

# REPORT ON LIVESTOCK VESSEL MAYSORA V114

FREMANTLE TO TEKIRDAG - APRIL 12 TO MAY 1, 2018

s. 22(1)(a)(ii)

Veterinary Officer, Department of Agriculture and Water Resources

DRAFT

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## 1. EXECUTIVE SUMMARY

My role as a DAWR Veterinary Officer Observer on board was described in the Directions Order of April 10 from Narelle Clegg, Assistant Secretary, Exports Division (**Attachment a**), viz. to monitor the activities of the <sup>s. 47F(1)</sup> and exporter in relation to their approved export programs for cattle and sheep through audio or video recordings or photographs, and to order the <sup>s. 47F(1)</sup> to take remedial action if a deficiency is observed.

No significant non compliances were observed in relation to the <sup>s. 47G(1)(a)</sup> CSEP during V114 and I was not required to issue a formal notice to the <sup>s. 47F(1)</sup> to remedy a deficiency.

This report describes the conditions and management control on board the vessel Maysora during its 114<sup>th</sup> voyage as a livestock carrier, departing Fremantle Port on 12 April 2018 at 02.30 hrs and arriving at Tekirdag, Turkey on 2 May 2018 at 01:30 hrs.

The vessel departed Port Adelaide at 4 am April 6 with LNC 10079 (37,085 sheep and 2,523 cattle) and sailed to Fremantle where LNC 10078 was loaded (36,751 sheep and 5,572 cattle). I also joined the voyage at Fremantle Port.

The overall mortality percentage in the sheep was 0.43 % and in the cattle was 0.11 %.

A standard series of photos and videos were taken each day of the same pens to record changes to the condition of the livestock and pens over the voyage. Other photos and videos were collected as indicated by the circumstances of the voyage.

Personal observations and reported opinions are indicated by *italicised* text in the body of the report and a summary of these observations is made in Section 8.

During the course of this voyage I enjoyed a courteous and professional relationship with the <sup>s. 47F(1)</sup> and crew as well as the <sup>s. 47F(1)</sup> and <sup>s. 47F(1)</sup>.



## 2. MV "MAYSORA"

### a) HISTORY

Built in Argentina in 1989 as a container vessel and converted in 2001 in Singapore as a livestock vessel. This is voyage no. 114 as a livestock vessel.

Originally Decks 1 to 7 were designed for cattle and Decks 8 to 11 for sheep.

In 2014 D7 and D8 were converted to dual use cattle and sheep.

Decks 9 to 11 are twin sheep decks (i.e. each of these decks contains both an upper and lower deck).

s. 47F(1)

s. 47F(1)

The vessel has regular AMSA inspections and had its last dry dock inspection Singapore on 4 August 2014. This AMSA inspection is valid for 5 years. s. 47C(1)

s. 47C(1)

As well there was an intermediate examination at berth in Turkey in 2017. The vessel is AMSA compliant.

A full suite of photos taken in September 2017 and also during this voyage are available on DAWR files.

### b) SIZE AND LAYOUT

s. 47G(1)(a)

### c) FLOORING

The concrete floors in the pens are coated with a paint called Bolidet, which claims to be hard wearing and non-slip. The flooring was in excellent condition.

### d) SERVICES

#### i. Fodder Storage

s. 47G(1)(a)

s. 47G(1)(a)

ii. Water

s. 47G(1)(a)

iii. Power

s. 47G(1)(a)

iv. Ventilation

s. 47G(1)(a)

s. 47C(1)

v. Engine

The engine is a s. 47G(1)(a) for the technically minded but suffice to say the engine and generator room is a very large scale operation.

### 3. MANAGEMENT

a) s. 47G(1)(a)

s. 47G(1)(a)

s.47F(1)

s.47F(1)

s. 47C(1)

s.47F(1)

s.47F(1)

s. 47C(1)  
s.47F(1)

b) Maysora

i. s. 47F(1)  
s.47G(1)(a)

ii. s. 47F(1)

iii. s. 47F(1)

s. 47G(1)(a)

s.47F(1)

iv. **s. 47F(1)**

There is also a hierarchy of **s. 47F(1)**  
**s. 47F(1)**

v. **s. 47F(1)**

**s. 47F(1); s. 47G(1)(a)**

vi. Capacity on Board

The maximum number of people allowed on board is 80. During this voyage there were 78, including the Observer.

