INDEPENDENT OBSERVER REPORT of s. 47G(1)(a) and s. 47G(1)(a) s. 47G(1)(a) (LNC - 010068 and LNC-010123) CONSIGNMENTS of LIVESTOCK from FREMANTLE to KUWAIT, QATAR and U.A.E. on the livestock carrier vessel the "AL MESSILAH" V 160 during the time of the 1st to the 20th MAY.

### INTRODUCTION:

I. s. 22(1)(a)(ii) Veterinary Officer of the Department of Agriculture and Water Resources have received a directional letter from Narelle Clegg, Assistant Secretary Exports Division on the 20th April 2018 to monitor the undertaking by an Accredited Veterinarian of all the activities in, and the activities in relation to the approved export program through audio or video recordings and photographs of LNC-010068 and LNC-010123.

Pre-loading, I accompanied s. 47F(1) during the Health / Welfare inspection of the sheep consignment ats. 47G(1)(a) and the cattle at boths. 47G(1) and s. 47G(1)(a). The body condition score for all animals was equal to or > 3., Due to the extended time spent in the feedlot because of several changes to the voyage schedule, I have no hesitation in declaring that no healthier and better conditioned sheep have departed Australian ports in recent times. Personnel from the Department of Agriculture WA walked all decks prior to departure: No comments were forthcoming.

The Al Messilah departed Fremantle at 18:30 hrs on Tuesday 1st May carrying a total of 65,334 sheep and 228 head of cattle to the Middle East. The 1st port of call was Kuwait on the 14th May where 19433 sheep and 72 steers were discharged, then Hamid Port Qatar on the 16th for 35,000 sheep and 156 bulls and finally Jebel Ali Port U.A.E. for 6982 sheep.

s. 47G(1)(a)

The Al Messilah vessel is a 38 year old reconverted car carrier registered and owned in Kuwait that has 12 decks, with decks 11 to 2 being constructed for the carriage of sheep, and deck 7 sharing with cattle pens. Deck 7 is the only deck fitted for cattle. In 2017 the Al Messilah completed a lengthy time in dry dock where it was totally overhauled to bring it up to the standard as required in todays market.

s. 47F(1)

LOAD PLAN:

s. 47G(1)(a)

s. 47G(1)(a)

Thes. 47F(1) was not involved in the load plan calculations, this being the domain of thes. 47F(1) acting on the statistics provided by the exporters.

s. 47F(1)

s. 47F(1)

By 3rd May, all pens had been adjusted . I was satisfied with the final result. Several photos and videos taken during the voyage demonstrate the space available , providing ample room for > 50% to sit or lie down. The Al Messilah has no two tiered sheep pens.

Cattle pens are only available on Deck 7, with the deck being shared with sheep pens. With only 228 head being loaded, there were pens left spare and room for more.

All pen area and sheep calculations are attached. Hospital pens are excluded from calculations. The HSRA compliance is the responsibility of the s. 47F(1) and not the s. 47F(1).

## HOSPITAL PENS.

Hospital pens are painted green and available on all decks except 2, 5 and 6. There was no problem with walking or carting sheep up or down decks. Several spare cattle pens were available if required for cattle. It was recommended to the 4.47F(1) and 5.47F(1) to increase the cover of wood shavings in the sheep hospital pens. The sheep hospital pens were used during every day of the voyage due to the diligence of the 4.47F(1) and 5.47F(1) in detecting any animal requiring special monitoring and care.

INSPECTIONS

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

s. 47F(1)

s. 47F(1)

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

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

At varying times (5 evenings) I scoured the decks to locate the watchman on duty. I was successful on the last 3 occasions after reporting my findings to the s. 47F(1). The s. 47F(1) assured me that there is always someone on duty during those hours, this being validated by the hourly check-in to the bridge.

DAILY MEETING

s. 47G(1)(a)

s. 47F(1)

s. 47F(1)

FEEDING / WATER

s. 47G(1)(a)

## s. 47C(1)

Despite prolonged observation of sheep movement in pens, it was not possible to validate that all occupants were getting their turn at the feed trough. However, primary inanition as a possible cause of death was not diagnosed, and no pen was highlighted for containing sheep in poor condition.

