for four days of additional feed. If a longer voyage is planned, this may increase.

In addition, the impact of COVID means that vessels are experiencing additional delays prior to unloading cattle at the destination port, and so exporters will be required to carry additional feed to meet this foreseeable delay. At the time of publishing, this was an average of one additional day however please note that this requirement is subject to change dependent on the ongoing impacts of COVID in 2022-2023.

The exporter will provide the Authorised Person and MPI with the calculations used to arrive at the amount of fodder to be loaded as well as a copy of the feed testing laboratory's certificate for the pelleted feed, confirming the DM, ME, CP, NDF values and salt percentage used for the calculations.

The exporter must ensure the pelleted feed has a nutrient profile within the ranges in Table 3 below:

**Table 3: Nutrient profile for cattle exported by sea**

Pellet Nutrient Profile	
Nutrient	Range
Dry Matter	87 - 95%
Energy	8 - 12MJME/kgDM
Crude Protein	10 - 13% of dry matter
Neutral Detergent Fibre	40-65% of dry matter
Salt	Maximum of 0.25%

Feed from a previous voyage, that is suitable for cattle consumption, may remain in a feed storage tank provided that:

- each tank is completely emptied at least once every 90 days
- all feed that is no longer suitable for cattle consumption is emptied in its entirety before new feed is added
- accurate records are maintained of the emptying of feed storage tanks and are made available for inspection upon request
- laboratory certificates showing the DM, ME, CP, NDF values and salt percentage of the feed are available.

Feed management must ensure that all the cattle in each pen have access to food at all times during feeding. This includes ensuring that sufficient trough space is available in each pen to reduce competition between animals. This is especially important for animals known to be shy feeders.

Feeding must be done in a manner that prevents serious digestive disturbance. This includes acidosis, prolonged scouring, or bloat. Care must be paid to pellet composition to ensure pellets have an appropriate fibre length.

## 8.9 Flooring & Bedding Materials

Where sawdust, rice hulls or similar material are used exclusively for bedding material, they must be provided at a rate of at least 7 tonnes or 25m<sup>3</sup> for every 1,000m<sup>2</sup> of floor space used to carry animals. This is to ensure that underfoot conditions are relatively dry and the surface is non-slip, and reduces the likelihood of injury, including slipping, abrasions, lameness or other issues arising including pugging or faecal coating. Bedding material should be applied prior to loading and unloading to minimise slipping during these activities. Flooring and bedding materials must be monitored at least once a day and changed or replenished as often as required to maintain the health and welfare of the cattle.

## 9 Loading Arrangements

Once cattle have arrived at the port, responsibility must be transferred to a competent person who is nominated by the exporter. This person must be provided with any relevant information regarding any aspect of the travel to the port that may have or will likely have an impact on animal health and welfare.

Loading arrangements must take into consideration:

- the port facilities including lighting, shelter, and facilities for containment of the cattle
- contingency plans covering interruptions to loading.

No animals destined to be exported may leave PEI until MPI Animal Exports and MPIVS have inspected the vessel and VS have provided written authorisation to the exporter to approve the loading of cattle. Cattle must be loaded by competent stockpersons in a manner that reduces the likelihood of injury and stress to the animals. During loading the exporter must inform the Master of the vessel of any potential issue around preparation or transport that may impact on animal health and welfare.

Only healthy animals may be loaded onto the vessel. Any animal that meets any of the rejection criteria outlined in [Table 1](#) may not be loaded onto the vessel. Animals that meet any of the rejection criteria must be marked, removed from the consignment and provided treatment and care. Removal from the port must also be arranged. If euthanasia is required it must be undertaken according to best practice (see [Section 10.5](#)). Arrangements must be made for the removal of carcasses from the port.

Loading and unloading facilities must be designed, constructed, and maintained to allow the steady and safe transfer of cattle. At a minimum, they must be:

- fitted with side panels of sufficient strength and height to prevent the escape of cattle
- fitted with a non-slip walking surface suitable for cattle
- fitted with a closing arrangement at the point of entry to the vessel to prevent gaps between the vessel and accessway
- be free of any protrusions.

