CHAPTER 9.4.

TAURA SYNDROME

Article 9.4.1.

For the purposes of the *Aquatic Code*, Taura syndrome (TS) means *infection* with Taura syndrome virus (TSV). Taura syndrome virus is classified as a species in the family Dicistroviridae. Common synonyms are listed in the corresponding chapter of the *Aquatic Manual*.

Information on methods for diagnosis are provided in the Aquatic Manual.

Article 9.4.2.

Scope

The recommendations in this Chapter apply to: Pacific white shrimp or whiteleg shrimp (*Penaeus vannam ei*), blue shrimp (*P. stylirostris*), northern white shrimp (*P. setiferus*), southern white shrimp (*P. schmitti*), greasyback prawn (*Metapenaeus en sis*) and giant tiger prawn (*P. monodon*). These recommendations also apply to any other *su sceptible species* referred to in the *Aquatic Manual* when traded internationally.

For the purposes of this Chapter, the terms shrimp and prawn are used interchangeably.

Article 9.4.3.

Commodities

- 1. When authorising the importation or transit of the following *commodities*, the *Competent Authorities* should not require any TS related conditions, regardless of the TS status of the *exporting country, zone* or *compartment*.
 - a) For the species referred to in Article 9.4.2. intended for any purpose:
 - i) commodities treated in a manner that inactivates the disease agent e.g. boiled, canned or pasteurised products and some ready-to-eat meals; and crustacean oil and crustacean meal intended for use in feed;
 - ii) chemically extracted chitin;
 - iii) crustacean products made non-infectious through processing as dry *feed* (e.g. pelleted or extruded *feed*);
 - iv) biological samples preserved for diagnostic applications in such a manner as to inactivate the *disease agent*.
 - b) [The following products destined for human consumption from species referred to in Article 9.4.2. which have been prepared and packaged for direct retail trade:

For the *commodities* listed in point 1b), OIE Members may wish to consider introducing internal measures to address the *risks* associated with the *commodity* being used for any purpose other than for human consumption. (under study)]

- 2. When authorising the importation or transit of the *commodities* of a species referred to in Article 9.4.2., other than those listed in point 1 of Article 9.4.3., the *Competent Authorities* should require the conditions prescribed in Articles 9.4.7. to 9.4.11. relevant to the TS status of the *exporting country*, *zone* or *compartment*.
- 3. When considering the importation/transit from an exporting country, zone or compartment not declared free of TS of a commodity of a species not covered in Article 9.4.2. but which could reasonably be expected to be a potential mechanical vector for TSV, the Competent Authorities should conduct a risk analysis in accordance with the recommendations in the Aquatic Code. The exporting country should be informed of the outcome of this assessment.

Article 9.4.4.

Taura syndrome free country

A country may make a *self-declaration of freedom* from TS if it meets the conditions in points 1, 2, 3 or 4 below.

If a country shares a zone with one or more other countries, it can only make a self-declaration of freedom from TS if all the areas covered by the shared water are declared TS free countries or zones (see Article 9.4.5.).

1. A country where none of the *susceptible species* referred to in Article 9.4.2. is present may make a *self-declaration of freedom* from TS when *basic biosecurity conditions* have been continuously met in the country for at least the past 2 years.

OR

2. A country where the *susceptible species* referred to in Article 9.4.2. are present but there has been no observed occurrence of the *disease* for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in the corresponding chapter of the *Aquatic Manual*, may make a *self-declaration of freedom* from TS when *basic biosecurity conditions* have been continuously met in the country for at least the past 2 years.

OR

- 3. A country where the last observed occurrence of the *disease* was within the past 10 years or where the *infection* status prior to *targeted surveillance* was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in the corresponding chapter of the *Aquatic Manual*) may make a *self-declaration of freedom* from TS when:
 - a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
 - b) targeted surveillance, as described in Chapter 1.4. of the Aquatic Code, has been in place for at least the last 2 years without detection of TSV.

