

STATE OF HAWAII  
DEPARTMENT OF AGRICULTURE  
ANIMAL INDUSTRY DIVISION  
ANIMAL DISEASE CONTROL BRANCH  
99-941 HALAWA VALLEY STREET  
AIEA, HAWAII 96701  
October 11, 2022

Board of Agriculture  
Honolulu, Hawaii

Subject: (1) Request for Approval to Adopt Proposed Amendments to Chapter 4-16, Hawaii Administrative Rules, entitled "Cattle, Sheep and Goats" Concerning: Objective, Construction of rules, Subchapters, Definitions, Quarantine-general, Quarantine area-feedlot, Quarantine area-slaughterhouse, Regulatory jurisdiction on importations, Entry status on imports, Ports of entry, Carrier responsibility on importations, Use of quarantine station facilities, Regulatory jurisdiction on exports; Subchapter 2 Cattle, Scope, Pre-shipment entry requirements, Post-shipment entry requirements, Anaplasmosis surveillance, control, and eradication, Brucellosis surveillance, control, and eradication, Vaccination for brucellosis prohibited; exceptions, Tuberculosis control and eradication; Subchapter 3 Sheep, Scope, Pre-shipment entry requirements, Post-shipment entry requirements; Subchapter 4 Goats, Scope, Pre-shipment entry requirements, Post-shipment entry requirements; and (2) Submission of Hearings Officers Summary of Public Hearings Testimony on Proposed Amendments to Chapter 4-16, Hawaii Administrative Rules, and Hearings Officers' Recommendation.

## **I. Background**

The primary reasons for amending Chapter 4-16, Hawaii Administrative Rules are to amend and clarify definitions and carrier responsibility; add Bison, Water Buffalo and Camelid requirements, revise entry requirements; amend and clarify use of state quarantine station and fees; and update the chapter to reflect current science and terminology.

Proposed Amendments include:

(1) Add Bison, Water Buffalo and Camelid species to the Chapter. (2) Change definitions by: (a) simplifying the definitions Board", Chairperson", "Department", "Division Head"; (b) amending "Official vaccinate" "State veterinarian"; (c) adding the definitions "APHIS", "Certificate of Veterinary Inspection" or "CVI", "Contact", "Entry", "Hold order", "Polymerase Chain Reaction" or "PCR", "Premise"; (d) clarifying "Carrier", "Effects", "Health certificate", "Quarantine", "Shipmaster's Declaration" and "Vaccine; (e) expanding the definition of

“Animals”, “Domestic animals”, “Inspector”; and (f) deleting “Premises” and “Provisional quarantine.” (3) Add “population of animals” as a group quarantine can be applied to. (4) Clarify movement for quarantine area feedlot and slaughterhouse. (5) Adding regulatory jurisdiction on importations of Bison, Water Buffalo and Camelids, entry status and add plant quarantine permitting for Bison and water buffalo. (6) Clarify ports of entry for added Bison, Water Buffalo and Camelids species. (7) Update and clarify carrier responsibility on importation and intrastate transport by sea. (8) Amend animal owner responsibility for use of quarantine station facilities. (9) Certificate of veterinary inspections issued in Hawaii for export is clarified. (10) Clarify import permitting, Trichomoniasis testing is added and Certificate of veterinary inspection clarified pertaining to Pre-shipment entry requirements. (11) Detail “Quarantine site” and “symptoms” is replaced with “signs” to correct terminology regarding post shipment entry requirements. (12) Amend Anaplasmosis and Brucellosis testing and management. (13) Clarify Tuberculosis control and eradication procedures and update test reactor management. (14) Add new section for Trichomoniasis control and eradication. (15) Add a new section covering disease investigation. (16) Add Scrapie entry requirements and clarify entry requirements for sheep and goats. (17) Specify the object in sheep post entry requirements by replacing “they” with “animals” (18) Add “camelids” to “goats” in subchapter 4. (19) Specify ectoparasite treatment, replace “health certificate” with “Certificate of Veterinary Inspection” for clarity, and add “official USDA” to “eartag” to specify acceptable tags in Pre-shipment entry requirements for goats. (20) Other changes are proposed throughout Chapter 4-16 for clarity, simplification or to correct format, grammar and punctuation.

## **II. Hearing Officer’s Summary of the Public Hearing Testimony**

The proposed amendments to chapter 4-16, HAR, as preliminarily approved by the Board on November 30, 2021, were taken to public hearings on May 9, 2022 (Kauai), May 10, 2022 (Oahu), May 11, 2022 (Maui), May 12, 2022 (Kailua-Kona), and May 13, 2022, (Hilo). Thirteen individuals attended in-person or via video conferencing. In total, 62 individual written and oral testimonies were received and summarized. A summary sheet and the written testimonies from public hearings, facsimile transmissions, and postal and electronic mail are attached to this submittal.