# s. 47G(1)(a)

s. 47G(1)(a) The water is very clean and any sediment that sinks to the bottom is removed continuously during the feeding times by the crew using hand held filter paddles. The troughs are never empty. or emptied. The quantity of water consumed and produced by the Osmosis process is displayed daily in the ships bridge I did not see any fouled water ( or feed ) troughs during the entire journey. All troughs are protected by a rail.

s. 47C(1)

## TEMPERATURE READINGS

Each deck is serviced by ONE only dry and wet bulb thermometer which is read once daily by the crew between 10:00 and 11:00 hrs.

I have recorded readings that I took between 16:00 and 17:00 hrs daily from the 5th May, the hottest part of the day. There was only a difference of between 0.5 and 2.00 degrees celsius for the most part, if any at all.

However, due to the reading of only the one fixed thermometer / deck, and the reading only once a day and at the same time, it must be concluded that the official recordings for each deck are unlikely to be the hottest temperature experienced during any particular day.

s. 47C(1)

### **CLEANING**

Cattle share deck 7 with sheep pens. Therefore no hosing of cattle pens takes place.

These pens were cleaned every 5 days by the enthusiastic crew using wheelbarrows and shovels. Each pen was then replenished with copious good quality dry wood shavings. Spare clean cattle pens were available at all times.

Sheep pens ,as is normal practice, were not provided with a wood shaving floor base. The flooring appeared to consist of a multi painted chip board base. As the days passed, this base (PAD) would build up to form a cushion base that varied from dry to moist. This PAD was never removed from a pen and did not affect the sheeps health status.

Feed troughs were never emptied but the pellets were continually circulated from the base of the automatic dispensers by the use of hand held paddles.

The cleaning of passageways by the crew was an ongoing process throughout every day.

#### SHEEP PEN PADS

The build up of the floor base in the sheep pens over the course of the journey varied from dry and crumbly to moist and sticky. See attached scoring system.

Very few reached the condition of moist and sticky (score 4), and none wet. Wood shavings were added when indicated which had the effect of reducing the moisture. These pens dried out after entering the Persian Gulf with the reduced humidity.

It should be noted that the condition of the pad did not cause any detriment to the health or welfare status of the sheep. In fact, the sheep were more comfortable sitting on a cushion surface rather than a hard chipboard. The major issue appears to be that the sheep can become dirty with mud sticking to their fleece - nothing to do with animal welfare. s. 47C(1) s. 47C(1)

### HUMIDITY and PEN PADS.

Moist pen pads can result from a combination of increased ambient temperatures, increased drinking and urination or leaking water troughs. Continual maintenance of the water troughs eliminated this source of wetting, but where air flow was in need of a boost particularly pens next to the engine room (identified for added fan installations), a few moist pads were identified. This moisture contributes to the humidity level.

It was noted that the humidity readings dropped markedly after passing through the Straits of Oman and entering Kuwait, where the dry heat quickly dried out any moist pens, further contributing to a reduction in the humidity levels.

s. 47C(1)

## PREGNANT EWES.

The s. 47F(1)

identified 15 - 20 pregnant ewes spread

throughout the consignment - identified by a green triangular ear-tag.

No lambs were born on the voyage.

Management Procedure:- Any lambs born on the ship were to be kept with their mother and off-loaded at arrival. If the lambs mother was not identified, the lamb was to be euthanised.

# LIGHTING.

All decks are illuminated 24 hrs / day - that is, the aisles only. - adequate.

## CRUSH / RESTRAINT.

There is no crush facility available on the Al Messilah. Restaint is by sedation only. Although restraint of cattle during the voyage was not required, spare, bedded down cattle pens were available, as well as appropriate drugs (xylazine) and captive bolt. Hospital pens for sheep were in constant use with animals identified either by the 5.47F(1) ors. 47F(1) to be placed in a hospital pen. The number of sheep and their treatments were accurately recorded in the daily report.

s. 47F(1) DUTIES.

s. 47F(1) , ably assisted by the s. 47F(1) continually walked the decks, examining sheep closely with the aid of a torch to identify any animal that had an obvious health problem or any pen issue. These animals were located to a hospital pen for treatment and/or assessment. s. 47F(1) presented a document that provided in detail the regime that he follows for the treatments of sheep on export boats. Insightful and practical procedures were recommended for some particular problems as they arose.

