Program Handbook
Export of Live Animals (Livestock) from the United States

Live Animal Export Handbook
April 2023
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Introduction

The Animal and Plant Health Inspection Service (APHIS) of the U.S. Department of Agriculture (USDA) regulates the exportation of live animals, hatching eggs, and animal germplasm. The regulations are codified in Title 9, Code of Federal Regulations (9 CFR), Part 91, “Exportation of Live Animals, Hatching Eggs or Other Embryonated Eggs, Animal Semen, Animal Embryos, and Gametes from the United States”

These export regulations, which are referred to below as “the regulations,” require use of disinfectants approved by the APHIS Administrator. As provided in the regulations, the Administrator will approve a disinfectant for the specified use depending on determining that it is effective against the pathogens that may be spread by the animals and, if the disinfectant is a chemical disinfectant, that it is registered or exempted for the specified use by the U.S. Environmental Protection Agency (EPA). This handbook discusses disinfectants approved by the Administrator for use under 9 CFR 91.6, 9 CFR 91.12, and 9 CFR 91.13. Other disinfectants may also be approved by the Administrator in accordance with the regulations.

The regulations also contain requirements for export inspection facilities, export isolation facilities, and ocean vessels. The handbook includes guidance on how to comply with these requirements. The guidance is intended to assist owners and operators by describing acceptable ways to meet the requirements. The methods described in this handbook are one way, but not the only way, to comply with the requirements. Owners and operators may submit alternate plans for complying with the requirements to APHIS for evaluation and approval. Alternatives must be at least as effective in meeting the requirements of the regulations as the methods described in this handbook. APHIS must approve an alternate plan before it can be used. For this reason, plans should be submitted well in advance of when approval is needed to allow time for APHIS review and to avoid unnecessary or wasteful expenditures. For additional information and to discuss how much time may be needed for APHIS review of a plan, contact USDA, APHIS, VS, Field Operations (FiOps), either the Veterinary Export Services (VETS) office, or the Ports Services office, depending on your request.

The regulations also contain reporting requirements for ocean vessels. This handbook contains contact numbers and addresses for submitting reports, as well as an optional template that may be used for the operator’s report required by 9 CFR 91.12(f).

The most recent edition of this handbook is available for viewing and downloading on APHIS’ International Regulations (IREGS) for Animal Exports home page. APHIS will notify the public of changes to the handbook via announcements on its Web site. Any substantive changes to guidance will also be made available for public comment through a notice in the Federal Register.
Part 1. Approved Disinfectants

Regulatory Authority: 9 CFR 91.6, 91.12(b), and 91.13(a)

Background:

The regulations require use of disinfectants approved by the Administrator for:

- Conveyances or containers in which livestock are moved from the premises of export and any facilities into which such livestock are unloaded.
- All fittings, utensils, containers, and equipment, including halters, ropes, and similar equipment (unless new) to be used in the loading, stowing, or other handling of livestock aboard ocean vessels, and
- The stowage area of any aircraft to be used for the export of livestock and any loading ramps, fittings, and equipment to be used in loading the livestock.

The disinfectants listed below and indicated on the linked pages have been approved by the Administrator for the purposes listed. The Administrator may approve other disinfectants for use as required by the regulations upon determining that the disinfectant is effective against the pathogens that may be spread by the animals and, if the disinfectant is a chemical disinfectant, that it is registered or exempted for the specified use by the EPA. Disinfectants must be approved by the Administrator before they may be used to meet the requirements of the regulations.

1.1. Approved Disinfectants

1.1.1 For use on conveyances, containers, and facilities under 9 CFR 91.6, “Cleaning and disinfection of means of conveyance, containers, and facilities used during movement; approved disinfectants.”

Chemical disinfectants registered with or exempted by EPA for this specified use. A list of general antimicrobial disinfectants can be found at EPA’s site as a list of antimicrobial products registered with the EPA as sterilizers. Pathogen-specific disinfectants can be found on the Selected EPA-Registered Disinfectants page.

1.1.2 For use on fittings, utensils, and equipment on ocean vessels under 9 CFR 91.12, “Ocean Vessels”:

Any ocean vessel intended for use in exporting livestock, and all fittings, utensils, containers, and equipment (unless new) used for loading, stowing, or other handling of livestock aboard the vessel must be thoroughly cleaned and disinfected to the satisfaction of an APHIS representative prior to any livestock being loaded.

a. On ocean vessels last used to carry livestock to or from a region affected with foot-and-mouth disease:
See the VS list of disinfectants and the list of potential disinfectants to use against the causative agents of selected foreign animal diseases in farm settings.

b. On ocean vessels returning from other foreign countries:

Disinfectants listed in 9 CFR 71.10 (see section 1.4 of this Handbook).

1.1.3 For use on aircraft and associated loading ramps, fittings, and equipment under 9 CFR 91.13, “Aircraft”

a. For use in stowage areas:

See the VS list of disinfectants and the list of potential disinfectants to use against the causative agents of selected foreign animal diseases in farm settings.

b. For use on loading ramps, fittings, and equipment:

Chemical disinfectants registered with or exempted by EPA for this specified use. A list of general antimicrobial disinfectants can be found at EPA’s site as a list of antimicrobial products registered with the EPA as sterilizers. Pathogen-specific disinfectants can be found on the Selected EPA-Registered Disinfectants page.

1.2 Disinfectants permitted under 9 CFR 71.10, “Permitted Disinfectants.”

See the VS list of disinfectants and the list of potential disinfectants to use against the causative agents of selected foreign animal diseases in farm settings.

The product must always conform to specifications for composition and performance issued by the Administrator.
Part 2. Approval of Export Isolation Facilities

Regulatory Authority: 9 CFR 91.11

Background:

Livestock may have to be isolated for a period of time prior to export to meet the health requirements of the country to which they will be shipped. While these requirements differ from country to country and even among classes of livestock destined for export, and APHIS recommends that exporters contact the importing country directly regarding the requirements, there are certain generally applicable standards that, in our experience, apply to the import requirements for many countries and classes of animals. These are:

2.1. Cleaning and Disinfection

- Pastures and exercise areas included in the export isolation facility are clean.
- All stables, barns, walkways, and equipment to be used in the export isolation facility have been cleaned prior to use for isolation.
- During the isolation period, the export isolation facility requires all protective outer clothing for personnel and all feeding, grooming, and cleaning equipment to be used exclusively within the export isolation facility or to be properly cleaned and disinfected between uses if used with animals outside the export isolation facility.

2.2. Water Supply

The export isolation facility has an adequate supply of water available at all times for the isolated animals to drink and for cleaning purposes.

2.3. Feed, Bedding, and Other Essential Items

Supplies of feed, bedding material, and other essential items are delivered and stored in a manner that prevents contact with animals not intended for export.

2.4. Drainage

Drainage is channeled away from areas in the export isolation facility.

2.5. Isolation
• The isolation period starts when the last animal to be exported enters the export isolation facility, at which time the supervising USDA-accredited veterinarian (or, if requested by the importing country, the APHIS veterinarian) completes and signs an inventory of all livestock in the export isolation facility.
• All isolated animals are confined within the export isolation facility.
• Measures are taken to prevent other animals from approaching within 30 feet of the isolated livestock (including, in any outdoor facilities, pastures, tracks, paddocks, or fields that are part of the export isolation facility).

2.6. Personnel Authorized Entry

Only personnel authorized by the supervising accredited veterinarian or APHIS veterinarian may enter the export isolation facility. The export isolation facility maintains an entry/exit log and/or a list of personnel authorized to enter.

2.7. Unannounced Inspections

The export isolation facility is available during the isolation period for unannounced inspections by an accredited veterinarian or APHIS representative.

2.8 Removal of Livestock from the Export Isolation Facility

• No animal is removed from the export isolation facility until testing for program diseases or other country required testing (e.g., tuberculosis, brucellosis, pseudorabies) is completed and the isolated herd is found negative.
• Animals may be removed from the export isolation facility only with the approval of the supervising accredited veterinarian or APHIS veterinarian. Animals are not permitted to re-enter the isolation facility once they have been removed.
• The export isolation facility keeps records of all removed animals and the reason for the removal (e.g., calving, no longer wanted by buyer).

See Appendix 3 – Export Isolation Facility Checklist.
Part 3. Approval of Export Inspection Facilities

Regulatory Authority: 9 CFR 91.7(a) and (b); 9 CFR 91.10

Background:

All livestock intended for export by sea or air must receive a visual health inspection from an APHIS veterinarian within 48 hours prior to embarkation unless the importing country specifies an alternate timeline. Unless otherwise authorized by the Administrator, the inspection must be done at the export inspection facility affiliated with the port of embarkation. Such facilities must be approved in advance by the Administrator as a location where APHIS will conduct pre-export inspections of livestock.

To be approved as either a permanent or temporary inspection facility, facilities must be constructed, equipped, and managed in a manner that prevents transmission of disease to and from livestock in the facility, provides for the safe and humane handling and restraint of livestock, and provides sufficient offices, space, and lighting for APHIS veterinarians to safely conduct required inspections of livestock and related business.

Temporary inspection facilities must be approved prior to each shipment and prior to any animals entering the facility.

Following permanent approval, if the owner of the facility changes or significant structural changes are made to the facility, the facility will need to be reapproved. APHIS will conduct site inspections of permanently approved export inspection facilities at least once a year for continued compliance with the standards. If a facility fails to pass the inspection, the Administrator may revoke the Agency’s permanent approval. If the Administrator revokes approval for a facility that serves a designated port of embarkation, the Administrator may also remove that port from the list of designated ports of embarkation.

3.1. Separation of Animals

The facility is arranged and located to isolate all animals in the facility from all other animals not in the shipment by either at least a 30-foot separation, a solid wall, or other approved separation configuration.

3.2. Space to Accommodate the Animals

The facility has adequate space and/or scheduling to accommodate the animals in an export shipment. A minimum space twice the size contained in the guidelines for space per animal on ocean vessels is acceptable. (See Section 5.4 of this Handbook.)
3.3 Protection from Inclement Weather

The facility has a roof adequate to protect the animals from inclement weather over at least three fourths of the pens and alleys and over all inspection areas.

3.4 Floors

The floors of pens, alleys, and chutes are skid resistant and can be easily disinfected, and are cleaned on a regular basis to remove effluent and feces. Materials that can be easily disinfected are those which resist the absorption of fluids, such as concrete, asphalt, brick, and metal.

3.5 Fences, Gates, and Other Parts of the Facility Used for Animals

Fences, gates, and other parts of the facility used for animals are constructed of material, such as wood or metal, which can securely restrain the animals in a safe and humane manner.