A total of seven individuals testified in-person or via video conference at the public hearing at Lihue, Kauai, Honolulu, Oahu, Kahului, Maui, and Kona and Hilo, island of Hawaii. In addition, the Department’s proposed amendments received 62 written and email testimonies of which 17 testimonies (27.4%) were in support of the proposed amendments, and none were received in opposition. (refer to Appendix 2) Testimony was in support of the rule amendments by all individuals/groups identifying themselves as the Hawaiian Humane Society, ranchers, handlers, cattle industry organizations such as the Hawaii Cattleman’s Council, Hawaii Cattle Producers Cooperative Association, a veterinary hospital and a veterinarian.

The Hawaii Cattleman's Council (HCC) is the largest livestock industry organization in the State that represents most of Hawaii's cattle production. HCC submitted written testimony (refer to Appendix 2) that supported the proposed rule amendments and commented specifically:

- a) Support updating the carrier responsibility.
- b) The requirement for a Shipmaster's declaration to "better track livestock movement and control movement of disease" and ensure the safety of livestock during transport.
- c) That animals "...not be stowed in a manner that prevents natural ventilation," placement of shipping containers in areas that allow for natural airflow, and prevent placement where ventilation is restricted.
- d) Limiting time livestock spend on board by loading animals "last-on" at departure and "first-off" at the destination.
- e) Use shipping load densities using the Interisland Livestock Shipping Standards and not deviating by more than 10%. HCC also commented the standards have proven to be successful, as transporting livestock interisland.
- f) Access to food and water must be provided for livestock transported over 24 hours.
- g) Animal welfare has always been and remains the foundation of our operations.

Nine other testimony in support, contained similar comments as HCC.

Forty-two testimonies (67.7%) did not specifically support or oppose the proposed rule changes but contained similar comments and were sent via thesoftedge.com government relations and advocacy software. Three of these 42 testimonies varied by: one testimony had watched "...cows arriving at O'ahu's slaughterhouses in the shipping containers..." and described the animals as being in fear; one testimony stated to "...treat animals with as much respect as possible, regardless of their final destination," and one testimony stating "These are living things. You don't take it lightly. Please change procedures and be extremely careful."

The other 39 of those 42 testimonies were identical aside from email subject. Three subject titles used by these 39 testimonies were: Keep cattle and Goats Safe During Transport, Amend Proposed Transport Regulations to Protect Animals, and Protect Animals at Sea.

These 42 testimonies included comments on: amending the regulations to ensure that animals do not experience heat stress, that they have adequate ventilation, and that they be fit for travel, improving loading practices; requiring carriers to provide animals with food, water, and access to shade; and to restrict cow container locations on ships so that animals are not placed in areas with excessive heat. Additional comments were to disallow transportation of animals that are not fit to travel, and conditions listed as unfit were: lame, weak, or fatigued, blind in both eyes, females that have given birth within 48 hours, pregnant females within the final 10% of their gestation, newborns with unhealed navels, or animals with unhealed wounds. The testimony(s) also referred to an incident in 2019 where 21 cattle died on a barge traveling from Honolulu to Kauai. These testimonies stated that the "... proposed regulations rely on standards that have proved woefully inadequate..."

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The Animal Welfare Institute (AWI) submitted detailed testimony in written format. That testimony included “AWI is dedicated to reducing animal suffering and advancing the welfare of all animals, including those raised for food. As part of our mission, we work to improve conditions for farm animals, including during transport. AWI has over a decade of experience advocating on behalf of animals transported by sea vessel. Refer to Appendix 2 for AWI testimony.

AWI’s testimony supported the proposed amendments to Chapter 4-16, which “will, if approved, provide legally mandated standards for interisland shipment of certain animal species.” Their testimony specifically supported requirement of the Shipmaster's Declaration, “...the acknowledgement of the importance of adequate ventilation” and the “...inclusion of rules related to the condition of animal containers...”

AWI also testified that the proposed rule amendments “...codifies the same standards that gave rise to the circumstances that highlighted the rule's necessity. In 2019, 21 cows perished on a barge due to a lack of adequate ventilation on a ship that purportedly complied with the Hawaii Cattlemen's Council standards for the transport of cattle on sea vessel” and that “...*the proposal makes no improvements to this standard in adopting it in regulation.*”<sup>\*</sup> AWI testified to “...include minimum space requirements and/or maximum loading densities for cattle, sheep and goats, pigs, and horses. Ensure calculations are based on the correct internal dimensions of shipping containers. Decrease the “maximum number to load” as indicated (in an attached document). Remove any provision to exceed the maximum loading densities specified in the regulations.”

