Due to the extreme caustic nature of sodium hydroxide solution, precautionary measures such as the wearing of rubber gloves, boots, raincoat, and goggles should be observed. An acid solution such as vinegar shall be kept readily available in case any of the sodium hydroxide solution should come in contact with the body.

§ 91.18 Cleaning and disinfection of transport carriers for export.

All fittings, utensils and equipment, unless new, to be used in the loading, stowing, or other handling of animals aboard surface vessels under the provisions of this part, shall first be cleaned and disinfected under the supervision of an inspector before being used for, or in connection with, the transportation of animals from any United States port. Such disinfection of halters, ropes, and similar equipment used in handling and tying of animals shall be by immersion in an approved disinfectant. When the surface vessel has last been used to carry livestock to or from a foot-and-mouth disease infected country, the approved disinfectant shall be a freshly prepared solution of:
(a) Sodium carbonate (4 percent) in the proportion of 1 pound to 3 gallons of water.
(b) 4 percent sodium carbonate plus 0.1 percent sodium silicate.
(c) Sodium hydroxide (Lye) prepared in a fresh solution in the proportion of not less than 1 pound avoirdupois of sodium hydroxide of not less than 95 percent purity to 6 gallons of water, or one 13½-ounce can to 5 gallons of water.7

For carriers returning from other foreign countries, the approved disinfectant shall be a disinfectant permitted for use under §71.10, part 71 of this chapter.

§ 91.19 Inspection of ocean vessels prior to loading.

It shall be the responsibility of the owners or the masters of an ocean vessel intended for use in exporting livestock to present the vessel to an inspector at a United States port of embarkation or at the desecration of the Administrator, upon request of the exporter, transporting company, or their agent, at a foreign port, for an inspection to determine if the fittings aboard the vessel are in compliance with the provisions of this part. A notarized statement from an engineering concern shall be required to certify to the rate of air exchange in each compartment. Such notarized statement shall be required upon first use of such vessel:
Provided, That such notarized statement may again be required by the Administrator if substantive changes in fittings aboard the vessel have been made since the vessel was last certified.


§ 91.20 General construction.

A variety of construction materials such as wood, metal plate, or pipe may be used for stalls, crates, or 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. Material used for stalls, crates, or pens shall be properly formed, closely fitted, and rigidly secured in place. Special care shall be taken to design and finish all edges, welds, and hardware that are accessible to animals. A combination of wood and steel pipe or other steel profile construction may be accepted if the construction complies with the regulations in this part. Where the sides of pens are adjacent to the ship's sides which have steel casing, frames, stays or similar fittings, the carrier shall cover these profiles with wooden battens of at least 2 inch thick lumber or plywood of similar strength to prevent animals from injury.


§ 91.21 Ventilation.

Each underdeck compartment on which animals are being transported aboard an ocean vessel shall be equipped with a system of mechanical ventilation that will furnish a complete change of air in each compartment every 2 minutes when deck