**4. s. 47F(1) and s. 47F(1)**

a) **s. 47F(1)**

**s.47G(1)(a)**

**s.45(1)**



b) s. 47F(1)

s. 47F(1)

s.47G(1)(a)

s.47G(1)(a)

s. 47C(1); s. 47F(1)

ii. s. 47F(1)

s.47F(1); s.47G(1)(a)

s. 47C(1); s. 47F(1)

s. 47C(1)

## 5. THE CONSIGNMENT

### a) Pre Departure at Registered Premises

The sheep and cattle were held at DAWR Registered Premises within 2 hours drive of Port Adelaide and Fremantle before their respective departures. At the Registered Premises they were prepared by the s. 47F(1) according to the Turkish protocol and introduced to pellets. The pre-departure procedures do not form part of this report however it is a very important leg of the journey for at least the following two reasons:

#### i. Nutrition Management

The animals would presumably be introduced to a pellet ration during this stage. The feeding transition to the ship board diet needs to be carefully managed, particularly in the context of the additional challenges they are facing. s. 47C(1)

s. 47C(1)

s. 47C(1) This is a general comment and no nutritional conditions were diagnosed on this voyage.

The s. 47F(1) was not involved in this transition period, nor was he even provided a nutritional profile of the pellets or chaff provided. Altering or mixing the chaff and pellets is a significant tool for the s. 47F(1) in managing heat stress related issues in particular. For these consignments the s. 47F(1) was verbally advised that the pellet ME was 12 MJ/kg and crude protein 13%.

No information was given on the nutritional profile of the chaff, which was supplied in two lines of Oaten Chaff and Lucerne Chaff. The same pellet and chaff is provided for both sheep and cattle. However Lucerne chaff is usually high in protein and very high in soluble carbohydrate and the oaten chaff is low in protein and takes longer to digest, resulting in a lower heat load. s. 47C(1)

s. 47C(1)

s. 47C(1)

s.47G(1)(a)

ii. Final selection of animals

Animals are rejected at the registered premises for failing testing protocols, on health and welfare grounds and for commercial reasons. Selection is made by the s. 47F(1) s. 47F(1) in consultation with the exporter.

Under the Approved Arrangements and Turkish protocol the DAWR VO inspects a sample of animals within 48 hours of departure. Based on this, the minimum sample size required to be inspected was 325 for the Adelaide cattle, 360 for the Fremantle cattle, and 380 sheep in each of the Adelaide and Fremantle consignments. s. 47C(1)

s. 47C(1)

With regard to these consignments there were no particular issues relating to the loading of animals not fit to travel or too weak to embark on the voyage. However the sheep were examined at loading by the s. 47F(1) and a number of sheep were rejected (probably up to 100) for eye problems and lameness. These sheep did not appear on the ship's manifest, however it raises the point that the health of a consignment is not static.

One bull was injured in the leg at loading at Port Adelaide. It was hospitalised in Deck 2 on the vessel and treated immediately. The animal was subsequently discharged at Tekirdag without incident or pain killers.

## s. 47C(1)

## b) Consignment

## i. Maysora V114

The voyage LNC 10079 commenced in Adelaide where 2,532 cattle and 37,085 sheep were loaded over 2 days before departing on 6 April 2018 to Fremantle.

The Maysora arrived in Fremantle on April 10 and loaded LNC 10078 with a further 5,572 cattle and 36,751 sheep

The Maysora departed Fremantle at 02:00 hrs 12 April 2018 with the following livestock:

Livestock	No.	Average Weight (kg)	Total (mt)
Cattle	8,104	280	2,275
Sheep	73,836	43.6	3,219
			<b>5,494</b>

## ii. Livestock Categories

A detailed description of the cattle and sheep and their weights is provided in **Attachment c.**

The cattle were divided into Pastoral, Euro and British. s. 47G(1)(a)  
s. 47G(1)(a)

The categories are probably based on the value of each category with Euro being most expensive, British next and Pastoral the cheapest. The breeds that handled the journey the best were roughly in the reverse order.