<sup>\*</sup>HDOA investigation of this 2019 incident indicated that the death loss was a result of human error that resulted in ventilation inadequacy, and not related to the cattle’s condition, container design or load density. Our investigation concluded that the container was stowed in a position with no ventilation because the assumption was that the container was empty and did not contain livestock. Per Young Brothers’ SOP containers with livestock are placed in locations that ensure adequate ventilation and that was not the case in the 2019 incident. The container was stowed in a manner that empty containers are stowed, which allowed no ventilation. Proposed amendments to 4-16-11(c) requires adequate ventilation and is a significant change and improvement from not having any requirements for ventilation.

AWI testified that load densities should be revised specifically because external and not internal container measurements were used to determine the load densities. HDOA initially utilized the Hawaii Cattlemen Council “Interisland Livestock Shipping Standards” that HDOA had previously participated in developing. Those standards allowed for more room, lower density than industry standards for the ground transportation of livestock. Those HCC standards were developed by an HCC task force made up of livestock veterinarians and livestock shippers with years of experience shipping livestock interisland. The group used references and standards for ground transportation recommended by the American Association of Bovine Practitioners (AABP) in conjunction with input from Dr. Temple Grandin. Dr. Grandin is a prominent proponent for the humane treatment of livestock and the author of more than 60 scientific papers

on animal behavior. The duration of the Intrastate movement of livestock in Hawaii is most closely aligned with the interstate ground transportation of livestock by trucks and trailers on the Mainland US. Densities recommended by the HCC task force also took into account the many decades of experience of successful inter-island shipping by the livestock shippers on the task force. Given that the densities recommended by the HCC guidelines is already lower than those recommended by AABP/Grandin, and have resulted in many decades of successful inter-island livestock shipments we believe the proposed densities with a 10% maximum deviation will continue to provide for successful and humane transport of livestock by inter-island barges. However, with the proposed mandatory Shipmaster's Declaration requirement proposed to be put in place HDOA will be able to more closely monitor and evaluate these shipments going forward.

Testimony by AWI also included the following specific comments:

- a) That "...the proposal should be revised to limit loading density and ensure placement and loading practices minimize heat stress." Specific comments were that pigs and horses are not included, the load density tables for sheep and goats are deleted, and that the proposed load densities are not correct for cattle sheep and goats.
- b) That "...regulations should thus be amended to ensure that animals are not placed in a location that prevents cross-ventilation for animals, or in locations that produce excessive heat. Examples of such locations include nearby engine boiler rooms, fuel oil storage walls, the ceiling on the uppermost deck, or the sides of the vessel."
- c) "The proposed rule should be amended to include practices to minimize time onboard by requiring carriers to implement loading practices that ensure that animals are the last on and first off a docked vessel."
- d) "HDOA's proposal should be revised to incorporate fitness for transport standards." Conditions are listed that would deem animal unfit for travel were "Animals that are injured, obviously ill, unable to bear weight on all 4 limbs, are likely to give birth during transport, or those that have not been weaned and are traveling separate from the mother should not be transported. Aggressive animals should be transported separately."
- e) That food and water be required for animals when transport or holding exceeds 12 – 24 hours.

Testimony was also received that did not comment on the proposed amendments. For example, one testimony received was related to mosquitoes. Other testimony were not directly related to the proposed rule amendments and included loading and staging area conditions, and comments on species other than cattle sheep and goats (such as horses and pigs).

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In written testimony submitted during the public comment period on the amendments to chapter 4-16, the Animal Industry Division proposed to include the space requirements section of the Interisland Livestock Shipping Standards for Sheep and Goats that was inadvertently not included with the rest of that table in the proposed rules and changing the title “Exhibit B” with “Exhibit A” for correctness. That section of the Exhibit A table appears below.

*These space requirements only pertain to Hawaii interisland transportation and do not pertain to interstate shipping.					
AVG. BODY WEIGHT (lbs)	AREA PER ANIMAL (ft <sup>2</sup> )	HEIGHT (ALL SPECIES)	20' CONTAINER (max number to load)	40' CONTAINER (max number to load)	40'X2 DOUBLEDECKER (max number to load)
60	2.4	Stand comfortably, ensure head clearance	67	133	203
80	2.7		59	119	181
100	3		53	107	163
120	3.6		44	89	136

The Division’s testimony is included in Appendix I. The specific recommended changes to chapter 4-16 are provided in section III below.