OR

- 4. A country that has previously made a *self-declaration of freedom* from TS but in which the *disease* is subsequently detected may make a *self-declaration of freedom* from TS again when the following conditions have been met:
 - a) on detection of the *disease*, the affected area was declared an *infected zone* and a *buffer zone* was established; and
 - b) infected populations have been destroyed or removed from the *infected zone* by means that minimise the *risk* of further spread of the *disease*, and the appropriate *disinfection* procedures (see *Aquatic Manual*) have been completed; and

- c) targeted surveillance, as described in Chapter 1.4. of the Aquatic Code, has been in place for at least the past 2 years without detection of TSV; and
- d) previously existing *basic biosecurity conditions* have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

In the meantime, part of the non-affected area may be declared a free *zo ne* provided that such part meets the conditions in point 3 of Article 9.4.5.

Article 9.4.5.

Taura syndrome free zone or free compartment

A zone or compartment within the territory of one or more countries not declared free from TS may be declared free by the Competent Authority(ies) of the country(ies) concerned if the zone or compartment meets the conditions referred to in points 1, 2, 3 or 4 below.

If a zone or compartment extends over more than one country, it can only be declared a TS free zone or compartment if all the relevant Competent Authorities confirm that the conditions have been met.

1. A zone or compartment where none of the susceptible species referred to in Article 9.4.2. is present may be declared free from TS when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

2. A zone or compartment where the susceptible species referred to in Article 9.4.2. are present but in which there has not been any observed occurrence of the disease for at least the past 10 years despite conditions that are conducive to its clinical expression, as described in the corresponding chapter of the Aquatic Manual, may be declared free from TS when basic biosecurity conditions have been continuously met in the zone or compartment for at least the past 2 years.

OR

- 3. A zone or compartment where the last observed occurrence of the disease was within the past 10 years or where the infection status prior to targeted surveillance was unknown (e.g. because of the absence of conditions conducive to its clinical expression as described in the corresponding chapter of the Aquatic Manual) may be declared free from TS when:
 - a) basic biosecurity conditions have been continuously met for at least the past 2 years; and
 - b) targeted surveillance, as described in Chapter 1.4. of the Aquatic Code, has been in place, through the zone or compartment, for at least the past 2 years without detection of TSV.

OR

- 4. A *zone* previously declared free from TS but in which the *disease* is subsequently detected may be declared free from TS again when the following conditions have been met:
 - a) on detection of the *disease*, the affected area was declared an *infected zone* and a *buffer zone* was established: and
 - b) infected populations have been destroyed or removed from the *infected zone* by means that minimise the *risk* of further spread of the *disease*, and the appropriate *disinfection* procedures (see *Aquatic Manual*) have been completed; and
 - c) targeted surv eillance, as described in Chapter 1.4. of the Aquatic Code, has been in place for at least the past 2 years without detection of TSV; and

d) previously existing *basic biosecurity conditions* have been reviewed and modified as necessary and have continuously been in place for at least the past 2 years.

Article 9.4.6.

Maintenance of free status

A country, zone or compartment that is declared free from TS following the provisions of points 1 or 2 of Articles 9.4.4. or 9.4.5. (as relevant) may maintain its status as TS free provided that basic biosecurity conditions are continuously maintained.

A country, zone or compartment that is declared free from TS following the provisions of point 3 of Articles 9.4.4. or 9.4.5. (as relevant) may discontinue targeted surveillance and maintain its status as TS free provided that conditions that are conducive to clinical expression of TS, as described in the corresponding chapter of the Aquatic Manual, exist, and basic biosecurity conditions are continuously maintained.

However, for declared free zones or compartments in infected countries and in all cases where conditions are not conducive to clinical expression of TS, targeted surveillance needs to be continued at a level determined by the Competent Authority on the basis of the likelihood of infection.

Article 9.4.7.