The juvenile Angus bulls in this consignment weighing less than 230 kg were the most vulnerable and accounted for 7 out of the 9 mortalities

The sheep were described along traditional lines of wether, hogget, ram and lamb.

## c) Feed and Fodder Calculation

s. 47G(1)(a)



d) Load Plan and HSRA

Before departure the exporter must have the Heat Stress Risk Assessment and associated Load Plan provided to DAWR Canberra. These are both core documents for Middle East shipments, including Turkey.

s. 47G(1)(a)

s. 47G(1)(a)

It is common for pens to be adjusted after loading to more evenly distribute the cattle or sheep according to visual assessments. Also, loading cattle and sheep is a dynamic process where, while aggregate numbers are exact, livestock numbers for each pen do not precisely conform to the Load Plan at the start of the voyage and minor changes are often made soon after the voyage commences, mainly because sheep and cattle are described on basis of average weights but pens may need to be adjusted to cater for actual relative size of the animals.

s. 47G(1)(a)

s. 47G(1)(a)

Observations on the Load Plan and HSRA:

s. 47C(1)

s. 47C(1)

## 6. THE VOYAGE

### a) Route

The route taken was direct to the Gulf of Aden (passing just west of the Maldives) before sailing past Jeddah to the Suez Canal and then directly to the Turkish Port of Tekirdag (120 km west of Istanbul). The total distance is 12,938 km from Fremantle and 20 days sailing. The distance from Adelaide is 15,408 km and an extra 5 days, including 2 days at Fremantle.

### b) s. 47G(1)(a)

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s.45(1); s.47F(1)

s.45(1); s.47F(1)

s.47F(1)

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s.47F(1)

s.47F(1)

s. 47C(1) s.47F(1)

s.47F(1)

s.47F(1)

s. 47C(1)

s.47F(1)

The following panting score described by Catherine Stockman in her PhD thesis (1) may more realistically describe the level of respiratory stress in a sheep. This 4 point rating system for sheep was used during the voyage and for this report

<b>Sheep Panting Score</b> <i>Stockman, Catherine (1)</i>	
0	No panting
1	Slight panting, mouth closed
2	Fast panting, occasional mouth open
3	Open mouth and some drooling
4	Open mouth, tongue out and drooling

s. 47C(1)

Gaughan et al (8) described the following Panting Score for feedlot cattle, which was used as a guide during the voyage. s. 47C(1)

s. 47C(1)

<b>Cattle Panting Score</b> <i>Gaughan J.B. et al (7)</i>	
0	No panting
1	Slight panting, mouth closed, no drool, easy to see chest movement
2	Fast panting, drool present, no open mouth.
2.5	As for 2, but occasional open mouth panting, tongue not extended
3	Open mouth and excessive drooling, neck extended, head held up
3.5	As for 3 but with the tongue out slightly and occasionally fully extended for short period
4	Open mouth with tongue fully extended for prolonged periods with excessive drooling. Neck extended and held up.
4.5	As for 4 but head held down. Cattle "breathe" from the flank. Drooling may cease.

s. 47C(1)

s.47F(1)

#### DAWR Relationship with AAVs

s 47C(1); s. 47F(1)

#### Accuracy of Hygrometers

The accuracy of temperature and humidity readings is important because they drive decisions such as feeding regimes, installation of extra fans and zig zagging vessels to capture cross winds. The Dry and Wet bulb temperatures recorded at some stages in this voyage were questionable and led the s. 47F(1) to clean each of the hygrometers. They need regular cleaning to maintain their accuracy and the s. 47F(1) s. 47F(1) advised that they have ordered new and improved units. Four of the hygrometers were replaced during the voyage with spare new ones, but the new ones were worse than the old ones and clearly showed questionable readings and so the older versions were reinstalled after thorough cleaning.