3.6 Cleaning and Disinfection

The facility has running water available to wash the facility. The facility and all equipment used with animals are cleaned and disinfected with a chemical disinfectant registered with or exempted by the EPA for this specified use. (See Section 1 of this handbook)

3.7 Drainage Systems

The facility has a drainage system that controls surface drainage into and from the facility in a manner that prevents any significant risk of livestock diseases being spread into the facility.

3.8 Inspection Space

The facility has a separate area for animal inspection equipped with restraining devices that allow for the safe and humane handling of animals during inspection.

If horses will be inspected at the facility, areas where horses are inspected have ceilings at least 12 feet high and walkways in front of horse stalls are wide enough to allow APHIS personnel to safely remove horses from the stalls for inspection if necessary.
3.9 **Animals of Questionable Health Status**

Separate pens or yards are provided for segregation and/or treatment of animals of questionable health status apart from animals qualified for export.

3.10 **Personnel Tending the Animals**

Personnel tending the animals who have had contact with animals outside the facility must change or sanitize their outer clothing and footwear before entering areas used for animals.

3.11 **Water for the Animals**

The facility has an ample supply of potable running water that is made available to the livestock. In cold weather, the water is kept free from ice.

3.12 **Lighting**

The facility is equipped with artificial lighting that provides sufficient illumination in the inspection area for inspectors to conduct inspections.

3.13 **Office and Restroom**

A suitable office and restroom facilities are provided for the use of APHIS representatives.

See Appendix 4 – Permanent Export Inspection Facility Checklist
See Appendix 5 – Temporary Export Inspection Facility Checklist
Part 4. Approval for Export Inspection of Livestock at a Facility Not Associated with the Port of Embarkation

4.1. Approval for Pre-Export Inspection of Livestock to Occur at an Approved Isolation Facility

Regulatory Authority: 9 CFR 91.7(b) and (c).

Background:

Livestock may be isolated for a period of time prior to export to meet the import requirements of the destination country. The Administrator may allow pre-export health inspection of livestock to be conducted at an export isolation facility, rather than at the export inspection facility associated with the port of embarkation, when the exporter can show to the satisfaction of the Administrator that the livestock would suffer undue hardship if:

- They had to be inspected at the export inspection facility, or
- When the distance from the export isolation facility to the port of embarkation is significantly less than the distance from the export isolation facility to the export inspection facility associated with the port of embarkation, or
- When inspection at the export isolation facility would be a more efficient use of APHIS resources, or for other reasons acceptable to the Administrator.

Temporary export inspection facilities located at an export isolation facility must meet the export inspection facility requirements outlined in Section 2 of this Handbook and must be approved prior to animals entering the facility for isolation. Approval is contingent on APHIS having personnel available to provide services at that location. The export isolation facility must also have space, lighting, and humane means of handling livestock sufficient for APHIS veterinarians to safely conduct required inspections. Submit requests to use an export isolation facility to conduct pre-export inspections to the local VS Field Operations (FiOps) Veterinary Export Trade Services (VETS) office prior to animals entering the facility.

See Appendix 3 – Export Isolation Facility Checklist
See Appendix 5 – Temporary Export Inspection Facility Checklist
4.2. Approval for Pre-Export Inspection at a Facility Not Associated with the Port of Embarkation or Approved Export Isolation Facility

Regulatory Authority: 9 CFR 91.7(b) and (d)

Background:

The Administrator may allow pre-export inspection of livestock to be conducted at an export inspection facility other than the export inspection facilities associated with the port of embarkation, when the exporter can show to the satisfaction of the Administrator that the livestock would suffer undue hardship:

- If they had to be inspected at the export inspection facility associated with the port of embarkation, or
- when inspection at this different export inspection facility would be a more efficient use of APHIS resources, or
- for other reasons acceptable to the Administrator.

Requests to use an export inspection facility other than the facility associated with the port of embarkation to conduct pre-export inspection must be submitted to the VS Port Veterinarian in Charge. Export Inspection Facility requirements as outlined in Section 2 of this Handbook must be met prior to approval.

If the facility used to conduct the inspection is a facility other than the export inspection facility associated with the port of embarkation, it must be located within 28 hours driving distance under normal driving conditions from the port of embarkation; livestock must be afforded at least 48 hours rest, with sufficient feed and water during that time period, prior to the pre-export inspection; and the exporter must maintain contact information for a veterinarian licensed in the State of embarkation to perform emergency medical services, as needed, on the animals intended for export.

See Appendices 4 and 5 – Export Inspection Facility Checklists
Part 5. Ocean Vessels

5.1. Inspection of Ocean Vessels

Regulatory Authority: 9 CFR 91.12(a)

Background:

Ocean vessels must be certified by APHIS prior to initial use to transport any livestock from the United States. Prior to the vessel’s arrival at a designated port of embarkation in the United States, the owner or operator of the ocean vessel must arrange for an APHIS representative to inspect the vessel while it is at that port of embarkation. If APHIS determines that the ocean vessel meets the requirements of 9 CFR part 91, APHIS will certify the vessel to transport livestock from the United States. The certification will specify the species of livestock for which the vessel is approved. The certification will be valid for up to 3 years; however, the ocean vessel must be recertified:

- Prior to transporting livestock any time significant changes are made to the vessel, including to livestock transport spaces or life support systems.
- Any time a major life support system fails.
- Any time species of livestock not covered by the existing certification are to be transported.
- Any time the owner or operator of the ocean vessel changes.

The owner or operator of the vessel must present the following documentation to APHIS prior to the vessel’s initial inspection for certification and when requested by APHIS prior to subsequent inspections for certification:

- General information about the vessel, including year built, length and breadth, vessel name history, port of registry, call sign, maximum and average speed, fresh water tank capacity and fresh water generation rate, and feed silo capacity (if the vessel has a silo).
- A notarized statement from an engineer concerning the rate of air exchange in each compartment of the vessel.
- The species of livestock to be transported on the vessel.
- Scale drawings that provide details of the design, materials, and methods of construction and arrangement of fittings for the containment and movement of livestock; provisions for the storage and distribution of feed and water; drainage arrangements; primary and secondary sources of power; and lighting.
- A photograph of the rails and gates of any pens.
- A description of the flooring surface on the livestock decks.
- The following measurements: Width of the ramps, the clear height from the ramps to the lowest overhead structures; the incline between the ramps and the horizontal plane; he distance between footlocks on the ramps; the height of side fencing on the ramps; the height of the vessel’s side doors through which livestock are loaded; the width of alleyways running fore
and aft between livestock pens; and the distance from the floor of the livestock pens to the beams or lowest structures overhead.

5.2. Ocean Vessels: Cleaning and Disinfection

Regulatory Authority: 9 CFR 91.12(b).

Background:

Any vessel intended for use in exporting livestock, and all fittings, utensils, containers, and equipment (unless new) used for loading, stowing, or other handling of livestock aboard the vessel, must be thoroughly cleaned and disinfected to the satisfaction of an APHIS representative prior to any livestock being loaded.

After all traces of manure have been removed, disinfectant (see sections 1.2.1. and 1.2.2 of this Handbook) should be applied to all surfaces of the livestock cargo areas, including floors, ceilings, walls, rails, and gates, and to all equipment and utensils that have been used in the livestock cargo areas, including automatic water cups, feed and water troughs, wheelbarrows, shovels, rakes, pitchforks, ropes, and boots. Any surface of the cargo vessel on which the crew walks with the same footwear worn in the livestock cargo areas should be cleaned and disinfected.

A certificate certifying that cleaning and disinfection has been completed must be submitted to APHIS prior to entry into the port and APHIS inspection.

5.3. Ocean Vessels: Determining Sufficient Amounts of Feed and Water

Regulatory Authority: 9 CFR 91.12(c)

Background:

The owner or operator of an ocean vessel carrying livestock from the United States to a foreign country must provide the livestock with sufficient feed and water after the animals are loaded onto the vessel, taking into consideration the livestock’s species, body weight, the expected duration of the voyage, and the likelihood of adverse climatic conditions during transport.

5.3.1. Determining Sufficient Water.

The vessel has an ample supply of potable running water that is made available to the livestock. Watering devices are in good working order and able to be deiced in cold weather. If not automatically refilled, drinking water devices or troughs are filled ad libitum during transport.
5.3.2 Determining Sufficient Feed.

The minimum amount of feed needed for a voyage is 2.25 percent of the body weight of all livestock on board, multiplied by the number of days estimated for the voyage, plus 15 percent of that amount for unforeseen circumstances. The number of days estimated for the voyage should include the time from completion of loading to the time of arrival at the port of discharge.

5.4 Ocean Vessel: Accommodations for the Humane Transport of Livestock

Regulatory Authority: 9 CFR 91.12(a) and (d).

Background:

Ocean vessels used to transport livestock intended for export must be designed, constructed, and managed to reasonable assure the livestock are protected from injury and remain healthy during loading and transport to the importing country. To meet these expectations, ocean vessels must comply with standards in the regulations for the humane transport of livestock. No livestock may be loaded onto an ocean vessel unless an APHIS representative has determined that the vessel meets those standards.

The vessel must be inspected for compliance with the standards prior to initial use to transport any livestock from the United States. APHIS will issue a certificate to vessels deemed to be compliant. Subsequently, prior to each voyage, a certified vessel will be evaluated for ongoing compliance with the standards, as well as the vessel’s suitability to transport that shipment of livestock.

To schedule an inspection for certification, contact VS’ Collateral Port Services Veterinarian in Charge.

Standards below that pertain to the construction of the vessel and its overall suitability to transport livestock (e.g., 7.1 and its subsections; 7.5 and 7.6) will be evaluated at the initial inspection for certification and will be reevaluated for ongoing suitability prior to each voyage to export livestock. Standards below that pertain to the vessel’s suitability to transport a particular shipment of livestock (e.g., 7.2, 7.4) will be evaluated prior to the voyage containing that shipment.

5.4.1 Pens1.

5.4.1.1 Stanchions, rails, and gates; general construction

All pens, including gates and portable rails used to close accessways, are designed and constructed of material of sufficient strength to securely contain the livestock. The pens and components are properly formed, closely fitted, and

1 As used in this Handbook, “pen” may mean the space for one animal (often referred to as a stall) or the space for more than one animal.
rigidly secured in place. They have smooth finished surfaces free from sharp protrusions. There are no worn, decayed, unsound, or otherwise defective parts.

5.4.1.2 Stanchions, rails, and gates; materials

A variety of construction materials, such as wood, metal plate, or pipe, including a combination of materials, may be used for pens aboard ocean vessels. Pipe fittings have the advantage of smooth surfaces, easy maintenance, long-range economy, and spaces between pipe rails to allow for feeding, watering, cleaning, and better ventilation. The nonporous surfaces of pipe are also easy to disinfect. Carefully design and finish all edges, welds, and hardware that are accessible to animals.