Importation of live aquatic animals from a country, zone or compartment declared free from Taura syndrome

When importing live aquatic animals of species referred to in Article 9.4.2. from a country, zone or compartment declared free from TS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the exporting country or a certifying official approved by the importing country attesting that, on the basis of the procedures described in Articles 9.4.4. or 9.4.5. (as applicable), the place of production of the aquatic animal is a country, zone or compartment declared free from TS.

The certificate should be in accordance with the Model Certificate in Chapter 5.10.

This Article does not apply to *commodities* listed in point 1 of Article 9.4.3.

Article 9.4.8.

Importation of live aquatic animals for aquaculture from a country, zone or compartment not declared free from Taura syndrome

- 1. When importing, for aquaculture, live aquatic animals of species referred to in Article 9.4.2. from a country, zone or compartment not declared free from TS, the Competent Authority of the importing country should assess the risk and, if justified, apply the following risk mitigation measures:
 - a) the direct delivery to and lifelong holding of the consignment in biosecure facilities for continuous isolation from the local environment: and
 - b) the treatment of all effluent and waste materials in a manner that ensures inactivation of TSV.

- 2. If the intention of the introduction is the establishment of a new stock, the Code of Practice on the Introductions and Transfers of Marine Organisms of the International Council for the Exploration of the Seas (ICES) should be followed.
- 3. For the purposes of the *Aquatic Code*, the ICES Code (full version see: http://www.ices.dk/indexfla.asp) may be summarised to the following main points:
 - a) identify stock of interest (cultured or wild) in its current location;
 - b) evaluate stock health/disease history;
 - c) take and test samples for TSV, pests and general health/disease status;
 - d) import and quarantine in a secure facility a founder (F-0) population;
 - e) produce F-1 generation from the F-0 stock in *quarantine*;
 - f) culture F-1 stock and at critical times in its development (life cycle) sample and test for TSV and perform general examinations for pests and general health/disease status;
 - g) if TSV is not detected, pests are not present, and the general health/disease status of the stock is considered to meet the *basic biosecurity conditions* of the *importing country*, *zone* or *compartment*, the F-1 stock may be defined as TS free or specific pathogen free (SPF) for TSV:
 - h) release SPF F-1 stock from quarantine for aquaculture or stocking purposes in the country, zone or compartment.

This Article does not apply to *commodities* listed in point 1 of Article 9.4.3.

Article 9.4.9.

Importation of live aquatic animals for human consumption from a country, zone or compartment not declared free from Taura syndrome

When importing, for human consumption, live aquatic animals of species referred to in Article 9.4.2. from a country, zone or compartment not declared free from TS, the Competent Authority of the importing country should assess the risk and, if justified, require that:

- 1. the consignment be delivered directly to and held in isolation until processing and/or consumption; and
- 2. all effluent, dead *aquatic animals* and waste materials from the processing be treated in a manner that ensures inactivation of TSV.

OIE Members may wish to consider introducing internal measures to prevent such commodities being used for any purpose other than for human consumption.

This Article does not apply to commodities listed in point 1 of Article 9.4.3.

Article 9.4.10.

Importation of aquatic animal products from a country, zone or compartment declared free from Taura syndrome

When importing aquatic animal products of species referred to in Article 9.4.2. from a country, zone or compartment declared free from TS, the Competent Authority of the importing country should require an international aquatic animal health certificate issued by the Competent Authority of the

exporting country or a certifying official approved by the *importing country* attesting that, on the basis of the procedures described in Articles 9.4.4. or 9.4.5. (as applicable), the place of production of the consignment is a country, zone or compartment declared free from TS.

The *certificate* should be in accordance with the Model Certificate in Chapter 5.10.

This Article does not apply to commodities listed in point 1 of Article 9.4.3.

Article 9.4.11.

Importation of aquatic animal products from a country, zone or compartment not declared free from Taura syndrome

When importing aquatic animal products of species referred to in Article 9.4.2. from a country, zone or compartment not declared free from TS, the Competent Authority of the importing country should assess the risk and apply appropriate risk mitigation measures.

This Article does not apply to commodities listed in point 1 of Article 9.4.3.