A Whirling Hygrometer was described to me by s. 47F(1) as a portable and accurate measuring device for both wet and dry bulb temperatures. This would enable the fixed devices to be checked and also enable the temperatures and humidity to be measured at any location.

s. 47C(1)

s.47F(1)



### Hospital Pen Reporting

There were some errors in the daily reports. Mostly they were typographical in nature but the Cattle Hospital Pen count was incorrect for 3 days until noticed on April 24 that the numbers had been under recorded on the Daily Report. When brought to the attention of the <sup>s. 47F(1)</sup> it was immediately reconciled and corrected

There is no written record of an animal's individual identity on entering and leaving hospital pens but the <sup>s. 47F(1)</sup> and <sup>s. 47F(1)</sup> were able to demonstrate that they do have a knowledge of the status and treatment regime of each animal in the pens. Gross numbers in hospital pens on each Deck are recorded on a daily basis but the numbers entering and leaving are not recorded.

Please refer to **Attachment f(i)** regarding the management of Hospital Pens. Generally, early signs of respiratory disease in cattle are treated in the pens but lame cattle are transferred to the hospital pens when noticed so they do not suffer further damage from other cattle. Also many of the cattle in hospital for lameness end up with BRD, which is the primary cause of deaths on long haul voyages vessels disease that can be fatal. So early treatment for lameness includes a preventative injection of Draxxin, particularly for the light and super light British and Euros.

### Euthanasia of Moribund Animals.

<sup>s. 47F(1); s. 47G(1)(a)</sup>

### Rectal Temperatures

The best measure of hyperthermia in cattle and sheep is their rectal temperature. This is difficult with cattle but <sup>s. 47F(1)</sup> regularly checked sheep rectal temperatures. During this voyage the max temp recorded was 40.2°C, which is at the high end of normal.

<sup>s. 47C(1)</sup>

### Pellet Quality

The quality of pellet is very important, for example on this journey the pellets tended to go to powder, which lacked fibre and was unpalatable particularly to the sheep. The <sup>s. 47F(1)</sup> responded by discarding the powdered pellets if the sheep refused to eat it, incurring losses of 7 tons on one occasion. However it was a continuing problem during the voyage. <sup>s. 47G(1)(a)</sup>

<sup>s. 47G(1)(a)</sup> The issue was appropriately noted and managed by the <sup>s. 47F(1)</sup> and the corrective actions were satisfactory.

### c) Voyage Report

The temperatures and humidity records for V114 can be found in the Attachment g:

**Attachment g(i):** Temperature and Humidity Record

**Attachment g(ii):** Voyages to Turkey and the Gulf

**Attachment g(iii):** Temperature Graph V114L

Note from the previous Daily Report that there were some issues with the hygrometers, at least for Days 5 and 6 (which are highlighted in the table). Despite some concerns over those days every effort was made to ensure their accuracy.

The readings are routinely taken 4 times each day at 6 hourly intervals from midnight.

From April 16 an extra reading (5th) was taken at 3 pm by me. It can be noticed that the 3 pm readings were often hotter and more humid than the 12 noon readings.

The 3 pm readings stopped after passing Jedda when temperatures and humidity reduced to a safe zone.

Reviewing the data readily leads to the conclusion that there are 3 distinct stages of the voyage from Fremantle to Tekirdag.

#### **Stage 1 Day 1 to Day 5 (ex Perth)**

It can be seen in **Attachment g(i)** that the temperatures of sea, Decks and Bridge rose quickly to Day 5, or about 3 days south of the equator. It can be seen from the other comparative voyages in Attachment g(ii) that V114 entered the "red zone" a day or two earlier than expected. However this was counterbalanced by a day or two relief at the equator when the temperature moderated and some rain and moderate winds were experienced. Attachment g(iii) is provided for interest, showing some voyages to the Persian Gulf where more extreme conditions can be experienced in the middle of the summer.

**Note:** The humidity on the Bridge on Day 1 is recorded as 81% but the Maysora sailed at 02:00 hours so this reading was taken 10 hours into the voyage. At 6 am on Day 1 the humidity in the Decks were all about 68%.

By Day 5 the Sea temp had increased from 21°C to 27°C and the Bridge Temp had increased from 19 C to 30 C (DBT) and 68% to 71% humidity.

Deck 8 (sheep) had progressed from 22°C and 66% humidity to 31°C and 79% humidity; and

Deck 4 (cattle deck) had increased from 25°C and 68% humidity to 30C and 85 % humidity.