Stanchions, rails, and gates made of pipe:

- Pipes are made of extra-strong, medium carbon steel and are either galvanized (coated with zinc) or painted.
- All parts are cut from seamless pipe with no threaded pipe connections.
- Rails and gates use at least four pipes, with the top one having a diameter of at least 3 inches (7.62 cm) and the others a diameter of at least 2 ½ inches (6.35 cm).
- Stanchions are at least 3 ½ inches (8.89 cm) in diameter, at least 5/16 inches (0.79 cm) thick and placed no more than 8 feet (2.438 m) apart center to center.
- Bolt and pin holes are properly located and centered on the pipe and are not more than 1/32 inch (0.08 cm) oversize.
- Pipes are not deformed or weakened by welding of such items as reinforcing rods or hinges onto them. Welding is exposed in the finished work. Pins, plates, and parts other than pipe are made of galvanized steel.
- All areas where galvanizing of the steel has eroded or has been damaged have been finished with a rust preventative.
- Pipe rails are aligned with the tops of all gates at the same height.
- If feed or water dispensers are mounted externally, or if feed will be placed on the floor outside pens, pipe rails are arranged to allow livestock access to the feed and water.

Stanchions, rails, and gates made of wood:

Although acceptable, lumber is rarely used for pen construction on modern ocean vessels used to transport livestock. For this reason, and because descriptions of acceptable construction for wooden pens are quite lengthy, they are in Appendix 1, rather than in this section of the Handbook.
5.4.1.3 Flooring

Flooring must be strong enough to support the weight of the livestock to be transported and must provide a non-slip foothold. Acceptable surfaces include epoxy and concrete flooring with roughened texture (taking care to ensure the surface is not so sharp it will hurt the animals’ feet). Footlocks may also be used to prevent the animals from slipping. Flooring made from 3-inch (7.62 cm) concrete pavement, proportioned and mixed to give 2,000 psi compressive strength in 28 days, or material of equivalent strength, is acceptable.

Although acceptable, lumber is rarely used for flooring on modern ocean vessels used to transport livestock. For this reason, and because descriptions of acceptable construction for wooden flooring are quite lengthy, they are located in Appendix 1, rather than in this section of the Handbook.

5.4.1.4 Pens adjacent to ship’s sides

Any fittings or protrusions from the ship’s sides that abut pens are covered to protect livestock from injury.

If the sides of pens are adjacent to the ship’s sides that have steel casings, frames, stays, or similar fittings, these profiles are covered, or the sides of pens are fitted with rump boards to protect the livestock from injury. The coverings or rump boards are of sufficient dimensions and strength to protect animals from injury. Acceptable coverings include wooden battens made of at least 2 inch (5.08 cm) thick lumber or plywood of similar strength. Rump boards may be made of tongue and groove lumber at 1 ½ inches (3.81 cm) thick or square-edged lumber at least 2 inches (5.08 cm) thick or plywood of similar strength. Rump boards should form a solid wall at least 4 ½ feet (1.372 m) high for horses, 4 feet (1.219 m) high for cattle, and 2 ½ feet (0.76 m) high for sheep, goats, and swine.

5.4.1.5 Pens adjacent to engine or boiler rooms or other sources of heat:

Boiler rooms or similar sources of heat are fitted to protect livestock in nearby pens from injury due to transfer of heat.

The sides of engine or boiler rooms or other sources of heat are covered with a tongue and groove tight sheathing producing a 3-inch wide air space. On ships powered with internal combustion engines, this sheathing may not be required at the discretion of the APHIS representative.

5.4.1.6 Pens on exposed upper decks:

Pens on exposed upper decks must protect livestock from the weather.
If animals will be transported on exposed upper decks in space abutting the outside rails or the ship’s sides, the rails or sides are least 4 feet (1.219 m) high from the deck, and barriers are erected at all unprotected ends of pens to prevent animals from being lost overboard. Additionally, the rails or sides must be of sufficient strength to securely hold any pen fittings attached to them.

All pens on exposed upper decks must be covered securely with watertight roofing that extends at least 2 feet (0.610 m) beyond the pen.

All open spaces on the sides of exposed decks used to carry livestock must be covered with planking, except the top course planking may be left off in warm weather to allow a free circulation of air.

5.4.1.7 Pens on hatches:

No pen is positioned where the pen or livestock in the pen can damage or obstruct hatches or hatch covers, or where the hatches or hatch covers can result in injury to the livestock.

5.4.1.8 Size of transport spaces:

Pens are of an appropriate size for the species, size, weight, and condition of the livestock being transported, as well as the ship’s route.

5.4.1.8.1 General

Generally, any individual animal should have pen space 6 inches (15.24 cm) more in height, depth, and width than the measurements of the animal concerned.

Space should be arranged so that an animal handler can observe each animal regularly and clearly.

Guidelines on pen size are set out below:

- If the vessel will be moving into or through a tropical area (the area of the world situated between the Tropic of Cancer and the Tropic of Capricorn), increase the space for each animal by 10 percent or more (e.g., more for unshorn sheep).
- If any animal to be loaded is in the third trimester of pregnancy, increase the space by at least 10 percent for cattle and horses, and at least 50 percent for sheep, goats, and swine. This increase is in addition to any increase due to movement into or through a tropical area (e.g., increase size by 20 percent for cattle that are in the third trimester of pregnancy and will be moving into or through a tropical area).
An APHIS representative will make the final determination of space needed for each animal at the port of embarkation based on the size and type of livestock presented, weather, destination, route, cubic inches of air available to each animal, and the ventilation capability of the vessel. Irregularly shaped pens may be used only if the APHIS representative determines they will be safe for the livestock and allow livestock in the pen adequate access to feed and water.

5.4.1.8.2 Horses

Horses must have at least 6 feet 6 inches (1.981 m) of space from roof or beams overhead to floor underfoot.

Pens for horses are no larger than 120 square feet (11.155 square meters) and are between 8 feet (2.438 m) and 9 feet (2.743 m) wide, measured across the ship from side to side, except that an APHIS representative may allow pens 7 feet (2.134 m) wide for medium-sized horses.

Single stalls for horses are at least 8 feet (2.438 m) long by 2 ½ feet (0.762 m) wide. Mares in foal are shipped in single stalls that are at least 8 feet (2.438 m) long by 3 feet (0.914 m) wide. Stalls for stallions are at least 8 feet (2.438 m) long by 5 feet (1.524 m) wide. Stalls for mares in foal and stallions must be readily accessible to ship personnel.

5.4.1.8.3 Cattle:

Except in containers, space for cattle weighing 1,000 pounds or more is at least 8 feet (2.438 m) wide and 6 feet 3 inches (1.911 m) from roof or beams overhead to flooring underfoot, except that the height may be 6 feet (1.829 m) or more, at the discretion of the APHIS representative, when floors are raised over pipes and similar obstructions. Pens for cattle weighing less than 1,100 pounds are no more than 226 square feet (20.966 square meters). When pens include stanchions, sounding tubes, ventilators, or other obstructions, provide 20 percent more space for each animal. Single stalls for cattle weighing 1,000 pounds or more are at least 8 feet (2.438 m) long by 3 feet (0.914 m) wide.

5.4.1.8.4 Calves and yearlings:

Calves and yearlings may be stowed in pens or stalls at the discretion of the APHIS representative at the port of embarkation.

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2 Please note: 15 U.S.C. 1824(a) prohibits the export of horses destined for slaughter by means of ocean vessels.
5.4.1.8.5 Sheep, goats, and swine:

Space for sheep, goats, and swine is at least 3 feet (0.914 m) in height. The length and width of pens do not exceed 15 feet (4.572 m) by 8 feet (2.438 m).

5.4.1.8.6 Space requirements

The following space guidelines apply to livestock other than as described in section 5.4.1.8 of this Handbook:

Space per head:

<table>
<thead>
<tr>
<th>Liveweight (lb/kg)</th>
<th>Minimum pen area (ft²/m²/head)</th>
<th>Liveweight (lb/kg)</th>
<th>Minimum pen area (ft²/m²/head)</th>
<th>Liveweight (lb/kg)</th>
<th>Minimum pen area (ft²/m²/head)</th>
</tr>
</thead>
<tbody>
<tr>
<td>88/40</td>
<td>2.36/0.226</td>
<td>9.39/0.872</td>
<td>924/420</td>
<td>16.34/1.518</td>
<td></td>
</tr>
<tr>
<td>110/50</td>
<td>2.73/0.260</td>
<td>9.76/0.906</td>
<td>946/430</td>
<td>16.70/1.552</td>
<td></td>
</tr>
<tr>
<td>132/60</td>
<td>3.10/0.294</td>
<td>10.13/0.940</td>
<td>968/440</td>
<td>17.07/1.586</td>
<td></td>
</tr>
<tr>
<td>154/70</td>
<td>3.47/0.328</td>
<td>10.50/0.974</td>
<td>990/450</td>
<td>17.44/1.620</td>
<td></td>
</tr>
<tr>
<td>176/80</td>
<td>3.84/0.362</td>
<td>10.85/1.008</td>
<td>1012/460</td>
<td>17.80/1.654</td>
<td></td>
</tr>
<tr>
<td>198/90</td>
<td>4.21/0.396</td>
<td>11.22/1.042</td>
<td>1034/470</td>
<td>17.80/1.688</td>
<td></td>
</tr>
<tr>
<td>220/100</td>
<td>4.58/0.430</td>
<td>11.58/1.076</td>
<td>1056/480</td>
<td>18.53/1.722</td>
<td></td>
</tr>
<tr>
<td>242/110</td>
<td>4.95/0.464</td>
<td>12.95/1.110</td>
<td>1078/490</td>
<td>18.90/1.756</td>
<td></td>
</tr>
<tr>
<td>264/120</td>
<td>5.32/0.498</td>
<td>12.31/1.144</td>
<td>1100/500</td>
<td>19.27/1.790</td>
<td></td>
</tr>
<tr>
<td>286/130</td>
<td>5.69/0.532</td>
<td>12.68/1.178</td>
<td>1122/510</td>
<td>19.63/1.824</td>
<td></td>
</tr>
<tr>
<td>308/140</td>
<td>6.06/0.566</td>
<td>13.05/1.212</td>
<td>1144/520</td>
<td>20.00/1.858</td>
<td></td>
</tr>
<tr>
<td>330/150</td>
<td>6.43/0.600</td>
<td>13.41/1.246</td>
<td>1166/530</td>
<td>20.37/1.892</td>
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</tr>
<tr>
<td>352/160</td>
<td>6.80/0.634</td>
<td>13.78/1.280</td>
<td>1188/540</td>
<td>20.73/1.926</td>
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<tr>
<td>374/170</td>
<td>7.17/0.668</td>
<td>14.147/1.314</td>
<td>1210/550</td>
<td>21.10/1.960</td>
<td></td>
</tr>
<tr>
<td>Pen Group</td>
<td>Live Weight Range</td>
<td>Minimum Pen Area Per Head</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>---------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>396/180</td>
<td>7.54/0.702</td>
<td>14.51/1.348</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>418/190</td>
<td>7.91/0.736</td>
<td>15.88/1.382</td>
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</tr>
<tr>
<td>440/200</td>
<td>8.28/0.770</td>
<td>15.24/1.416</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>462/210</td>
<td>8.65/0.804</td>
<td>15.60/1.450</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.02/0.838</td>
<td>15.97/1.484</td>
<td>1320/590</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Pen group live weight range: The live weight range in each pen of cattle should not exceed the pen average plus or minus 110/50 lb/kg.
- For animals weighing between 88/40 lbs./kg. and 1,320/600 lbs./kg., for weights between those shown in the table, the minimum pen area per head should be calculated by linear interpolation.
- The time for a voyage is calculated from completion of loading in the United States until anticipated arrival at the port of discharge overseas.
- For animals weighing more than 1,320/600 lbs./kg., the minimum pen area per head is 22.92/2.13 square feet/square meters plus 0.37/0.034 square feet/square meter for each 22/10 lb./kg. above 600 kg.