**III. Specific Changes Recommended**

Specific changes proposed to Chapter 4-16, HAR, from the amendments approved by the Board are:

*(Bracketed material is removed; Underlined material is added)*

**1. Amend punctuation in the following sections by adding hyphen to pre-shipment.**

- Section 4-16-15 Pre-shipment entry requirements.
- Section 4-16-22 Pre-shipment entry requirements
- Section 4-16-25 Pre-shipment entry requirements.

**2. Amend Exhibit A to correct: a) an omission in Section 4-16-11 Carrier responsibility for sheep and goats; b) space requirements listed; and c) clarify the space requirements only pertain to Hawaii interisland transportation and do not pertain to interstate shipping.**

- a) Exhibit A is amended to add space requirements section of the Interisland Livestock Shipping Standards for Sheep and Goats that was inadvertently not included with the rest of that table in the proposed rules.
- b) Space requirements are changed in Exhibit A for cattle, and sheep and goats.
- c) Statement added: this only pertain to Hawaii interisland transportation and do not pertain to interstate shipping.

**Exhibit A**  
Required Interisland Livestock Shipping Standards | CATTLE

SHIPPING METHOD	Trailers, 20' containers, 40' containers, shipping pens. Must be 4-sided, structurally sound and without protruding objects that could injure animals. Must have four sided forklift pockets to ensure container cannot shift or tip off the fork lift during lifting.
LEAK PROOF	All shipping trailers/containers shall be watertight up to a level of 2" and nonslip flooring is required.
SIDES	Sides shall be solid up to the level of the animals' backs or window guards should be indented to prevent discharge.
WINDOWS	Escape proof. Must contain entire animal. Tall enough to be above the backs of the animals or with 6" indented bars to prevent fecal discharge and allow proper airflow* *Window openings should be at least 7% of the area of the side panel surface to ensure proper ventilation
ROOF	Must have a solid roof to protect from the sun, rain, and contain the animal entirely.
WATER	Not required for trips < 24hrs; must have some form of watering system in case of transit delay. Please bring your own water when possible.
FEED	Not required for trips < 24hrs.
SPACE	*See table.
TRAILERS DELIVERING LIVESTOCK	All livestock trailers entering into the harbor must be constructed to contain animal fecal matter and urine.
TRANSFER AREA & STAGING AREA	In secured DOT designated area only. Water should be available nearby.
TRANSFER PROCESS (TRAILER TO CONTAINER)	Trailer with slide or inward opening gate abut flush to container with slide or inward opening gates.
OR TRANSFER PROCESS (DOT CHUTE)	Secure chute gates to trailer and container, if DOT chute is available.
SPILLAGE	All spillage must be cleaned up and removed from harbor. To comply with EPA, no water should be used to clean, the shipper must bring shovel, broom, etc to clean area. All shipping containers that remain in the harbor must be cleaned out and material hauled away. A fine/fee will be imposed if spillage is not cleaned.

\*These space requirements only pertain to Hawaii interisland transportation and do not pertain to interstate shipping.

AVG. BODY WEIGHT (lbs)	AREA PER ANIMAL (ft <sup>2</sup> )	HEIGHT (ALL SPECIES)	20' CONTAINER (max number to load)	40' CONTAINER (max number to load)	40'X2 DOUBLEDECKER (w/ feeders and water units) (max number to load)
400	6.4	Stand comfortably, ensure head clearance	23	46	70
500	7.5		20	40	61
600	8.5		17	36	54
800	10.4		14	29	Over height limit
1,000	13		11	23	Over height limit
1,200	14.7		10	21	Over height limit
1400	18		8	17	Over height limit

**Exhibit A**  
**Required Interisland Livestock Shipping Standards | SHEEP & GOATS**

SHIPPING METHOD	Trailers, 20' containers, 40' containers, shipping pens. Must be structurally sound and without protruding objects that could injure animals. Must have four sided forklift pockets to ensure container cannot shift or tip off the fork lift during lifting.
LEAK PROOF	All shipping trailers/containers shall be watertight up to a level of 2" minimum absorptive bedding and nonslip flooring is required.
SIDES	Sides shall be solid up to the level of the animals' backs.
WINDOWS	Escape proof. Must contain entire animal. Tall enough to be above the backs of the animals or with 3" indented bars to prevent fecal discharge.
ROOF	Must have a solid roof to protect from the sun, rain, and contain the animal entirely.
WATER	Not required for trips < 24hrs; must have some form of watering system in case of transit delay. Please bring your own water when possible.
FEED	Not required for trips < 24hrs.
SPACE	*See table.
TRAILERS DELIVERING LIVESTOCK	All livestock trailers entering into the harbor must be constructed to contain animal's fecal matter and urine. and contain bedding material.
TRANSFER AREA & STAGING AREA	In DOT designated area only. Water should be available nearby.
TRANSFER PROCESS (TRAILER TO CONTAINER)	Trailer with slide or inward opening gate abut flush to container with slide or inward opening gates
OR TRANSFER PROCESS (DOT CHUTE)	Secure chute gates to trailer and container, if DOT chute is available. Block space between trailer back gate floor and ground.
SPILLAGE	All spillage must be cleaned up and removed from harbor. To comply with EPA, no water should be use to clean, the shipper must bring shovel, broom, etc to clean area. All shipping containers that remain in the harbor must be cleaned out and material hauled away. A fine/fee will be imposed if spillage is not cleaned.