The sheep steadily progressed during these 5 days to where >70% progressed to Stage 1 panting at Day 5. This can be confirmed in the videos.

Less than 1% of sheep were in Stage 2 panting on Day 5.

The sheep's water intake was calculated to increase from 3.0 l/hd/day to 3.5 l/hd/day on Day 5 and stay at 3.5 l/hd/day until Day 18 when it returned to 3.0 l/hd/day

The cattle demonstrated very little in the way of response to the increasing heat during the first stage.



Feed consumption for cattle was measured at constant levels of 8 to 8.1 kg pellets per day but this does not take account of a variable chaff component (also measured) so is this figure just relates to pellets. Although the amount of pellets remaining at next feed is at best roughly estimated, the consumption rate does not take into account losses from spillage, water damage, faecal spoilage and powdered pellets.

### Stage 2 Day 5 to Day 16 (ex Perth)

From Day 5 the conditions were harsher as the vessel moved toward the Equator (Day 9) to the Gulf of Aden (Day 12).

The Sea temperatures reached 30°C on Day 8, and the Bridge Temperature (DT) went from 30°C to 33°C from Day 8 to Day 15

As the vessel moves into the Gulf of Aden the wind direction is often a following wind so the **s. 47F(1)** decided on many occasions, without the **s. 47F(1)** needing to request, to steer the vessel in a zig zag pattern to capture some cross wind.

Sheep:

During this stage more than 90% of sheep mostly stayed in Stage 1 panting and around 5 to 7 % progressed to Stage 2 with occasional mouth opening. Only 1% exhibited sustained mouth open panting. The panting was mostly restricted to dead space nasal ventilation, with the occasional deeper breath.

Sheep water consumption increased from 3.0 to 3.5 l/hd/day during Stage 2. There was no change in the consumption of pellets during this period and this is consistent with the literature.

**s45(1); s. 47F(1)**

Around Day 7 and 8 there was a minor break in the weather with a drop in temperature of a degree Celsius and a cooler breeze and some rain which allowed the sheep in particular to reduce the panting, conserve energy and allow their sweat glands to recover before the hot humid conditions returned.

Cattle:

Water consumption was stable until Day 5 when it increased from 25 l/hd/day to 26.5 l/hd/day and then to 27 l/hd/day from Day 11 to Day 16 when it returned to 26 l/hd/day for the remainder of the voyage (**Attachment e(vi)**)

The cattle respiratory rate, mainly in the British Breeds, experienced elevation in respiration rate from 35 breaths/min to up to 50 breaths/min during the hot spell.

An estimated that 30% , mostly Pastoral cattle were in Stage 1 of the cattle panting score, 65% were in Stage 2 , with the remaining 5% ( only British or Euro breeds) in Stage 2.5

### Stage 3 Day 17 (ex Perth) to end of voyage

The end of stage 2 was marked as the vessel passed Jedda in the Red Sea. Jedda is a predictable turning point and the cooling impact at Jedda can be seen in the history of other voyages (**Attachment g(ii)**), with the exception of V108L in July 2016, when the weather stayed hot for several days after passing Jedda.

From the time the vessel passed Jedda on Day 17 to the final discharge at Tekirdag the sheep breathing returned to a normal resting pattern with a panting score of 0.

The cattle generally brightened up and the mud on cattle and cattle pen floors in the lower decks started to dry.

Refer to videos for these changes

#### d) Deck Washing

The Cattle Decks 1 - 7 were washed over a cycle of 4 days. Decks 1-6 Hold 4 was washed one day, followed by Decks 1 - 6 Holds 5 & 6 the next day, followed by Deck 7 the next. The 4<sup>th</sup> day was a rest day before the cycle started again (refer **Attachment k**).

At 6 am the washing would start. On average 1 Deck would take 1 hr and 20 minutes. That is the only time the cattle would be without water. The water and feed troughs are cleaned out also and the cattle fed chaff at the end of the wash.

The washing would finish by 2 pm.