5.4.1.8.7 Space requirements for large animals transported in containers:

- The following space guidelines apply to livestock transported in containers and whose length exceeds the width of the container.
- Containers used aboard containerized ocean vessels measure 8 feet (2.438 m) in width outside but vary from 7 feet 3 inches (2.210 m) to 7 feet 9 inches (2.362 m) in width inside and from 17 feet (5.182 m) to 40 feet (12.192 m) in length. The following chart provides space guidelines for livestock whose length exceeds the inside width of the container. For ready measurement of dairy cattle only, the distance from the withers to the pin bone multiplied by 1.65 gives the approximate total length. Other cattle and large animals must be measured to determine their total length. Animals weighing more than shown in the following charts shall be stowed subject to the approval of the APHIS representative at the port of embarkation.
- The maximum inside length of container pens is 12 feet 9 inches (3.886 m).
<table>
<thead>
<tr>
<th>Animal weight, pounds</th>
<th>3 head</th>
<th>4 head</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum space per head</td>
<td>Minimum pen size</td>
</tr>
<tr>
<td></td>
<td>Square feet</td>
<td>Square meters</td>
</tr>
<tr>
<td>Containers 7 feet 9 inches wide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>18.5</td>
<td>1.719</td>
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<tr>
<td>850</td>
<td>19.5</td>
<td>1.812</td>
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<tr>
<td>900</td>
<td>20.4</td>
<td>1.895</td>
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<tr>
<td>950</td>
<td>21.4</td>
<td>1.988</td>
</tr>
<tr>
<td>1,000</td>
<td>22.4</td>
<td>2.081</td>
</tr>
<tr>
<td>1,050</td>
<td>23.4</td>
<td>2.174</td>
</tr>
<tr>
<td>1,100</td>
<td>24.5</td>
<td>2.276</td>
</tr>
<tr>
<td>1,150</td>
<td>25.5</td>
<td>2.369</td>
</tr>
</tbody>
</table>
## Live Animal Export Handbook

<table>
<thead>
<tr>
<th>Weight (lb)</th>
<th>Width (in)</th>
<th>Height (in)</th>
<th>Length (ft)</th>
<th>Weight (kg)</th>
<th>Height (cm)</th>
<th>Length (cm)</th>
<th>Weight (oz)</th>
<th>Height (mm)</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200</td>
<td>26.5</td>
<td>79.5</td>
<td>10’ 3”</td>
<td>3.124</td>
<td>79.5</td>
<td>3102</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1,250</td>
<td>27.4</td>
<td>82.2</td>
<td>10’ 6”</td>
<td>3.200</td>
<td>82.2</td>
<td>3100</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1,300</td>
<td>28.4</td>
<td>85.2</td>
<td>11’ 0”</td>
<td>3.353</td>
<td>85.2</td>
<td>3100</td>
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<td>-----</td>
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<tr>
<td>1,350</td>
<td>29.6</td>
<td>88.8</td>
<td>11’ 6”</td>
<td>3.505</td>
<td>88.8</td>
<td>3100</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1,400</td>
<td>30.8</td>
<td>92.4</td>
<td>12’ 0”</td>
<td>3.658</td>
<td>92.4</td>
<td>3100</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1,450</td>
<td>31.9</td>
<td>95.7</td>
<td>12’ 4”</td>
<td>3.759</td>
<td>95.7</td>
<td>3100</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>1,500</td>
<td>32.9</td>
<td>98.7</td>
<td>12’ 9”</td>
<td>3.886</td>
<td>98.7</td>
<td>3100</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

### Containers 7 feet 3 inches wide

<table>
<thead>
<tr>
<th>Weight (lb)</th>
<th>Width (in)</th>
<th>Height (in)</th>
<th>Length (ft)</th>
<th>Weight (kg)</th>
<th>Height (cm)</th>
<th>Length (cm)</th>
<th>Weight (oz)</th>
<th>Height (mm)</th>
<th>Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>16.3</td>
<td>1.514</td>
<td>7’ 3”</td>
<td>65.2</td>
<td>6.057</td>
<td>9’ 9”</td>
<td>2.972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>750</td>
<td>17.5</td>
<td>1.626</td>
<td>7’ 3”</td>
<td>65.2</td>
<td>6.057</td>
<td>9’ 9”</td>
<td>2.972</td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>18.9</td>
<td>1.756</td>
<td>7’ 9”</td>
<td>75.6</td>
<td>7.024</td>
<td>10’ 5”</td>
<td>3.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>850</td>
<td>20.1</td>
<td>1.867</td>
<td>8’ 3”</td>
<td>80.4</td>
<td>7.469</td>
<td>11’ 1”</td>
<td>3.378</td>
<td></td>
<td></td>
</tr>
<tr>
<td>900</td>
<td>21.3</td>
<td>1.979</td>
<td>8’ 9”</td>
<td>85.2</td>
<td>7.915</td>
<td>11’ 9”</td>
<td>3.581</td>
<td></td>
<td></td>
</tr>
<tr>
<td>950</td>
<td>22.3</td>
<td>2.072</td>
<td>9’ 2”</td>
<td>89.2</td>
<td>8.287</td>
<td>12’ 4”</td>
<td>3.759</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000</td>
<td>23.7</td>
<td>2.202</td>
<td>9’ 8”</td>
<td>89.2</td>
<td>8.287</td>
<td>12’ 4”</td>
<td>3.759</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,050</td>
<td>24.8</td>
<td>2.304</td>
<td>10’ 1”</td>
<td>103.6</td>
<td>414</td>
<td>10’ 1”</td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,100</td>
<td>26.0</td>
<td>2.416</td>
<td>10’ 9”</td>
<td>107.4</td>
<td>425</td>
<td>10’ 9”</td>
<td>327</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,150</td>
<td>27.1</td>
<td>2.518</td>
<td>11’ 3”</td>
<td>111.2</td>
<td>436</td>
<td>11’ 3”</td>
<td>349</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,200</td>
<td>28.4</td>
<td>2.638</td>
<td>11’ 10”</td>
<td>115.0</td>
<td>447</td>
<td>11’ 10”</td>
<td>367</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.4.1.8.8 Hospital pens

The ocean vessel has an adequate number of appropriately sized and located pens set aside to segregate livestock that become sick or injured away from other animals.

At least 1 percent of the pen space in each compartment or deck where livestock are loaded is set aside to be used as hospital pens for any animals that become sick or disabled aboard ship.

Hospital pens provide at least 3 feet by 8 feet (0.914 m by 2.438 m) for each animal.

5.4.2 Ramps, doors, and alleyways used for livestock.

Ramps, doors, and passageways used for livestock are of sufficient width and height for their use and allow the safe passage of the species transported. Ramps may not have an incline that is excessive for the species of livestock transported and must be fitted with foot battens at intervals suitable for the species. They also must have a non-slip surface. Acceptable surfaces include epoxy and concrete flooring with roughened texture (taking care to ensure the surface is not so sharp it will hurt the animals’ feet). The sides of ramps must be of sufficient height and strength to prevent escape of the species of livestock transported.

Ramps connecting one deck of a ship to another have a clear width of 2 ½ to 3 feet (0.762 to 0.914 m) and a clear height of not less than 6 feet 6 inches (1.981 m). The incline of the ramps does not exceed 1:2 (26 ½ degrees) between the ramps and the horizontal plane. The ramps are fitted with foot battens of approximately 2 by 2 inches (5.08 by 5.08 cm) spaced no more than 1 foot (0.305 m) apart. The ramps have side fencing not less than 5 feet (1.524 m) high. Side doors in the ship’s shell plating through which livestock are to be loaded are not less than 6 feet (1.829 m) high for cattle and 6 feet 6 inches (1.981 m) high for horses.

Alleyways running fore and aft on the ocean vessel that are used for feeding, watering, and loading animals, including horses in box stalls, are at least 3 feet (0.914 m) wide and have non-slip flooring. Acceptable surfaces include epoxy and concrete flooring with roughened texture (taking care to ensure the surface is not so sharp it will hurt the animals’ feet). If the alleyways are used for feeding or watering livestock, but not for loading or unloading of livestock, they may be at least 28 inches (0.711 m) wide. However, for a distance not to exceed 8 feet (2.438 m) at the end of alleyways in the bow and the stern of the ship, and where obstructions of less than 3 feet (0.914 m) in length occur, the width may be reduced to a minimum of 24 inches (0.610 m). The ship
has enough alleyways at least 24 inches (0.610 m) wide running across the ship to afford ready access to deck drains and to the ends of alleyways running fore and aft.

However, on exposed decks where deck drains and the ends of fore and aft alleyways are readily accessible across the ship, alleyways across the ship are not required.

5.4.3 Feed, water, and bedding.

The feeding and watering system is designed to permit all livestock in each pen adequate access to feed and water. The system is designed to minimize soiling of pens and to prevent animal waste from contaminating feed and water.

- Dispensers

All stalls and pens are equipped with proper troughs for feeding the livestock and with proper troughs, containers, or other dispensers for watering animals.

The troughs/dispensers are made of sturdy material that is easy to disinfect, such as metal or plastic, and may be either removable or fixed.

The troughs/dispensers are arranged to minimize soiling of pens and prevent animal waste from contaminating feed and water.

Hay is dispensed from racks or nets of a type acceptable to the inspecting APHIS representative or by placing the hay on the floor of the pens in which the animals are confined.

- Storage

Hay, feed, and bedding are stored below deck or otherwise covered to protect them from weather at sea.