The height of the tide at the berth must be considered when planning loading or unloading. This will affect the grade of the ramp. The dock surface must be level with the floor of the vehicle from which the animals are being unloaded.

Cattle must be loaded according to the loading plan (see [Section 5.7](#).) Before departure the head stockperson must review and confirm that the animals have been loaded according to the loading plan. They must also confirm that the feed and bedding requirements have been loaded as specified in this plan.

Stock handlers must have adequate skill and experience to ensure appropriate handling and care is provided for cattle during loading and unloading. This includes knowledge of cattle behaviour, flight zones, visual capabilities, social behaviour and how cattle may respond to stimuli. Understanding of these aspects of cattle physiology and behaviour can significantly reduce the amount of handling needed to move, load, or unload cattle, and the amount of stress the cattle experience. During loading and unloading, cattle must be moved at a steady rate to minimise unnecessary stress and must be supervised at all times.

## 10 Onboard Management

### 10.1 Veterinarian

A veterinarian who is registered in New Zealand or Australia and has sufficient experience in cattle medicine must accompany each consignment.

The veterinarian should preferably have experience in cattle shipments, and if not, must be paired with an experienced head stockperson.

It is strongly recommended that onboard veterinarians undertake basic safety at sea training to ensure they have foundational seafarer skills to work safely and effectively on an export vessel. The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STWC) provides a basic safety training course that covers personal survival techniques, fire prevention and firefighting, elementary first aid, personal safety and social responsibility and seafarer's security awareness.

MPI may interview the on-board veterinarian to ensure their experience is appropriate.

### 10.2 Stockpersons

One stockperson must be provided for every 1400 head of cattle. The veterinarian may also act as a stockperson if suitably qualified and experienced. During the application process one experienced individual must be nominated to serve as a head stockperson who is responsible for the management of the team that provides care to the animals.

Where a suitably trained member of the crew is nominated as a stockperson, they must be relieved of their other on-board duties to ensure they are available to carry out day to day animal husbandry activities.

Like on-board veterinarians, stockpersons should undertake safety at sea training to ensure they have foundational seafarer skills to work safely and effectively on an export vessel (see details above).

MPI may interview the nominated head stockperson to ensure their experience and management plans for the consignment are appropriate.

### 10.3 Inspection of Cattle

Cattle must be inspected at least four times a day, at evenly spaced intervals. The frequency of inspection should increase in proportion to environmental demands such as extreme heat or humidity. If sick or injured animals are identified during an inspection, they must be assessed immediately. Depending on the situation such an animal may be treated, moved to a hospital pen or euthanised.

### 10.4 Veterinary Equipment

Veterinary equipment (including non-expired medicines, instruments and stores), suitable for the number of cattle being carried, must be carried during each voyage. The Authorised Person will verify this equipment prior to loading of cattle onto the vessel (the minimum equipment is outlined in [Appendix 2](#) as well as additional equipment that is required for pregnant animals). Beyond the minimum requirements additional equipment may be included depending on the specific needs of the consignment.

## 10.5 Humane Destruction

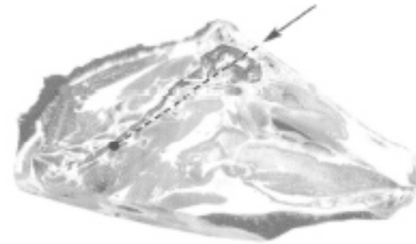
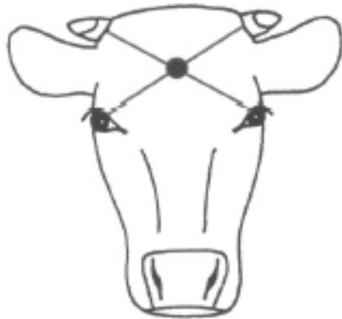
At a minimum, two humane killing devices, in good working order must be carried during each voyage along with sufficient cartridges. These will be verified by an Authorised Person. Stockpersons must be proficient in their use and must be able to demonstrate safe operation of the device and the correct target site on the animal.