On this voyage the deck washing was delayed after departing Fremantle until Day 5. This was 9 days after the Adelaide cattle decks had been washed on 8/4. The delay was caused by the vessel being fully loaded and they could not trim the vessel before the 17/4 due to extra feed at the fore of the vessel.

s. 47C(1)

The higher humidity and possible increased water intake led to sloppy floors 10 cm thick in some pens. (Refer videos and photos).

s. 47C(1)

s. 47C(1)

The subsequent 4 day interval in the second wash also led to some sloppy floors and my observations concluded that if deck washing has to be extended past 4 days for operational reasons then strategies including sawdust and/or shovelling, or reducing the 4 day rotation should be provided based on a pen by pen assessment.

The floors dried after the vessel reached Jedda and the humidity and temperature decreased.

#### e) Mortalities

Refer to **Attachment i** for a detailed summary of deaths by date, per deck and livestock category. The following table summarises the overall performance:

Livestock	Loaded	Mortalities	Percentage
Adelaide Sheep	37,085	143	0.37
Fremantle Sheep	36,751	172	0.44
<b>Total Sheep</b>	<b>73,836</b>	<b>315</b>	<b>0.43</b>
Adelaide Cattle	2,532	2	0.08
Fremantle Cattle	5,572	7	0.13



Total Cattle	8,104	9	0.11
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### Sheep

All of the sheep deaths were attributed to the syndrome inanition/pneumonia, which has been recognised as most significant cause of death in feedlot and live export sheep (2). It can be seen from the literature review that there is still much to be understood about this syndrome.

s. 47F(1); s. 47G(1)(a)

Decks 10L (0.8%), 9L (0.7%) and 7 (0.7%) had the highest mortalities, but I am not able to make a definite conclusion about the reason for these higher rates.

Video of a post mortem can be seen in video topic together with a discussion with the s. 47F(1), who describes the syndrome. Injuries caused by misadventure or poor handling were not seen on this voyage.

### Cattle

6 of the 8 cattle deaths were due to BRD, with the other 2 due to lameness.

s. 47F(1); s. 47G(1)(a)

s. 47F(1); s. 47G(1)(a)

The lameness can be associated with BRD as *Mannhemia haemolytica* is often found in both conditions, with the organism entering through cuts on the legs(4).

## 7. PHOTOGRAPHS AND VIDEOS

These daily images were filed under s. 47E(d) and the naming convention used was Deck / Hold / Row / Pen / Stock category / Date (day/mth) /no. (e.g. D6 H5 B5 LP(F) 2004 2).

Other pens were photographed on occasions to broaden the sample and also to investigate certain issues.

The photos can be referenced to the deck wash program and the temperature/humidity records for each deck, which provide essential background for evaluating the images.

The aim of the photographs and videos is to provide a record of the animal's behaviour; appearance; pen and pad condition; pen densities; feeding and watering procedures and management practices over the course of the voyage. Some of the videos will emphasise individual conditions and others will be more concerned with issues such as pen densities. The images are intended to provide a record of the entire journey and not of isolated incidents.

## 8. REFERENCES

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7. **Gaughan, J.B., et al.** *A New Heat Load Index for Feedlot Cattle.* Faculty Papers and Publications in Animal Science, Lincoln : University of Nebraska, 2008. 613.



## 9. LIST OF ATTACHMENTS

- a) DIRECTIONS ORDER
- b) **s. 47F(1)**
- c) CONSIGNMENT DESCRIPTION
- d) LOAD PLAN AND HSRA
- e) FODDER AND FEED
- f) VETERINARY ISSUES
- g) TEMPERATURE AND HUMDITY RECORDS
- h) DAWR and RSPCA QUESTIONS
- i) MORTALITIES
- j) CSEP
- k) DECK WASH PLAN

## 10. LIST OF VIDEO TOPICS

- a) VENTILATION
- b) SHEEP POST MORTEM
- c) CATTLE POST MORTEM
- d) VETERINARY DRUGS
- e) LAMB BORN ON VOYAGE



**Australian Government**  
**Department of Agriculture  
and Water Resources**

s. 22(1)(a)(ii)

Veterinary Officer  
Department of Agriculture and Water Resources

Via email: s. 22(1)(a)(ii)

Dear s. 22(1)(a)(ii)

**Direction to undertake and monitor approved export program activities LNC-010078 & LNC-010079**

The purpose of this letter is to notify you that I have made a direction under sections 9D and 9E of the *Export Control Act 1982 (Act)* respectively.

s. 47G(1)(a)

Under sections 9D and 9E of the Act respectively, the Secretary may direct an authorised officer to:

- undertake some or all of the activities in an approved export program; and
- monitor, review or audit, whether within or outside Australia the undertaking by accredited veterinarians of the activities in approved export programs, and the activities of exporters in relation to approved export programs.