If being kept under livestock transport spaces, hay, feed, and bedding are protected from spillage from animal watering and feeding and animal waste.

5.4.4 Ventilation.

Ventilation is adequate for variations in climate and weather and meets the needs of the livestock being transported.

Under deck compartments are equipped with a system of mechanical ventilation, including a backup system or equipment in working order, that furnishes a complete change of air in each compartment every 2 minutes when the deck height (height from floor to ceiling) is less than 8 feet (2.438 m) and every 2 ½ minutes when the deck height is 8 feet (2.438 m) or more.
A spare motor and fan of an approved type in working order is aboard the vessel for each type of motor or fan used.

Net pen space in any compartment does not exceed 80 percent of the deck area.

The adequacy of any mechanical ventilation will be evaluated using the engineering report.

**5.4.5. Waste management.**

The vessel has a system or arrangements for managing waste to prevent excessive buildup in livestock transport spaces during the voyage. This includes a backup system or alternate arrangements.

There is adequate drainage away from all areas used for livestock, including sufficient deck drains. A walkway provides easy access to the deck drains. The vessel has adequate arrangements for the removal of feces and other waste from animal transport spaces. APHIS recognizes that laws exist that prevent the discharge of waste from ships in certain locations. However, to the extent possible, the route should be managed to avoid excessive buildup of waste in animal transport spaces.

Livestock on lower decks and their feed and water are protected from being soiled by feces and urine from livestock on upper decks.

**5.4.6 Lighting.**

The vessel has adequate illumination to allow clear observation of livestock during loading, transport, and unloading.

**5.5: Ocean Vessels Using Shipping Containers**

**Regulatory Authority: 9 CFR 91.12(e)**

**Background:**

An inspector may exempt an ocean vessel that uses shipping containers to transport livestock to an importing country from any of the accommodation standards for ocean vessels that he or she specifies, if the inspector determines that the containers themselves are designed, constructed, and managed in a manner to reasonably assure the livestock are protected from injury and remain healthy during loading, unloading, and transport to the importing country.

**Guidance:**

**5.5.1 Size.**
Shipping containers should meet the size standards specified in section 5.4.1.8.7 of the Handbook.

5.5.2 Construction materials.

Shipping containers must be constructed of materials able to support livestock weight, and durable enough to withstand normal shocks and climatic conditions incidental to transit. Flooring must provide a non-slip foothold and support the weight of the livestock to be transported. Acceptable surfaces include wood, epoxy, and concrete flooring with roughened texture (taking care to ensure the surface is not so sharp it will hurt the animals’ feet). Footlocks may also be used to prevent the animals from slipping.
5.5.3 Water.

The container has access to a supply of fresh potable water that will be made available to the livestock. It is preferred, although not required, that shipping containers be able to connect to the ocean vessel’s water supply system. All watering devices are in good working order and deiced in cold weather.

5.5.4 Waste management.

Shipping containers must ensure that there is not significant, prolonged contact between livestock and their effluent, or must otherwise ensure that all effluent is removed or absorbed so that it does not become an irritant for the animal.

5.5.5 Ventilation.

Ventilation is adequate for variations in climate and weather and meets the needs of the livestock being transported. A spare motor and fan of an approved type in working order is aboard the vessel for each type of motor or fan used.

5.6: Contact Information and a Template for Ocean Vessel Reports

Regulatory Authority 9 CFR 91.12 (f).

Background

The owner or operator of any ocean vessel used to transport livestock from the United States must submit a written report to APHIS within 5 business days after completing a voyage. The report must include information required by 9 CFR 91.12(f). Additionally, if an ocean vessel used to export livestock experiences any failure of a major life support system for livestock during the voyage, the owner or operator must notify APHIS immediately by telephone or other electronic means.

Owners and operators should contact their VS Port Services Veterinarian in Charge for the contact information of the person to whom to send the report; in general, this will be the VS Collateral Port Offices Veterinarian in Charge, although other VS personnel may also be specified. The report may be sent by email or fax.
This section of the Handbook contains a form that may be used for the required reports.

**OPERATOR’S REPORT**
Required by 9 CFR 91.12(f).

Operator’s name:       Date:
Telephone number:
Email address:

<table>
<thead>
<tr>
<th>SHIP DETAILS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Name of ship:</td>
<td></td>
</tr>
<tr>
<td>Names and addresses of all livestock exporters:</td>
<td></td>
</tr>
<tr>
<td>Duration of voyage:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>LOADING DETAILS</th>
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<tr>
<td>Port:</td>
<td>Type of livestock:</td>
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<td></td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>DISCHARGE DETAILS</th>
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<tbody>
<tr>
<td>Port:</td>
<td>Type of livestock:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FAILURE OF ANY LIFE SUPPORT SYSTEMS* FOR LIVESTOCK** (if applicable)
(including, but not limited to, systems for providing feed and water, ventilation systems, and systems for removing livestock waste)

System that failed:

Description of failure, including time and duration, effects on livestock, and any alternative measures implemented or other resolution:
Part 6. Laboratories Approved to Conduct Tests for Program Diseases

Regulatory Authority: 9 CFR 91.3(d)

Background:

All tests required by an importing country for program diseases must be conducted in laboratories approved by the Administrator.

Guidance:

APHIS posts [lists of laboratories approved by APHIS to conduct testing for specific diseases](#).

International movement requirements for tuberculosis (cattle or bison not known to be affected with or exposed to tuberculosis):

- No cattle or bison responding to an official tuberculosis test are eligible for international movement for the remainder of their lifetimes. The testing protocol for international movement shall be in accordance with the tuberculosis test requirements of 9 CFR 91.3(d).
Part 7. Designated Ports of Embarkation and Associated Export Inspection Facilities

Regulatory Authority: 9 CFR 91.9(a).

Background:
Livestock exported by air or sea may be exported only through ports designated as ports of embarkation by the Administrator.

Guidance:
The following ports have associated permanently approved export inspection facilities which the Administrator has determined satisfy the requirements of 9 CFR 91.9(a) and are therefore designated as ports of embarkation:

(1) Delaware

Wilmington: Sea port.

- Boxwood Farms (horses only), 135 Iron Ore Road, Englishtown, NJ 07726, (732) 446-7309.
- Mannington Meadows Farm, 60 Oechsle Road, Woodstown, NJ 08098, (609) 769-2009.
- McCartney, Inc., 18537 South Dry Run Road, Dry Run, PA 17220, (717) 349-7752.
- Pennsylvania Holstein Association Export Inspection Facility, 1806 River Road, Middletown, PA 17057, (814) 234-0364.
- Wilkinson Farm, 1020 Broad Run Road, Landenburg, PA 19350, (610) 274-8670.

(2) Florida

Miami: Air and sea port.

- Horse Country Club, 6610 SW 123 Avenue, Miami, FL 33183, (305) 273-1075.
- Jacaranda Farms, 15460 SW 256 Street, Homestead, FL 33032, (305) 510-2999.
- Thebas Farms, 12401 SW 51st Street, Miami, FL 33175 (305) 381-0222.

Port Everglades: Sea port.

- Horse Country Club, 6610 SW 123 Avenue, Miami, FL 33183, (305) 273-1075.
- Thebas Farms, 12401 SW 51st Street, Miami, FL 33175 (305) 381-0222.
(3) Georgia

Atlanta Hartsfield International Airport: Air port.

- Cartersville (horses only) 118 Old Mill Road, Cartersville, GA 30120, (770) 547-8916,
- Southern Crescent Equine Services LLC, 815 Herring Road, Newnan, GA 30265, (770) 252-6860.

(4) Illinois

Chicago: Air port.

- C&R Midwest Quarantine Facilities, Ltd., Box 470, Route 31, Dundee, IL 60118, (312) 426-5009.
- Chicago Equine Export Center (horses only), 2200 Euclid Ave./P.O. Box 7, Arlington Heights IL 60006, (847) 385-7609.

(5) Louisiana

New Iberia: Air port.

Acadiana Regional Airport, Star R-3, Box 390-H (ARA), New Iberia, LA 70560, (318) 365-7204.

(6) New Jersey

Elizabeth: Sea port.

- Boxwood Farms (horses only), 135 Iron Ore Road, Englishtown, NJ 07726, (732) 446-7309.
- Mannington Meadows Farm, 60 Oechsle Road, Woodstown, NJ 08098, (609) 769-2009.
- The U.S. Equestrian Team’s headquarters (horses only), Pottersville Road, Gladstone, NJ 07934, (908) 234-1251.
- Walnridge Farm (horses only), 44 Arneytown-Hornerstown Road, Cream Ridge, NJ 08514, (609) 758-9100.

Newark International Airport: Air port.

- ARK Import-Export Center/The ARK at JFK (horses and small ruminants) 78A N. Boundary Road, John F. Kennedy International Airport, Jamaica, NY 11430, (212) 328-9132.
- Boxwood Farms (horses only), 135 Iron Ore Road, Englishtown, NJ 07726, (732) 446-7309.
• Mannington Meadows Farm, 60 Oechsle Road, Woodstown, NJ 08098, (609) 769-2009.
• The U.S. Equestrian Team’s headquarters (horses only), Pottersville Road, Gladstone, NJ 07934, (908) 234-1251.
• Walnridge Farm (horses only), 44 Arneytown-Hornerstown Road, Cream Ridge, NJ 08514, (609) 758-9100.

Salem: Sea port.

• Boxwood Farms (horses only), 135 Iron Ore Road, Englishtown, NJ 07726, (732) 446-7309.
• Mannington Meadows Farm, 60 Oechsle Road, Woodstown, NJ 08098, (609) 769-2009.
• Walnridge Farm (horses only), 44 Arneytown-Hornerstown Road, Cream Ridge, NJ 08514, (609) 758-9100.

(7) New York

John F. Kennedy International Airport (Queens): Air port.

• ARK Import-Export Center/The ARK at JFK (horses and small ruminants) 78A N. Boundary Road, John F. Kennedy International Airport, Jamaica, NY 11430, (212) 328-9132.
• Boxwood Farms (horses only), 135 Iron Ore Road, Englishtown, NJ 07726, (732) 446-7309.
• Walnridge Farm (horses only), 44 Arneytown-Hornerstown Road, Cream Ridge, NJ 08514, (609) 758-9100.

(8) Ohio

Rickenbacker International Airport: Air port.

596 Livestock Handling Facility (horses and small ruminants), 2134 Reserve Road, Columbus, OH 43217, (937) 541-7461 or (937) 564-2893.

(9) Pennsylvania

Harrisburg International Airport: Air port.

Pennsylvania Holstein Association Export Inspection Facility, 1806 River Road, Middletown, PA 17057 (717) 944-1374.

(10) Puerto Rico.