Where it is necessary to destroy an animal to prevent additional suffering, euthanasia must be carried out promptly and humanely, by either the stockperson, acting under the direct supervision of the veterinarian, or the veterinarian, using one of the methods listed below:

- use of a captive bolt pistol with a penetrating bolt, placed in direct contact with the head, followed by an immediate bleed out (thoracic or neck stick) (the captive bolt pistol, calibre and cartridge size must be appropriate for the animal according to the manufacturer's recommendations)
- a lethal dose of general anaesthetic (administered by a veterinarian)

Note that the two methods above remain the only acceptable methods for humane destruction of calves.

The pictures below show the correct target for the humane destruction of cattle by captive bolt pistol: the intersection of two lines, running from the rear of the eyes to the opposite horn buds.



## 10.6 Disposal

Cattle that die before loading, or that are dead on arrival at the port, must be removed from the port and disposed of in compliance with local health and environmental requirements. The decision as to whether a post-mortem is required rests with the Authorised Person.

No carcass may be disposed of unless the animal has been confirmed as dead by a veterinarian.

In the event of cattle dying at sea, ear tags must be removed before disposal of the carcass. Carcasses may not be disposed of within 12 nautical miles of the coastline of any country. Carcasses disposed of between 12 and 100 nautical miles of land must be ground up or have had their thoracic and abdominal cavities cut open.

## 11 Monitoring & Reporting

### 11.1 On-board Monitoring

Each day of the voyage the Master (or delegate) as well as the veterinarian and stockpersons must meet to discuss any issues that may impact on the health and welfare of the cattle.

In addition to animal inspections ([Section 10.3](#)) the systems that support animal care and husbandry must also be inspected (ie food, water, ventilation) alongside the monitoring of pen space allocation as well as pen and deck conditions.

Washing of decks should be carried out regularly and followed by the provision of bedding to maintain the flooring surface. This must be done in such a way that minimises stress for the animals.

### 11.2 Notifiable Incidents

The exporter must report all notifiable incidents to MPI as soon as practical, and within 12 hours.

A notifiable incident is an event that has the potential to cause serious harm to the health and welfare of the cattle. A notifiable incident includes, but is not limited to:

- unloading livestock anywhere other than the destination port
- compromise of any of the vessel's systems that may impact on animal health and welfare (eg ventilation, feeding, watering)
- a shortage of feed and/or water supply
- breakdown of the vessel
- marine casualty of the vessel
- an act of terrorism or piracy
- suspicion or diagnosis of a contagious disease in a consignment of cattle
- a shipboard mortality rate of equal to or greater than 0.5%
- rejection of the consignment at the overseas port of arrival
- any other event that may seriously impact the health and welfare of the animals.

### 11.3 Reporting

The following reporting is required.

#### 11.3.1 Daily Report

As a condition of the AWEC the on-board veterinarian must complete and submit to MPI each day of the voyage, a daily report describing the health and welfare of the livestock. The voyage starts from the time from when the first animal is loaded onto the vessel and finishes when the last animal has been unloaded at the destination port in the importing country

#### 11.3.2 Voyage Report

As a condition of the AWEC the exporter is required to provide a report on the way in which the animals were managed during the journey. This is to be done within 5 calendar days after completion of the voyage.

### **11.3.330-Day Post-Voyage Report**

As a condition of the AWEC the exporter is required to provide a report (on an MPI provided template) on the welfare of the animals for the 30-day period after arrival in the importing country. This is to be done within 10 calendar days after the completion of the 30-day period. This report must be submitted to MPI Animal Exports [livestockexportsbysea@mpi.govt.nz](mailto:livestockexportsbysea@mpi.govt.nz).