A copy of the approved export program is attached.

I am a delegate of the Secretary for the purposes of sections 9D and 9E. I understand that you are an authorised officer, appointed under section 20 of the Act.

I direct you to monitor the undertaking by an accredited veterinarian of all of the activities in, and the activities of exporters in relation to, the approved export program (carried out by the exporter's nominated livestock officer) through audio or video recordings and photographs.

If you identify a deficiency in the undertaking by the accredited veterinarian of the activities in an approved export program you may, in writing, direct the veterinarian to remedy the deficiency within a reasonable time as specified in that direction.

The direction must:

- identify the deficiency; and
- state that a failure to remedy the deficiency within the specified time is an offence under section 9H of the Act.

I have set out section 9H of the Act below for your reference.

I have notified the exporter to whose export activities the approved export program relates. The Vessel is intended to leave from Freemantle on 11 April 2018. Please **s. 47F(1)** **s. 47G(1)(a)** **s. 47G(1)(a)** to arrange accommodation.

If you have any questions relating to your duties as set out in this letter, please contact **s. 22(1)(a)(ii)** Director on **s. 22(1)(a)(ii)**

Yours sincerely

**s. 47F(1)**

Narelle Clegg  
Assistant Secretary  
Exports Division  
10 April 2018

**9H Offence of failing to remedy deficiency in undertaking approved export program**

(1) If:

- a. there is a deficiency in the undertaking by an accredited veterinarian of the activities in an approved export program; and
- b. under subsection 9E(2), an authorised officer directs the accredited veterinarian to remedy the deficiency; and
- c. the accredited veterinarian does not remedy the deficiency within the time specified in the direction;

the accredited veterinarian commits an offence.

Penalty: 50 penalty units.

(2) An offence against subsection (1) is an offence of strict liability.

ATTACHMENT h (i) DAWR Questions from s. 22(1)(a)(ii) Senior  
 Technical Officer. 11/04/18

Are the animals stocked in accordance with the Load Plan ?	Yes	Refer to Maysora report
If not , have adjustments in the Load Plan been made ?	Yes	Refer to Maysora Report
In my view is the space allocated sufficient ?		Refer Videos taken
Can 50% of the animals lie down at any one time ?	Mostly	Refer to videos and ASEL calculation
Are there issues with animals accessing feed and water ?	OK in practice	Water and drinking troughs do not allow all animals access at one time. Two feed troughs and one drinking trough per pen allow one time access of up to 3 to 4 sheep per pen and 2 to 3 cattle per feed trough.
Is the supply of feed and water appropriate for the conditions ?	Yes	Feed troughs are mechanically supplied
Is the equipment monitored and operating efficiently ?	Yes	Monitoring of feed and water delivery Here are 3 vessel stockmen per sheep decks and 2 per cattle deck as well as 2 s. 47F(1) s. 47F(1) , the s. 47F(1) , s. 47F(1) s. 47F(1) and s. 47F(1) continually monitoring the pens during the day. During the night there are 2 s. 47F(1) Not sure what equipment refers to ?
Are the daily temperature readings being taken ?	Yes	Routinely our times per day a( midnight, 6 am, 12.00 noon, and 6 pm.
Are these occurring at the same time each day ?	Yes	
Is a thorough examination of all animals being completed ?	?	Not sure what is meant by this question.
Are the pens in appropriate condition and in good order ?	Yes	All pens are in good order and well maintained. They have a Boledit floor.
Have any problem pens been identified with respect to pad condition or ventilation ?	No	Occasional rain damage to several pens was repaired with
Is there management and intervention for pads tat are deteriorating in condition ?		All sheep pads were good condition. Rain affected pads were