Post-mortems were conducted when indicated, often resulting in a definitive diagnosis, or the collection of pathology samples (e.g. lamb brain) for preservation for further investigation. For these samples ,the animal was euthanised (spasticity) by intra cardiac stab - very quick and non messy. Otherwise, euthanasia was carried out by captive bolt.

Not all dead animals underwent a post mortem, with many having died overnight and the ambient heat accelerating tissue degeneration rendering many as unsuitable subjects for a post mortem examination. At no time were systemic type symptoms such as multiple cases of diarrhoea or coughing within a confined area observed.

Post mortem results were varied and random, not unusual considering the large number of sheep involved.

s47C(1); s47F(1)

The final mortality % for the consignment was 0.34 %

AIR FLOW AND VENTILATION

s. 47C(1)

The factors influencing the final sheep comfort level is the result of the combination of ambient temperature, humidity and air flow.

Throughout the ship on every deck are positioned an extensive network of exhaust and inlet fans. Although these large units are operating 24 hrs / day, and are recognised by the sheep, s. 47C(1) s. 47C(1)

installed directly over pens are very affectives. 47G(1)(a)

s. 47G(1)(a) These fans can be adjusted to target direct air flow. Sheep settle and lie or sit down. s. 47C(1)

s. 47C(1)

s. 47C(1)

**OBSERVATIONS** 

s. 47C(1)

2. This shipment travelled with the benefit of an increase of 17.5% above the mandated ASEL density / floor space density based on the body weight of the animal. s. 47C(1)

This new method allowed enough space for at least 50% of the sheep in 85% of the pens to sit or lie down, but certainly not all. s. 47C(1)

s. 47C(1)

from the Al Messilah informed me that during the months of July to August, the temperature in Kuwait would be 45 degrees Celsius ("if it got that low"). That is, 10 - 15 Degrees hotter than this current voyage, although the humidity at Kuwait Port, Hamid Port and Jebel Ali Port is considerably lower than that experienced prior to Kuwait. s. 47F(1) said that is the normal pattern for humidity levels.

A spreadsheet of temperature readings from the 5th May is attached.

s. 47C(1)

- 3. Due to several scheduling delays with this shipment, the sheep spent an extra 2 ½ to 3 weeks in the feedlot. The result was that all of the sheep had a body score equal to or > 3. Therefore the component of "skinnys" that normally make up a portion of most sheep consignments and have a higher than normal mortality rate were not included.
- s. 47C(1)
- s. 47C(1)

6. From day 3, throughout the consignment there was very little change from the Pant Score of 1 right through to the date of despatch in Kuwait, Hamad and Jebel Ali ports. Generally, there was a noticeable increase in the respiration rates, but not accompanied by open mouthed, tongue lolling behaviour i.e. progressing to Pant Score 2 and 3. Even though this increased respiration rate looked to be energy draining, most just sat or laid down and relaxed. For the entire

consignment of 65,344 sheep I identified less than 30 animals that could have been given a Pant Score of 2.

Humidity levels were higher in the lower decks 4, 3 and 2 and this is where the increased respiratory rates were most obvious. s. 47G(1)(a) s. 47G(1)(a)

The cattle showed no signs of discomfort at any stage of the voyage.

ATTACHMENTS;

- 1. Load Plan etc. 2. Voyage Instructions
- 3. Dry / Wet Bulb Temperatures.
- 4. Discharge Port Figures 5.. Daily Report
- 6. Sheep Pad Score 7. Gaughan Pant Score



No Panting

Scoring by: s. 47F(1)

University of Queensland



Mouth closed, slight panting Easy to see chest movement



Fast panting, mouth slightly open Tongue not extended beyond lips



RAPID panting. Mouth open, neck extended

Head held up tongue extended

Can change quickly to PS=4 and likely to die



Mouth open, tongue fully extended for prolonged period, head often lowered.

Changes to slower <u>and</u> deeper breathing as core temperature increases for upto~24 hr.

Sheep is critical - dying