San Juan: Air port
• El Commandante Race Track (horses only), P.O. Box 1304 Rio Piedras, PR . 00929, (809) 724-6060.
• Hacienda Siesta Alegre Quarantine (horses only), Carr. 186 Km 23.9, Bo. El Verde, Rio Grande, PR 00745, (787) 397-8118.

(11) Texas

Brownsville: Air port, sea port, and border port.

• Texas Department of Agriculture, Livestock Inspection Facility, International Airport, Brownsville, TX 78520, (512) 546-5136.

Houston: Air port and border port.

• Texas Department of Agriculture, Livestock Export Facility, Box 60107, AMF, Houston, TX 77205, (713) 443-2447

Laredo: Air port and border port.

• El Primero Equine Export Facility (horses only), Route 7, Box 305, Laredo, TX 78401, (512) 723-5436.
• Texas Department of Agriculture, Livestock Export Facility, Route 1, Box 67-P, Laredo, TX 78040, (512) 722-6308.

(12) Washington

Olympia: Sea port.

• Schorno Agri-Business, 17835 Highway 507 SE, Yelm, WA 98507 (360) 458-7788

Seattle: Air port.

Schorno Agri-Business, 17835 Highway 507 SE, Yelm, WA 98507 (360) 458-7788
Appendix 1
Ocean Vessels: Use of Wood for Pen Construction

The following construction is acceptable when wood is used for stanchions, rails, gates, or flooring.

1. Stanchions, rails, and gates.

1.1 General construction:

All pens\(^3\), including gates and portable rails used to close accessways, are designed and constructed of material of sufficient strength to securely contain the livestock. They are properly formed, closely fitted, and rigidly secured in place. They have smooth finished surfaces free from sharp protrusions. They have no worn, decayed, unsound, or otherwise defective parts.

1.2 For cattle and horses:

- Rail stanchions are constructed of at least 4 by 6 inch (10.16 by 15.24 cm) lumber set no more than 5 feet (1.524 m) apart from center to center and secured to the ship’s rails or sides with 5/8 inch (1.59 cm) or larger bolts or collars and with heels braced to the side of the hull or waterway (narrow passage along the edge of a deck for drainage). Inboard stanchions are constructed of at least 4 by 6 inch (10.16 by 15.24 cm) lumber set in line with the rail stanchions and properly braced. (The method of securing and bracing stanchions may be modified as approved by the underwriter of the cargo bureau and the APHIS representative.)
- On open rail ships, spaces between the rails are blocked out to permit the affixing of outside planking.
- If supplementary stanchions are required for rump boards, these are at least 3 by 4 inches (7.62 by 10.16 cm) in size and are secured to beams and decks as provided above.
- On upper deck fittings at the ends of unprotected stalls, a stanchion of not less than 3 by 4 inches (7.62 by 10.16 cm) in size is similarly spaced and secured to beams and decks and properly braced.
- Stanchions on under decks are constructed, spaced, and secured in the same manner as upper deck fittings.

---

\(^3\) As used in this handbook, “pen” may mean the space for one animal (often referred to as a stall) or the space for more than one animal.
1.3 For sheep, goats, and swine:

Stanchions for single or double tier pens are constructed of lumber at least 3 by 4 inches (7.62 by 10.16 cm) set no more than 5 feet (1.524 m) apart center to center and secured as provided under 1.2 above for cattle and horses.

1.4 For all species:

- Two beams of at least 2 by 6 inch (5.08 by 15.24 cm) lumber are bolted on each side of the stanchions using 5/8 (1.59 cm) or larger bolts, nuts, and washers. The beams extend from outside planking to at least 2 feet (.610 m) beyond the line of the breast boards unless the beams butt on the ship’s deck fittings. Two beams of at least 2 by 6 inch (5.08 by 15.24 cm) lumber are used to support the roof of single tier pens on exposed decks and the floor of double tier pens on all decks.
- All gates have pivot pins at least ¾ inch (1.91 cm) in diameter.

2. Breast or front boards, rump boards, division boards, and foot boards.

2.1 General construction:

Pens are fitting with breast boards, rump boards, and division boards between pens at a height suitable for the species to provide support for the animals. If feed and water dispensers are mounted externally to the stalls or pens, breast boards are arranged as necessary (including through use of removable boards) to allow livestock access to the feed and water.

2.2 For horses:

- Breast boards: All pens are equipped with breast boards of not less than 2 by 10 inch (5.08 by 25.4 cm) dressed lumber with the top edge placed 3 feet 10 inches (1.168 m) from the floor and securely nailed to the stanchions. Where butting occurs, the joints are on the stanchions and are covered with metal plates 3 inches (7.62 cm) square or 5 inches (12.7 cm) in diameter and not less than ¼ inch (.64 cm) thick. A 5/8 inch (1.59 cm) or larger bolt passes through the plate, joint, and stanchion and is securely fastened with a nut. All breast boards have 1-inch (2.54 cm) holes bored through them at proper distances for tying animals. An occasional pen may have a removable breast board so that animals may be loaded into or removed from the pen.
- Foot boards: All pens have foot boards of not less than 2 by 10 inches (5.08 by 25.4 cm) lumber securely nailed or bolted across the stanchions. At the discretion of the APHIS representative, small ponies, asses, small mules, mares with foal at foot, young unbroken horses or gentle horses of any size be finished lumber at least 2 by 10 inches (5.08 by 25.4 cm) are placed between the breast and foot boards to effectively contain the animals.
• Rump boards: All pens have rump boards that form a solid wall at least 4 feet 6 inches (1.372 m) high and made of lumber not less than 1 ½ inch (3.8 cm) thick if tongued and grooved or 2 inches (5.08 cm) thick if square edged or of plywood of the same strength. Where the deck is clear of obstructions, rump boards may be set on the inside of the rail stanchions. Otherwise, sections affected are brought forward to clear such obstructions and are fastened by stanchions provided for this purpose. On lower decks, where the ship’s construction so justifies, rump boards may be affixed to wooden pieces at least 2 by 6 inches (5.08 by 15.24 cm) set the same as described for stanchions. Rump boards may be formed by filling spaces between cargo battens. Rump boards in pens built alongside hatches need be carried down only to the coaming line (vertical boundary of a hatch).

• Division boards: Division boards are used to separate all pens and to close the sides of pens at the ends of rows. They are used in sets of four boards of 2 by 10 inches (5.08 by 15.24 cm) dressed lumber separated by 3-inch (7.62 cm) spacers, extend from the rump boards to the inboard stanchions, and are fitted into appropriate channels or slots at both ends in a manner that permits their ready removal.

2.3 For cattle:

• Breast or front boards and foot boards: All pens have breast or front boards and foot boards as described above for horses, except that the breast or front boards are constructed in sets of three or more boards of dressed lumber at 2 by 10 inches (5.08 by 25.4 cm) separated by 3-inch (7.62 cm) spacers and placed on the foot board so that the front of the pen extends 48 inches (1.219 m) or more in height from the floor. One or more of the breast boards may be left off if feed or water troughs are to be mounted externally.

• Rump boards: All pens have rump boards as described above for horses, except that the rump boards for cattle form a solid wall at least 4 feet (1.219 m) high.

• Division boards: Division boards and boards forming the ends of pens are as described for rump boards for these animals.

2.4 For sheep, goats, and swine:

• Front boards: All pens are fitted with front boards of not less than 1 by 6 inch (2.54 by 15.24 cm) lumber approximately spaced and extending to the proper height for these species. A section of front boards may be removable to allow animals to be moved into or out of pens and for feeding or watering.

• Rump boards: All pens on exposed decks have rump boards as described above for horses, except that the rump boards for sheep, goats, and swine form a solid wall 2 ½ feet (0.762 m) high.

• Division boards: Division boards and boards forming the ends of pens are as described for rump boards for these animals.
3. Wooden flooring.

3.1 For cattle and horses:

- Flooring is laid athwartship and secured by placing ends beneath the underside of foot and rump boards or under a 2 by 4 inch (5.08 by 10.16 cm) strip nailed along these boards. Floors may be either of two types, flush or raised. The flush type is constructed of not less than 1 inch (2.54 cm) thick lumber laid flat on the deck. The raised type is constructed of not less than 2 inch (5.08 cm) thick lumber nailed to scantlings of at least 2 by 3 inch (5.08 by 7.62 cm) dimensions laid 2 feet 6 inches (0.762 m) apart. If desired, flooring may be laid in portable sections. Flooring is not necessary on ships with wooden decks provided foot locks are secured to the decks.
- Floors have four foot locks of 1 by 4 inch (2.54 by 10.16 cm) lumber laid fore and aft with flat side down, and so placed as to provide in between spaces of 12, 14, 26, and 14 inches (30.48, 35.56, 66.04, and 35.56 cm) beginning at the inside of the footboard. Additional foot locks are placed at 14-inch (35.56 cm) intervals in pens having a depth of 9 feet (2.743 m) or more. They are well secured with nails of a length that will permit 1 inch (2.54 cm) clinch in 1 inch (2.54 cm) flooring and 2 inch (5.08 cm) penetration in 2 inch (5.08 cm) flooring.

3.2 For sheep, goats, and swine:

- Flooring is laid as described above for cattle and horses, except that the raised flooring need not be greater than 12 inches (30.48 cm) thick.
- Floors have foot locks of not less than 1 by 2 inch (2.54 by 5.08 cm) lumber, four to h pen, equally distributed and laid as described above for cattle and horses.
Appendix 2
Cargo Containers for Livestock Shipped by Air

APHIS does not require the use of any particular material for cargo containers used for livestock shipped for export by air. However, any such materials must be of sufficient strength to securely contain the animals shipped. The Live Animal Regulations (LAR) of the International Air Transport Association (IATA) provide a useful guidance regarding suitable materials.