		attended to in acceptable time
Is the ventilation in the pens adequate ?	Yes	AMSA answer this with objective readings and from my observations ventilation was very good. They have a recorded airflows of 2 m <sup>3</sup> /min ( AMSA require 0.5) based on their patented system. Use of zig sagging by vessel also enhances ventilation on upper decks in case of following wind. Also the vessel has 8 portable fans that are installed, particularly at bulkheads or in situations of a following breeze to improve air flow if required
Does the observer agree with the assessment of the AAV ?	?	Question what this refers to.
Are births and abortions being accurately recorded and reported ?	Yes	Experienced one lamb born during voyage. Found a home a home for it.
Have euthanased animals been counted and recorded as separate from those found dead ?	Yes	Yes, but <sup>s. 47F(1)</sup> has not routinely include moribund animals euthanased in his records. This was subject of some discussion and I believe he will lower his thresh hold for reporting purposes from the next.



## ATTACHMENT h(ii) RSPCA QUESTIONS AND ANSWERS

## RSPCA Questions

1. Reporting of maximum wet bulb temperature and humidity on all decks and in pens where ventilation is every 24 hours ( including time , date fr maximum reading).  
Answer: dry and wet bulb temperatures are taken every 6 hours from midnight.
2. Two-tiered pens – what % of sheep can be seen for inspection from the walkway in top and bottom tiers  
Answer: it varies greatly. Refer to videos taken
3. Two tiered pens – do they have to bend over/climb on infrastructure to inspect  
Answer : There are gates to each deck. A person does have to bend over but stockmen move freely when inspecting stock, refer to videos.
4. Are the hospital pens empty at the start of the voyage ( not loaded with livestock or supplies)  
Answer: the hospital pens on each deck were kept empty at start voyage.
5. When are the hospital pens being used during the voyage ( are they pulling out sheep for treatment)  
Answer: The hospital pens are in regular use.
6. Are any animals pregnant or lambs born ?  
Answer: One lamb was born and together with mother , found a home in Turkey
7. How often are the are the cattle decks washed ?  
Answer: Cattle decks are scheduled to be washed on a 4 day cycle.Divided into Hold 4; Holds 5and 6; Deck 7; Rest Day
8. What is the moisture level of the manure pad in ah pen ( dusty, friable, crumbly, thick – need a scale for this in the absence of accurate moisture readings)  
Answer: Cattle floors varied during the voyage. Sheep pens were very good surface throughout voyage and were mostly hard/firm/dry. Referto photos and videos.
9. What is the vet doing – drugs used, records of use, euthanasia?  
Answer: Please refer to <sup>s. 47F(1)</sup> response in Attachment 2a.
10. Is the crush in working order ? Where is it located ?  
Answer: There is no crush on board.
11. How long does it take for one person to complete a full inspection of all pens on all decks ?  
Answer: Depends on what is going on. Could take from 1 to 2 hours

## ATTACHMENT h(ii) RSPCA QUESTIONS AND ANSWERS

12. Do all water troughs have water in at all times ? If water is turned off for draining and cleaning. How long is it for ? Is the water turned off for any other reason?

Answer: Refer to above section on Deck Washing. Water is not turned off except at trough cleaning time. Water is emptied into portable bin which is dragged to nearest drain. This is done to minimise water spilling into pens.

13. What is the water quality in the troughs? How often are they cleaned ?

Answer: Water quality in pens is excellent and cleaned at least daily. Water supplied by 2 reverse osmosis on board, dedicated to Livestock only and each capable of supplying 400 mt /day.

14. What is the quality of the chaff ? Is it kept dry. Is it kept dry ?

Answer: Chaff is fresh steam cut oaten chaff or lucerne chaff

15. What is the quality of the sawdust for the cattle ? Is it dry ?

Answer: The sawdust is shavings and is very dry and absorbant.

16. Nightwatchmen – how many and what checking are they doing ?

Answer: There are 2 night watchmen. They patrol decks and adjacent areas, take temperature readings on each deck and report any issues arising as required.

17. Lights – what is the lighting regime on each deck ? Are there any periods of darkness and if so for how long ?

Answer: Lights are always on in all decks