



Australian Government

Australian Quarantine and Inspection Service

Investigation into reportable cattle mortality level on sea voyage from Fremantle to Jakarta, Indonesia February 2008

1. Purpose

To report on the investigation into the cause of mortalities in cattle exported by sea to Indonesia, and to make recommendations with the objective of reducing the likelihood of a recurrence.

2. Summary

The vessel carried 1,789 cattle loaded as one consignment. There were 15 mortalities of the 1,789 cattle loaded which equates to a mortality rate of 0.84%.

The likely cause of the reportable mortality rate on this voyage was: rough weather due to nearby Tropical Cyclone (TC) Nicolas causing injuries resulting in death during the voyage or euthanasia at the port.

Background

The investigation into the mortality was carried out by reviewing the following information:

1. Stockman's end of voyage report.
2. Stockman's Daily Reports
3. Report from the exporter.
4. Records from the registered premises.
5. Report by the master of the vessel.
6. Report from the AQIS certifying veterinarian.
7. Report from the Australian Maritime Safety Authority (AMSA)

Table 1: Chronology of Events

Dates	Day of Voyage	Action	Cumulative Voyage Mortality Total	Cumulative% Mortalities
18/02/2008		Cattle loading in Fremantle 1,789 total cattle loaded.	0	-
19/02/2008	1			
20/02/2008	2		0	
21/02/2008	3		0	
22/02/2008	4		0	
23/02/2008	5	1 cow mortality	1	0.06
24/02/2008	6	1 cow mortality	2	0.11
25/02/2008	7	Arrival in Indonesia. 6 cattle euthanased on ship. Discharging and 7 cattle euthanased.	15	0.84
TOTAL	7		15	0.84

Table 2: Mortalities by Cause

Cause	Internal injuries	Septicaemia	Euthanased
#	1	1	13

- . 512 steers, 252 heifers and 1052 cows were loaded - 13 cows and 2 steers died.
- . 1 cow died on deck 5 from internal injuries – diagnosis based on the stockman’s post mortem findings.
- . 1 cow died on deck 3 from septicaemia from a wound in her udder – diagnosis based on stockman’s clinical findings.
- . 4 cows and 2 steers were euthanased on the ship due to injury.
- . 7 cows were euthanased at the port due to injury. These cows were predominantly from decks 3 to 6.

3. Findings

3.1 Mortalities in Registered Premises

The cattle exported from Fremantle were present at the registered premises from 9 February until loading on the 18 February 2008. The records of the registered premises indicated no mortalities over the preparation period.

The record of rejects indicated there were 24 rejects. The main reasons for rejection were: lameness (8), pinkeye (4) and heavy cattle (12)

3.2 Loading

The records from the exporter indicate the cattle were loaded in accordance with ASEL.

3.3 Journey

The climatic condition for the cattle decks were as follows

Table 3: Climatic conditions:

Date	Dry bulb (°C)	Humidity (%)	Daily water consumption (L)	Daily weather conditions from daily reports
19/02/2008	25	82	9	Very rough and heavy swell some cloudy
20/02/2008	27	78	22.9	Very rough and heavy swell cloudy
21/02/2008	28	80	35.2	Rough seas and moderate swell. Overcast and shower.
22/02/2008	30	80	41.4	Mod/rough seas and moderate swell. Overcast and showers.
23/02/2008	31	81	43.0	Slight/moderate seas and low swell. Fine
24/02/2008	31	81	43.0	Slight seas and low swell. Some cloud.

No data available for day 7, (25/02/2008) as the vessel was discharging in port.

The reportable mortality trigger for a short haul cattle voyage is 0.5 percent or three (3) animals whichever is the greater number of animals. The reportable mortality level was triggered on day 7, (25/02/2008).

The rough weather contributed to injuries in the cattle. The majority of injured cattle were cows.

4. AMSA evaluation of the vessel upon return to Australia.

The AMSA investigation indicates that there were no failures in the livestock services of the ship. However AMSA considers that there may have been better options in respect of cyclone avoidance by the master of the vessel. AMSA recommended changes to the ship's Safety Management System which were implemented.

5. Conclusion

The factors contributing to the majority of cattle mortalities on board the vessel were rough weather due to nearby TC Nicolas resulting in injuries to the cattle. These injuries either directly caused the death of the cattle or resulted in euthanasia at the port.

6. Recommendations

Additional conditions applied to the exporter until satisfactory results achieved.

7. Action

AQIS added conditions to the approval of NOI/CRMPs for cattle to south-east Asia for this exporter as follows:

- . The cattle require 3 clear days in the registered premises immediately prior to export.
- . The cattle must be provided with 10 per cent additional space over and above the requirements of the Australian Standards for the Export of Livestock.
- . In addition to the accredited stockman required by the Australian Standards for the Export of Livestock, an AQIS accredited veterinarian will be required to travel with, and report on the voyage.

8. Results

The following consignments had the above conditions applied with the following results:

Date	Destination	Number loaded	Number mortality	Mortality %
5 March	Malaysia	961	3	0.31%
20 March	Indonesia	1357	4	0.29%
26 March	Indonesia	2653	0	0%

The following consignments had the additional condition that cattle require 3 clear days in the registered premises, with the other two conditions removed, with the following results:

Date	Destination	Number loaded	Number mortality	Mortality %
23 April	Indonesia	2412	0	0%
5 May	Indonesia	1481	5	0.34%
5 May	Indonesia	2357	0	0%