## **Mortality Report 91**

Buffalo exported by sea to Indonesia in December 2024

## Summary

On 16 December 2024, a consignment of 299 feeder buffalo and 803 feeder cattle was exported to Indonesia. The journey was completed in 11 days and discharged in Belawan on 27 December 2024.

A voyage mortality rate of 1.67% (5 head) was reported for the buffalo. This exceeded the notifiable level of 0.5% as prescribed by the Australian Standards for the Export of Livestock (ASEL).

Of the 5 mortalities, the shipboard accredited stockperson reported one animal euthanased as a downer, and one animal found deceased in its pen with post-mortems revealing ‘shy-feeder’ as the likely cause. Shy feeding is a term used to refer to a reduction in feed intake and can result in overall health decline and death. Three animals were found deceased in their pen during discharge, due to an unknown cause. An investigation into the mortality event revealed that while a definitive common diagnosis was not possible, circumstances surrounding the sourcing of the buffalo, their preparation at the Registered Establishment (RE) and voyage conditions may have contributed to the mortalities.

## Information reviewed

The department reviewed the incident by assessing the following information:

1. A report from the exporter
2. Daily reports and the end of voyage report from the accredited stockperson
3. Property of origin details
4. A report from the Master of the vessel
5. Department veterinary inspection records for the consignment
6. Accredited veterinarian inspection records for the consignment
7. Department records from previous and subsequent voyages
8. The exporter’s approved arrangement and approved management plans

## Background

Prior to this voyage, the exporter had exported over 40 consignments of buffalo. This is the second notifiable mortality incident for this exporter in the past 5 years. The previous incident involved a consignment of cattle.

## Investigation Findings

### The livestock

The consignment consisted of 299 feeder buffalo and 803 feeder cattle.

### Preparation in the Registered Establishment (RE)

One RE was used for the preparation of buffalo in this consignment. It is located in the Northern Territory and is routinely used to prepare livestock for export.

The required time for buffalo to be held in an RE for short-haul voyages (less than 10 days) is a minimum of 7 clear days. The buffalo in the consignment met the ASEL requirements for the minimum length of time that livestock must remain in an RE prior to export.

The buffalo were inspected by an Australian Government Accredited Veterinarian (AAV) on 16 December 2024. One buffalo was rejected due to lameness.

The buffalo were also inspected on 16 December 2024 by the department’s regional veterinary officer.

The remaining buffalo were found to be eligible for export.

An investigation revealed that some buffalo were held in a pen at the RE not approved to hold livestock. The ground in pens holding buffalo was sloppy in some areas and feed troughs were not present. The absence of feed troughs meant that buffalo were not fed shipping pellets while held at the RE and hay was fed out on the ground, with potential for spoilage. To ensure adequate supply of feed and water, ASEL standard 3.1.8 requires the registered establishment occupier to provide feed that is neither contaminated nor spoiled, and all pelletised feed must be placed in troughs so that animals do not eat from the ground or floor.

### The vessel

The vessel involved in this incident is a purpose-built livestock carrier used to export livestock to a range of export markets. There have been 2 previous notifiable mortality incidents on this vessel.

### Loading onto the vessel

Loading of the consignment onto the vessel was completed within 7 hours on 16 December 2024. No issues were reported during loading.

### Conditions during the voyage

An accredited stockperson accompanied the voyage and was responsible for reporting, through the exporter, to the department. The accredited stockperson works with the Master of the vessel and crew to manage the health and welfare of the livestock on board.

The exporter notified the department on 21 December 2024 that there was a malfunction of a single supply fan of the ventilation system. Daily Voyage Reports and the Master’s Report identified that this occurred on day 3 and resolved by day 5. The starboard aft hold operated with a single supply fan for those days, with portable fans installed. The stockperson reported these actions to be effective in maintaining adequate conditions for livestock and no signs of heat stress were observed in the buffalo for the duration of the voyage. It was not able to be determined if ventilation was a contributing cause for the mortalities.

The buffalo consignment was spread from the midship to aft section of deck 4. The maximum wet bulb temperature reported on deck 4 was 30 degrees Celsius on day 4. All 5 buffalo that died on the voyage were in pens in the aft section of deck 4 in pens nearby to the engine room smokestack. Buffalo are more susceptible to heat stress than cattle and this may have been a contributing cause for the mortalities.

There were no issues with the watering systems or the feeding of livestock throughout the voyage. There were no extreme heat events, and the sailing conditions were reported as ‘moderate’ for most days, and ‘rough’ on day 5. The consignment discharged in Belawan, Indonesia following a 2 day delay due to congestion at port.

### Mortalities and treatments

There was a total of 5 buffalo mortalities in the consignment of 299, corresponding to a voyage mortality rate of 1.67%. One buffalo was euthanased, and one was found deceased in a hospital pen on day 5 of the voyage. Both were reported as shy-feeders following post-mortem by the stockperson. On day 11 during discharge, a further 3 buffalo were found deceased due to unknown causes with no post-mortem performed. The notifiable level for mortality rate (0.5%) was exceeded on day 11. Voyage mortalities that exceed a voyage mortality rate of 0.5% must be notified to the department.

## Department’s actions

In response to the incident, the department required the following for the exporter’s next livestock consignment of buffalo exported:

* An AAV must be involved in all treatment decisions during the voyage,
* a post-mortem must be conducted on all mortalities occurring during the voyage, and
* additional information must be provided to the department to demonstrate that buffalo were accustomed to eating from troughs prior to sourcing.

The department required the registered establishment to review, amend and vary as required, its processes for:

* managing of penning arrangements to ensure that livestock are held in approved pens in accordance with the registration, and
* providing hay to livestock in a manner that prevents spoilage to ensure compliance with ASEL 3.1.8.

## Conclusions

Following review of the reports from the accredited stockperson and exporter, as well as department records, the department could not definitively attribute the 5 mortalities to a common cause.

The investigation has concluded that aspects of the sourcing and preparation of the buffalo may have breached ASEL requirements and contributed to this incident, namely a possible lack of conditioning at the source property and feeding practices at the RE. Insufficient conditioning and inappropriate feed handling practices (as required by ASEL 1.2.2 and 3.1.8 respectively), coupled with localised higher ambient temperatures could increase the likelihood of shy-feeding and in turn increase the risk of mortality during the voyage.