Additionally, APHIS inspectors use the following standards as guidelines in determining whether a cargo container has sufficient space for animals destined for export:

Table 1: Calves, Cattle, Pigs, and Sheep

<table>
<thead>
<tr>
<th>Species</th>
<th>Weight (lbs.)</th>
<th>Density (lbs./m²)</th>
<th>Space per Animal (ft²)</th>
<th>No. of Animals per 100 ft²</th>
<th>No. of Animals per single tier pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>88 X 108”</td>
</tr>
<tr>
<td>Calves</td>
<td>110</td>
<td>45</td>
<td>2.45</td>
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</tr>
<tr>
<td></td>
<td>154</td>
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<tr>
<td></td>
<td>176</td>
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<td>3.25</td>
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<td>18</td>
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<td>198</td>
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<tr>
<td>Cattle</td>
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<td>11</td>
<td>6</td>
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<td>7</td>
<td>4</td>
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<td></td>
<td>1320</td>
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<td>1540</td>
<td>87</td>
<td>17.60</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Pigs</td>
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<td></td>
<td>220</td>
<td>40</td>
<td>5.50</td>
<td>18</td>
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<tr>
<td>Sheep</td>
<td>55</td>
<td>30</td>
<td>1.80</td>
<td>55</td>
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<td></td>
<td>154</td>
<td>40</td>
<td>3.85</td>
<td>26</td>
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Table 2: Horses

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<th>Weight (lbs.)</th>
<th>Space per horse (ft.$^2$)</th>
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<tr>
<td>0-220</td>
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<td>221-440</td>
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</tr>
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<td>661-880</td>
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</tr>
<tr>
<td>881-1000</td>
<td>12.81</td>
</tr>
<tr>
<td>1101-1320</td>
<td>14.42</td>
</tr>
<tr>
<td>1321-1540</td>
<td>16.25</td>
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<tr>
<td>1541-1760</td>
<td>18.62</td>
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</tbody>
</table>
# Appendix 3
Export Isolation Facility Checklist

## Export Isolation Facility Inspection Checklist

### Export Isolation Facility (physical location):
- **Name:**  
- **Address:**

### Export Isolation Facility Owner/Manager:
- **Name:**  
- **Address:**
- **Telephone:**

### Supervising Accredited Veterinarian:
- **Name:**  
- **Address:**
- **Telephone:**
- **National Accreditation Number:**

---

**Per 9 CFR 91.11, Export Isolation:** “If an importing country requires export isolation for livestock, such isolation must occur before the animals may be moved to a port of embarkation, and both the manner in which this isolation occurs and the facility at which it occurs must meet the requirements specified by the importing country.”
**Per VS Memo 592.105 Part IV. Section B, USDA-Approved Export Isolation vs. Other Export Isolation:**

When the foreign import health protocol (IHP) states that the animals for export must be subjected to "USDA-approved," "officially approved," "approved by the competent authority," or an "approved" isolation, before initiating each isolation the facility must be inspected and approved by an APHIS inspector and the export isolation facility inspection checklist completed and filed with the appropriate VS Endorsement Office for reference. The APHIS inspector should review the IHP for any additional isolation facility requirements.

In general, if the IHP requires the animals to be isolated in a facility that is “approved by the accredited veterinarian,” or “other export isolation,” this does not require an APHIS inspection. The facility may request an APHIS inspection and hourly user fees would apply.

1. The isolation facility may include pastures, stables, feedlots and barns. Pastures and exercise areas included in the isolation facility are clean. All stables, barns, walkways, and equipment to be used in the isolation facility have been cleaned, and disinfected if necessary. Animals are not present in the isolation facility at the time of the facility inspection.

   ![Pass Fail](Pass Fail)

   **Remarks**

2. Measures are taken to prevent other animals from approaching within 30 feet of the isolated animals (including any outdoor facilities or pastures that are part of the isolation facility).

   ![Pass Fail](Pass Fail)

   **Remarks**
Live Animal Export Handbook

3. An adequate water supply is available at all times for the isolated animals and for cleaning purposes.

☐ Pass  ☐ Fail

Remarks

4. Supplies of food, bedding material and other essential items are delivered and stored in the manner that prevents contact with animals not intended for export.

☐ Pass  ☐ Fail

Remarks

5. Drainage is channeled away from areas that are included within the isolation facility.

☐ Pass  ☐ Fail

Remarks
6. The owner/manager understands that during the isolation period, protective outer clothing and all feeding, grooming, and cleaning equipment must be used exclusively within the isolation facility, or properly cleaned and disinfected between uses if used with animals outside the isolation facility.

☐ Pass ☐ Fail

Remarks

7. The owner/manager and accredited veterinarian understand that the isolation period starts when the last animal to be exported enters the isolation facility.

☐ Pass ☐ Fail

Remarks

8. The owner/manager and accredited veterinarian understand that all isolated animals must be confined within the isolation facility. If exercise facilities are included within the isolation facility (i.e., tracks, paddocks, fields) the owner/manager and accredited veterinarian must understand that the isolated animals must remain separated from other animals throughout the entire isolation period.

☐ Pass ☐ Fail

Remarks
9. The owner/manager understand that only personnel authorized by the supervising accredited veterinarian may enter the isolation facility. The facility shall keep a properly maintained entry/exit log for all visitors other than authorized personnel.

☐ Pass    ☐ Fail

Remarks

10. The owner/manager understands that the facility will be available for unannounced inspections by the accredited veterinarian or supervising Federal official at any time during the isolation period.

☐ Pass    ☐ Fail

Remarks

11. The accredited veterinarian understands that only livestock that complete the testing requirements and isolation period required by the importing country are eligible for export.

☐ Pass    ☐ Fail

Remarks
12. The accredited veterinarian understands that after the facility has been approved and the last animal enters the isolation facility, the accredited veterinarian must accurately complete and sign an isolation inventory sheet and submit it to APHIS VETS within 10 days.

- Pass
- Fail

Remarks

13. None of the animals can be removed from the export isolation facility until testing for program diseases (e.g. tuberculosis, brucellosis, pseudorabies, etc.) is completed (if required by the importing country) and the isolated herd is found negative.

Animals can only be removed from the export isolation facility after consulting with the supervising accredited veterinarian or APHIS veterinarian. The export isolation facility must keep a record of all removed animals and the reason (e.g., calving, no longer wanted by the buyer, etc.) for removal.

14. Based on the “Export Isolation Facility Inspection Checklist” an owner/manager/accredited veterinarian agreement may be prepared.
APPROVAL/DISAPPROVAL OF EXPORT ISOLATION FACILITY

1. Date of Inspection: ____________ Expected Isolation Start Date: ____________


3. Species to be handled by the facility: ________________________________

4. Maximum number of animals to be handled at the facility, including animal type and average weight: ________________________________

5. Approved Export Inspection Facility (EIF) this isolation will use: ______________

6. Approved Port of Embarkation this isolation will use: ______________

Is this isolation facility seeking approval to become a Temporary EIF?  ☐ No  ☐ Yes*

*If YES, then a Temporary Export Inspection Facility (EIF) Inspection Checklist must be completed.
Signature of Export Isolation Facility Owner/Manager  Date

Signature of Supervising Accredited Veterinarian  Date

Based on my inspection, I recommend facility for  

Name of APHIS Inspector

Signature of APHIS Inspector  Title  Date

REVIEWED AND APPROVED

Name and Signature of Service Center VIC (or Acting)  Date
Appendix 4

PERMANENT EXPORT INSPECTION FACILITY CHECKLIST

Name and address of the export facility operator

Name and address of the export facility

1. The facility floors of pens, alleys, and chutes are fully disinfectable* and skid resistant. The cleaning and disinfection (C&D) must be conducted after every livestock export shipment and prior to facility inspection/ approval.

   * Disinfectable materials are those which resist the absorption of fluids, such as concrete, asphalt, brick, and metal (dirt floors or other permeable surfaces are not allowed).

☐ PASS ☐ FAIL

Remarks:
2. Fences, gates, and other parts of the facility used for animals are constructed of material, such as wood or metal, which can securely restrain the animals in a safe and humane manner.

☐ PASS  ☐ FAIL

Remarks:

3. The facility has overhead coverage adequate to protect the animals from continuous exposure to sun and inclement weather. The entire designated inspection area must be covered (permanent or temporary structure) to protect from inclement weather.

☐ PASS  ☐ FAIL

Remarks:

4. The facility has a separate area for inspection and identification of animals that is equipped with animal restraining devices which allow for the safe and humane handling of animals during inspection. Any ceilings of the designated inspection area are high enough to safely allow ingress and egress of livestock.

**NOTE:** If horses will be inspected at the facility, areas where horses are inspected have ceilings at least 12-feet high and there are walkways in front of horse stalls wide enough to allow APHIS personnel to safely remove horses from the stalls for inspection, if necessary.

☐ PASS  ☐ FAIL

Remarks:
5. The facility has sufficient personnel to ensure that animals can be unloaded and moved into the inspection area in a safe and humane manner.

PASS   FAIL

Remarks:

6. The facility is equipped with artificial lighting that provides sufficient illumination in the inspection area for APHIS to conduct thorough visual veterinary health inspections.

PASS   FAIL

Remarks:

7. Separate pens or yards are provided for segregation and/or treatment of animals of questionable health status apart from animals qualified for export and adequately maintain control of those animals excluded from the shipment (e.g., hold/ reject pen).

PASS   FAIL

Remarks:
8. The facility and all equipment used in contact with animals is cleaned and disinfected with an approved chemical disinfectant registered with or exempted by the EPA for the diseases of concern based on the species being handled. For more information, please see the Program Handbook.

☐ PASS ☐ FAIL

Remarks:

9. The facility is accessible to an APHIS inspector at all times, day and night.

☐ PASS ☐ FAIL

Remarks:

10. A suitable work area/office and restroom facility are provided for use by APHIS representatives.

☐ PASS ☐ FAIL

Remarks:
11. The arrangements for handling the animals shall be subject to the approval of the APHIS inspector, which shall be granted only if he or she finds that such arrangements will not permit the spread of communicable livestock diseases to the animals in the export shipment.

☐ PASS  ☐ FAIL

Remarks:

12. Testing and treatment of animals in the export inspection facility shall be performed by an accredited veterinarian under the supervision of an APHIS veterinarian.

☐ PASS  ☐ FAIL

Remarks:

13. The facility is arranged in such a way as to isolate all animals in each export shipment from all other animals, by either a 30-foot separation or solid wall, to prevent direct and indirect contact between animal groups and their effluence.

☐ PASS  ☐ FAIL

Remarks:
14. Personnel tending the animals who have had contact with animals outside the facility are required to change or sanitize their outer clothing and footwear before entering areas used for animals.

☐ PASS  ☐ FAIL

Remarks:

15. The facility has running water available to wash the facility.

☐ PASS  ☐ FAIL

Remarks:

16. The facility has a drainage system that controls surface drainage into and from the facility in a manner that prevents any significant risk of livestock diseases being spread into or from the facility.

☐ PASS  ☐ FAIL

Remarks:
17. The facility has an ample supply of potable and accessible water that is made available to the livestock. In cold weather, the water shall be kept free from ice.

☐ PASS  ☐ FAIL

Remarks:

18. The application for approval of a permanent export inspection facility is accompanied by a certificate/letter from the authorities having jurisdiction over environmental affairs regarding disposal of animal wastes in the locality of the facility. The certificate/letter should state that the facility complies with the applicable State and/or local regulations, if any (attach to checklist). The letter will be valid for up to 365 days unless the environmental letter specifies a different period of validity.

   NOTE: If there are no local applicable environmental regulations, the certificate/letter issued by the authorities having jurisdiction over environmental affairs may simply state that no regulations related to disposal of animal waste apply to the facility.