\*These space requirements only pertain to Hawaii interisland transportation and do not pertain to interstate shipping.

AVG. BODY WEIGHT (lbs)	AREA PER ANIMAL (ft <sup>2</sup> )	HEIGHT (ALL SPECIES)	20' CONTAINER (max number to load)	40' CONTAINER (max number to load)	40'X2 DOUBLEDECKER (w/ feeders and water units) (max number to load)
60	2.2	Stand comfortably, ensure head clearance	67	137	240
80	2.5		59	121	211
100	2.8		53	107	189
120	3.4		44	89	156

**3. Other change proposed in section 4-16-11 to remove “unless ventilation with large industrial type fans is provided”**

Carriers are to place livestock in areas where ventilation is adequate at all times. Industry does not experience shipments of livestock demonstrating heat



stress at harbors and airports and on aircraft, ocean vessels and barges when adequate natural ventilation is provided. There are concerns that generators on barges to run fans may generate more heat and fans may end up blowing hot air.

(c) Carriers shall ensure that cattle, bison, water buffalo, camelids, sheep, and goats are provided adequate ventilation. Animals shall not be stowed during transportation or staged prior or subsequent to transportation in a manner that prevents natural ventilation

**4. Change proposed in section 4-16-11 to add paragraph requirements for loading and unloading.**

New paragraph g) is added in response to testimony from industry and AWI stipulating loading and unloading practices to minimize heat stress.

(g) Ocean carriers, baring harbor logistical limitations, shall implement loading practices that strive to ensure animals are the last on and first off a docked vessel. Carriers shall restrict animals from being loaded into locations that produce excessive heat, have restricted ventilation and are placed in locations that may flood containers with ocean water. Carriers shall ensure that livestock staging areas within harbors have access to clean water and adequate ventilation.

**5. Change proposed in section 4-16-11 to add paragraph on types of animal conditions prohibited from transport.**

A new paragraph (h) is added in response to testimony that addresses the health status of animals that are allowed to be shipped.

(h) No animal shall be transported via ocean vessel that is injured, ill, has unhealed wounds or is unable to bear weight on all

four limbs; is blind in both eyes; is likely to give birth during transport or has given birth in the past 48 hours and traveling without their offspring; or is not weaned and traveling separate from the mother. Aggressive animals shall be transported separately.

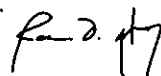
**4. Other changes are proposed throughout Chapter 4-16 to correct format and punctuation.**

No additional changes are recommended.

In addition to the hearing officers' summary and recommendation, this submission includes Appendix I, "Division Testimony" Appendix II, "Copies of Written Testimonies Received" and Appendix III, Summary of proposed changes and copy of proposed Chapter 4-16, HAR in Ramseyer format.

The Animal Industry Division recommends that the Board approve to adopt the attached proposed amendments to chapter 4-16, HAR, entitled "Cattle, Bison, Water Buffalo, Camelids, Sheep and Goats," including Hearings Officers' Summary of Public Hearings Testimony on Proposed Amendments to chapter 4-16, and Hearings Officer's Recommendations.

The Animal Industry Division recommends that the Board approve to adopt the attached proposed amendments to chapter 4-16, HAR, entitled "Cattle, Bison, Water Buffalo, Camelids, Sheep and Goats," including Hearing Officers summary of Public Hearings Testimony on Proposed Amendments to chapter 4-16, and Hearings Officer's Recommendations.



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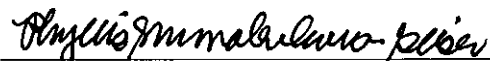
CONCURRED:



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ISAAC M. MAEDA, DVM  
Administrator,  
Animal Industry Division

APPROVED FOR SUBMISSION:



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PHYLLIS SHIMABUKURO-GEISER,  
Chairperson  
Board of Agriculture