## CHAPTER 5.4.

# RECOMMENDATIONS FOR SAFE TRANSPORT OF AQUATIC ANIMALS AND AQUATIC ANIMAL PRODUCTS

#### Article 5.4.1.

#### **General considerations**

- 1. These considerations should be used as recommendations when countries introduce measures to control the *aquatic animal* health *risks* related to the transport of these *aquatic animals* and *aquatic animal products*. These recommendations do not address *aquatic animal* welfare.
- 2. Vehicles (or containers) used for the transport of aquatic animals shall be designed, constructed and fitted in such a way as to withstand the weight of the aquatic animals and water and to ensure their safety during transportation. Vehicles shall be thoroughly cleansed and disinfected before use according to the recommendations given in the Aquatic Code.
- 3. *Vehicles* (or *containers*) in which *aquatic animals* are confined during transport shall be secured to maintain optimal conditions for the *aquatic animals* during transport, and to allow easy access by the attendant.

Article 5.4.2.

#### Particular considerations for containers

- 1. The construction of *containers* intended for *transportation* of *aquatic animals* shall be such that the accidental release of water, etc., is prevented during transport.
- 2. In the case of the *transportation* of *aquatic animals*, provision shall be made to enable preliminary observation of the contents of *containers*.
- 3. *Containers* in transit in which there are *aquatic animal products* shall not be opened unless the *Competent Authorities* of the *transit country* consider it necessary. If this is the case, *containers* shall be subject to precautions to prevent contamination.
- 4. *Containers* shall be loaded only with one kind of product or, at least, with products not susceptible to contamination by one another.
- 5. It rests with each country to decide on the facilities it requires for the transport and importation of *aquatic anim als* and *aquatic anim al products* in *containers*.

#### Article 5.4.3.

### Particular considerations for the transport of aquatic animals by air

- 1. The stocking densities for the transport of *aquatic animals* in *containers* should be determined by taking the following into consideration when transporting by air:
  - a) the total volume of available space for each type of *aquatic animal*;

b) the oxygenation capacity available to supply the *containers* while on the ground and during all stages of the flight.

With regard to fish, molluscs and crustaceans, the space reserved for each *aquatic animal* species in *containers* that have been fitted for the separate *transportation* of several *aquatic animals* or for the *transportation* of groups of *aquatic animals* should comply with acceptable densities specified for the species in question.

2. The OIE approved International Air Transport Association (IATA) Regulations for live animals may be adopted if they do not conflict with national legislative arrangements. (Copies of these Regulations are obtainable from the International Air Transport Association, 800 Place Victoria, P.O. Box 113, Montreal, Quebec H4Z 1M1, Canada.)

Article 5.4.4.

#### Disinfection and other sanitary measures

- 1. Disinfection and all zoo-sanitary work should be carried out in order to:
  - a) avoid all unjustified inconvenience and to prevent damage or injury to the health of people and *aquatic animals*,
  - b) avoid damage to the structure of the *vehicle* or its appliances;
  - c) prevent, as far as possible, any damage to *aquatic animal products*.
- 2. On request, the *Competent Authority* shall issue the transporters with a certificate indicating the measures that have been applied to all *vehicles*, the parts of the *vehicle* that have been treated, the methods used and the reasons that led to the application of the measures.

In the case of aircraft, the certificate may be replaced, on request, by an entry in the General Declaration of the aircraft.

- 3. Likewise, the *Competent Authority* shall issue on request:
  - a) a certificate showing the date of arrival and departure of the *aquatic animals*,
  - b) a certificate to the shipper or exporter, the consignee and transporter or their representatives, indicating the measures applied.

Article 5.4.5.

#### **Treatment of transportation water**

Water to be used for transportation of *aquatic anim als* should be appropriately treated after transport and/or before discharge in order to minimise the *risk* of transferring pathogens. The specific recommendations are provided in the chapter of the Aquatic Code on disinfection.

During *transportation* of *aquatic animals*, the transporter should not be permitted to evacuate and replace the water in the transport tanks except on specifically designated sites in the national *territory*. The waste and rinsing water should not be emptied into a drainage system that is directly connected to an aquatic environment where *aquatic animals* are present. The water from the tanks should therefore either be disinfected by a recognised process (for example, 50 mg iodine or chlorine/litre for one hour), or sprayed over land that does not directly drain into waters containing *aquatic animals*. Each country shall designate the sites in their national *territories* where these operations can be carried out.

#### Article 5.4.6.

## **Discharge of infected material**

The *Competent Authority* shall take all practical measures to prevent the discharge of any untreated infective material, including transport water, into internal or territorial waters.

Article 5.4.7.

## Particular considerations for the transport of live fish by well boat

A well boat is a boat with integrated tanks to carry live fish in sea water that may operate with open valves to allow exchange of sea water. Therefore, well boats can present a biosecurity risk if the fish being carried are infected. Well boats are inherently difficult to disinfect.

- 1. Only healthy fish showing no clinical signs of *disease* on the day of loading should be transported. The well boat must have the capability of fully closed containment of fish during its operation if so required.
- 2. The stocking densities should be determined by taking both the total volume of available space for each species of fish and the oxygenation/aeration capacity available to supply the fish during all stages of transport into consideration.
- 3. Fish may be transported by well boat from an infected site if this is part of a disease response plan agreed to by the *Competent Authority*.
- 4. Provision shall be made to enable preliminary observation of the contents in the well, and monitoring equipment should be available where appropriate.
- 5. Access by farm staff to the vessel and from the vessel to the farm cages, including the equipment, should be restricted.
- 6. Transporting fish of different health status at the same time increases the *risk* of *disease* transfer between those fish and is discouraged.
- 7. Well boats may exchange water in their tanks with the environment except in designated areas in proximity to *aquaculture establishments* or areas with protected wild populations. The *Competent Authority* should designate the areas based upon a *risk assessment*.
- 8. Multiple deliveries of fish during the same trip should be avoided. Where unavoidable the order of deliveries should be made to sites of a higher health status first (e.g. youngest year class), to a single *aquaculture establishment*, or establishments of the same health status.
- 9. In the event of mortality occurring during transport, a *contingency plan* capable of dealing with full containment and disposal of dead fish, via an approved disposal method, should be available. This plan should be prepared according to the recommendations on handling and disposal of carcasses and wastes of aquatic animals (in preparation).
- 10. Well boats should not operate in adverse inclement weather conditions that may force the operation to divert from the planned route and schedule of transport.
- 11. The well boat should be cleaned and, where required, disinfected to an acceptable standard before re-use. The level of *disinfection* should be proportional to the risk. Well boats should maintain a *disinfection* checklist which should be kept with the ship's log and should be open to audit. It is essential to ensure that all fish are removed from the system before cleaning. All organic matters should be removed through the process of cleaning before *disinfection* commences. The general

principles and specific recommendations as outlined in the *Aquatic Manual* should be consulted for guidance.

12. When travelling between areas and zones of different health levels, cleaning and, if required, *disinfection* procedures should be followed and implemented to a standard approved by the *Competent Authority*.