☐ PASS  ☐ FAIL

Remarks:

19. The APHIS inspector was provided with a map or schematic of the facility (attach to checklist) requesting approval, or annual renewal of approval, of the facility, to include total square footage of the animal holding areas in the export inspection facility.

   NOTE: Size of animal holding areas will be used to calculate the maximum number of animals allowed in the facility per the VS Program Handbook.

☐ PASS  ☐ FAIL
Remarks:
APPROVAL/DISAPPROVAL OF PERMANENT EXPORT INSPECTION FACILITY

(Inspection must occur at least every 365 days to maintain status as a Permanent EIF)

1. Indicate if for: Initial approval □ Renewal of approval □

2. Date of inspection: _______________ Valid through: _______________

3. Species to be handled by the facility: ____________________________

4. Maximum number of animals to be handled at the facility, including animal type and average weight used to calculate maximum number of head: ____________________________
   _______________________________________________________________________

5. Designated port(s) of embarkation this EIF will service AND estimated travel time to (each) port: ____________________________
   _______________________________________________________________________

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Based on my inspection, I recommend facility for **Permanent** Approval  □ Disapproval.

________________________________________

Name of APHIS Inspector

________________________________________

Signature of APHIS Inspector  Title  Date

________________________________________

REVIEWED AND APPROVED

________________________________________

Name and Signature of Ports VIC (or Acting)  Date
Appendix 5

TEMPORARY EXPORT INSPECTION FACILITY CHECKLIST

Name and address of the export facility operator

______________________________

Name and address of the export facility

______________________________

______________________________

1. The facility floors of pens, alleys, and chutes are cleaned to remove organic animal material (e.g., effluence and feces) prior to facility inspection/ approval.

☐ PASS  ☐ FAIL

Remarks:

2. Fences, gates, and other parts of the facility used for animals are constructed of material, such as wood or metal, which can securely restrain the animals in a safe and humane manner.

☐ PASS  ☐ FAIL

Remarks:

3. The facility has overhead coverage adequate to protect the animals from continuous exposure to sun and inclement weather. The entire designated inspection area must be covered (permanent or temporary structure) to protect from inclement weather.

☐ PASS  ☐ FAIL

Remarks:
4. The facility has a separate area for inspection and identification of animals that is equipped with animal restraining devices which allow for the safe and humane handling of animals during inspection. Any ceilings of the designated inspection area are high enough to safely allow ingress and egress of livestock.

*NOTE: If horses will be inspected at the facility, areas where horses are inspected have ceilings at least 12-feet high and there are walkways in front of horse stalls wide enough to allow APHIS personnel to safely remove horses from the stalls for inspection, if necessary.*

PASS   FAIL
Remarks:

5. The facility has sufficient personnel to ensure that animals can be unloaded and moved into the inspection area in a safe and humane manner.

PASS   FAIL
Remarks:

6. The export inspection facility has a designated area for inspection of livestock that is of sound construction, sturdy enough to accommodate large numbers of large/heavy livestock, and wide enough to allow easy movement of livestock through the area during inspections.

PASS   FAIL
Remarks:

7. Lighting in the inspection area provides sufficient illumination for inspectors to conduct inspections OR the facility is equipped with artificial lighting that provides sufficient illumination in the inspection area for APHIS to conduct thorough visual veterinary health inspections.

PASS   FAIL
Remarks:
8. Separate pens or yards are provided for segregation and/or treatment of animals of questionable health status apart from animals qualified for export and adequately maintain control of those animals excluded from the shipment (e.g., hold/reject pen).

☐ PASS  ☐ FAIL

Remarks:

9. All equipment used in contact with animals is cleaned and disinfected with an approved chemical disinfectant registered with or exempted by the EPA for the diseases of concern based on the species being handled. For more information, please see the Program Handbook.

☐ PASS  ☐ FAIL

Remarks:

10. The facility is accessible to an APHIS inspector at all times, day and night.

☐ PASS  ☐ FAIL

Remarks:

11. A suitable work area/office and restroom facility are provided for use by APHIS representatives.

☐ PASS  ☐ FAIL

Remarks:

12. The arrangements for handling the animals shall be subject to the approval of the APHIS inspector, which shall be granted only if he or she finds that such arrangements will not permit the spread of communicable livestock diseases to the animals in the export shipment.

☐ PASS  ☐ FAIL

Remarks:
13. Testing and treatment of animals in the export inspection facility shall be performed by an accredited veterinarian under the supervision of an APHIS veterinarian.

☐ PASS ☐ FAIL

Remarks:

14. The facility is arranged in such a way as to isolate all animals in each export shipment from all other animals, by either a 30-foot separation or solid wall, to prevent direct and indirect contact between animal groups and their effluence.

☐ PASS ☐ FAIL

Remarks:

15. Personnel tending the animals who have had contact with animals outside the facility are required to change or sanitize their outer clothing and footwear before entering areas used for animals.

☐ PASS ☐ FAIL

Remarks:

16. The facility has a drainage system that controls surface drainage into and from the facility in a manner that prevents any significant risk of livestock diseases being spread into or from the facility.

☐ PASS ☐ FAIL

Remarks:

17. The facility has an ample supply of potable and accessible water that is made available to the livestock. In cold weather, the water shall be kept free from ice.

☐ PASS ☐ FAIL

Remarks:
18. The APHIS inspector was provided with a map or schematic of the facility (attach to checklist) requesting approval to include total square footage of the animal holding areas in the export inspection facility.

NOTE: Size of animal holding areas will be used to calculate the maximum number of animals allowed in the facility per the VS Program Handbook.

☐ PASS  ☐ FAIL

Remarks:
APPROVAL/DISAPPROVAL OF TEMPORARY EXPORT INSPECTION FACILITY

The facility is being approved on a per shipment basis. This approval does not guarantee approval of the facility for multiple or future shipments.

1. Date of inspection: 

2. Species to be handled by the facility: 

3. Maximum number of animals to be handled at the facility, including animal type and average weight used to calculate maximum number of head: 

4. Estimated date of embarkation/export: 

5. Designated port of embarkation this EIF will service AND estimated travel time to port: 

Based on my inspection, I recommend facility for temporary Approval or Disapproval.
<table>
<thead>
<tr>
<th>Name of APHIS Inspector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signature of APHIS Inspector</td>
</tr>
<tr>
<td>REVIEWED AND APPROVED</td>
</tr>
<tr>
<td>Name and Signature of Ports VIC (or Acting)</td>
</tr>
</tbody>
</table>
Appendix 6
Livestock Inspection

1. Official Identification Verification

USDA-accredited veterinarians are required to perform ID verification on 100 percent of the animals listed on export veterinary health certificates, without exception.

Unless doing so conflicts with the trading partner’s import health requirements, VS calculates the statistically accurate proportion of the animals be ID-verified during VS pre-export inspection. This calculation provides a 99 percent confidence interval with a 1 percent error rate.

Exporters are still permitted to elect to have VS ID verify 100 percent of all livestock, rather than the calculated proportion of animals, if they prefer. This option will incur additional hourly APHIS user fee charges for VS time for inspection. Please note that if a trading partner’s import health requirements require VS to complete 100 percent ID verification during pre-export inspection, VS will uphold this requirement and will not offer a calculated proportion for ID verification.

1.1 Calculation

This calculated proportion of animals to be ID verified during pre-export inspection gives us a 99 percent confidence interval that there is a less than 1 percent error rate in the identification of those animals presented for export.

Example calculations:

<table>
<thead>
<tr>
<th>Number of head in isolation group</th>
<th>Number of head to be ID verified by VS</th>
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<tbody>
<tr>
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<td>386</td>
</tr>
<tr>
<td>1400</td>
<td>391</td>
</tr>
</tbody>
</table>
1.2 Error encountered

If an erroneous identification number or an unlisted animal or any other problematic finding is encountered during this proportional ID verification process, the exporter will then have two options:

Option One: The export inspection facility’s accredited veterinarian must re-verify 100 percent of all livestock presented for export and reschedule VS inspection. This may delay the shipment and require VS to revise or reissue the APHIS-endorsed export veterinary health certificate.

Option Two: Request VS to ID verify 100 percent of all livestock presented for export and attempt to rectify the erroneously counted animal(s). The shipment could go forward as planned if time permits. The exporter will incur additional hourly APHIS user fee charges for VS time for inspection.

2. Rejection of Livestock Unfit to Travel or Based on Signs of Contagious Disease

APHIS will reject any livestock for export that is found unfit for travel or that exhibits signs of contagious disease. Reasons for rejection include, but are not limited to:

2.1 Unfit to travel (as recommended in Article 7.2.7 of the World Organization for Animal Health Terrestrial Health Code):

- Livestock that are sick, injured, weak, disabled, or fatigued.
- Livestock that are unable to stand unaided or bear weight on each leg.
- Livestock that cannot be moved without causing additional suffering.
- Newborn livestock with an unhealed navel.
- Livestock that have given birth within the previous 48 hours and are traveling without their offspring.
- Pregnant livestock that would be in the final 10 percent of their gestation period at the planned time of unloading in the importing country.
- Livestock with unhealed wounds from recent surgical procedures, such as dehorning.

2.2 Warts

Unless doing so conflicts with the trading partner’s import health requirements, an animal with a small number of warts may be cleared for export. An animal with
extensive warts (e.g., warts covering much of one side of the neck or a large number of warts on the face) shall not be cleared for export. The acceptability of borderline cases will be left to the APHIS veterinarian’s professional judgement.

Note: APHIS inspector(s) shall not remove, nor allow others to remove, warts at the export inspection facility, as medical treatment of an animal at the export inspection facility is generally not allowed (only with rare exception, warts not being one of them).

2.3 Ringworm

Unless doing so conflicts with the trading partner’s import health requirements, an animal with healing ringworm lesions may be cleared for export. An animal with moderate to extensive active ringworm lesions shall not be cleared for export. Indicators of active ringworm include, but are not limited to, scaling, crusting, scabbing, hair loss with little to no hair (re)growth (except in the case of scarring), and, where possible to discern, erythema. The presence of any substances intended to obscure ringworm lesions will be considered grounds to disqualify an animal for export, as medical treatment of an animal at an export inspection facility is generally not allowed.

2.4 Eye problems

Animals that are blind in both eyes shall not be cleared for export. An animal with one or more ocular tumors, keratitis, keratoconjunctivitis (pinkeye), moderate severe uveitis, moderate severe conjunctivitis, moderate severe ocular discharge related to the inflammatory process (whether serous, mucoid, or mucopurulent), enlargement of the eyeball, exophthalmos (bulging of the eye), shall not be cleared for export. An animal with slight conjunctivitis and/or slight serous or mucoid ocular discharge, may be cleared for export. Pinkeye that has healed/resolved and resulted in a scar (a small white disc on the globe of the eye that does not impede vision with no ocular discharge) may be cleared for export.