## Appendix 1: Nominated Veterinarians for Pregnancy Testing Approval Form

<p><b>Purpose</b></p> <p>This form is used to ensure that veterinarians undertaking pregnancy testing at pre-export isolation facilities have the necessary competency and experience to perform accurate pregnancy diagnosis and foetal aging in the context of cattle for export by sea.</p>
<p><b>Instructions</b></p> <p>Each practice manager and the nominated veterinarian that is to pregnancy test cattle for export by sea at a pre-export isolation facility must sign this form detailing the veterinarian's experience, training and competency in the use of manual palpation and ultrasound for pregnancy diagnosis and foetal aging.</p> <p>The practice manager must confirm the details in this form before the nominated veterinarian can be approved by MPI to perform pregnancy diagnosis and foetal aging at PEI facilities.</p> <p>An updated form will need to be resubmitted annually as approval for each veterinarian will be for 12 months only. Veterinary practices must inform MPI if they wish to reverse their endorsement of any nominated veterinarian or if a veterinarian approved by MPI to perform pregnancy diagnosis and foetal aging at PEI facilities leaves their practice.</p> <p>Completed forms must be sent to <a href="mailto:livestockexportsbysea@mpi.govt.nz">livestockexportsbysea@mpi.govt.nz</a></p>
<p><b>Implications of Inaccurate Pregnancy Scanning</b></p> <p>It is important to ensure that the veterinarians and the veterinary practices involved in the preparation of cattle for export have considered both the acute and wider implications of incorrect pregnancy diagnosis in cattle at PEI.</p> <p>Due to the international context and process involved in exporting these animals, any incorrect pregnancy diagnosis or inaccurate foetal aging can result in poor animal welfare outcomes during the voyage and can negatively impact the reputation of New Zealand as a responsible producer and exporter of animals.</p> <p>As a result, veterinarians must ensure they keep in mind the potential for rogue and unexpected pregnancies throughout their examination despite being provided with artificial insemination or mating dates.</p>
<p>Veterinarians must also be aware of the following prior to carrying out pregnancy testing at a PEI facility:</p> <ul style="list-style-type: none"> <li>• Mating or artificial insemination dates for individual animals or groups</li> <li>• Potential for rogue and unexpected pregnancies</li> <li>• Animals that require aged pregnancy scanning</li> <li>• Aging of pregnancy must involve visualisation of the foetus</li> <li>• Unclear or unexpected pregnancy diagnosis must be rechecked via manual palpation or ultrasound.</li> </ul>



**Eligibility Criteria**

For veterinarians to be approved by MPI to carry out pregnancy diagnosis and foetal aging on cattle for export at PEI facilities, a veterinarian must meet all of the following criteria:

- Has received one on one training in both manual palpation and ultrasound diagnosis of pregnancy and assessment of reproductive structures with a senior veterinarian for a minimum of 3 seasons
- Has at least 3 years' experience as a qualified cattle veterinarian
- Has performed accurate diagnosis of pregnancy and foetal aging by ultrasound in a minimum of 10,000 head of cattle in total
- Has been regularly audited through peer assessment by a senior veterinarian within the practice for a minimum of 50 head of cattle per season
- Has been made aware of the implications of incorrect pregnancy diagnosis in the context of export cattle.

**Veterinary Practice Information**

Practice name (company) and point of contact (name, email address, phone number):

**Nominated Veterinarian's Information**

Full Name	
Phone and email	
APC Registration Number	

**Declarations****Nominated Veterinarian's Declaration**

I confirm that the above information is true and correct.

Name:

Date:

Signature:

Practice Manager Declaration

I confirm that this veterinarian meets the eligibility criteria, and I endorse them as having the necessary competency to perform accurate pregnancy diagnosis and foetal aging for cattle for export by sea.

Name:

Date:

Signature:

## Appendix 2: Veterinary Medicines & Animal Equipment

These tables provide information regarding the required veterinary medicines and equipment to be carried on board a vessel during the transport of cattle by sea. The quantities have been calculated for voyages from New Zealand to China, so significantly longer voyages will need proportionally more.

It is strongly recommended that the voyage veterinarian check the medicines and equipment list supplied by the exporter and ensure it contains sufficient quantities and preferred items to treat respiratory disease, eye disease, gastrointestinal disease and musculoskeletal conditions and injuries.

Category	Specific Item	Minimum Requirement
<b>Injectable Antimicrobials</b>	Trimethoprim Sulphur	10 doses per 1000 animals
	Penicillin, short and long acting	15 doses of each per 1000 animals
	Oxytetracycline, long acting	30 doses per 1000 animals
	Antibiotic(s) appropriate for the treatment of bovine respiratory disease (BRD) complex (may include Tulathromycin, Ceftiofur and/or Tylosin)	35 doses per 1000 animals
<b>Topical treatments</b>	Topical chlorhexidine and/or iodine	500ml per 1000 animals
<b>Anti-inflammatory</b>	Dexamethasone	5 doses per 1000 animals
	Non-steroidal anti-inflammatory drug (may include meloxicam, ketoprofen and/or flunixin)	50* doses per 1000 animals
<b>Sedative</b>	Xylazine	10 doses per 1000 animals
	Xylazine reversal	5 doses per 1000 animals
<b>Supportive Products</b>	Oral electrolyte rehydration solutions	10 doses per 1000 animals
	Intravenous metabolic solutions	10 doses per vessel
<b>Products for Pregnant Animals Only</b>	Oxytocin	25ml per 1000 animals

\*Up to 10 doses per 1000 animals may be combination products containing a non-steroidal anti-inflammatory and antibiotic

Category	Specific Items	Minimum Requirement	
<b>Handling Equipment</b>	Rope halter	1 per vessel	
	Nose grips	1 per vessel	
	Rope for handling	1 per vessel	
	Cattle movement aides such as flagsticks	4 per vessel	
<b>Diagnostic Equipment</b>	Thermometer	3 per vessel	
	Post-mortem kit	2 post-mortem knives plus 1 steel and sharpening stone per vessel	
	Obstetrical gloves	1 box of 50 per vessel	
<b>Surgical Equipment</b>	Antiseptic concentrate (chlorhexidine or iodine)	1 litre per vessel	
	Basic surgical kit including scalpel blades, scalpel handle, needle drivers, needles, suture material, forceps, haemostats, swabs	1 kit per vessel	
	Lidocaine	100ml per vessel	
<b>Treatment Equipment</b>	Remotely triggered syringe device (e.g. westergun, pole syringe)	2 per vessel	
	Syringes	Syringes suitable for remotely triggered syringe device on-board (e.g. westergun, pole syringe)	10 per 1000 animals
		20ml syringes or larger	20 per 1000 animals
		10ml syringes or smaller	10 per 1000 animals
	Needles	Needles suitable for remotely triggered syringe device on-board (e.g. westergun, pole syringe)	10 per 1000 animals
18G 1 ½ inch needles for manual injection		50 per 1000 animals	

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	Obstetrical (only for those consignments with pregnant animals)	Obstetrical chains/ropes	1 set per vessel
		Obstetrical lubricant	5 litres per vessel
<b>Euthanasia Equipment</b>	Penetrative captive bolt device		2 per vessel
	Cartridges		40 cartridges per 1000 animals

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## **Appendix 3: References**

Animal Welfare Act 1999, New Zealand

Code of Welfare Dairy Cattle, Ministry for Primary Industries, New Zealand

Code of Welfare Sheep and Beef Cattle, Ministry for Primary Industries, New Zealand

Code of Welfare Transport within New Zealand, Ministry for Primary Industries, New Zealand

Maritime Rules Part 24C Carriage of Cargoes – Specific Cargoes, 1999, Maritime New Zealand

Version 3.1 Australian Standards for the Export of Livestock. Australian Government: Department of Agriculture, Water and the Environment