#### S.I. 83 of 2010

#### EXPORT OF FISHERY PRODUCTS ACT

(Cap 77A)

## Export of Fishery Products (Aquaculture) Regulations, 2010

In exercise of the powers conferred by the section 13 of the Export of Fishery Products Act, the Minister of Investment, Natural Resources and Industry hereby makes the following Regulations—

- 1. These Regulations may be cited as the Export of Citation Fishery Products (Aquaculture) Regulations, 2010.
- 2. These Regulations may be in addition to and not in derogation of any other written law for the time being in force relating to food safety and public health.

Scope of these Regulations

## 3. In these Regulations—

Interpretation

"aquaculture" means the managed production in artificial enclosures of aquatic organisms which are used for human consumption, and includes the production of intermediate stages of the life cycle including eggs and larval stages of fish, crustacean and molluscs. It does not include the holding of live animals for short periods for the purpose of collecting for market or for purification;

"aquaculture establishment" means a place at which aquaculture is undertaken whether for profit or not with a view to placing aquaculture products on the market for human consumption;

"aquaculture feed" means feed provided to aquaculture animals, including larval stages;

"aquatic organism" has the meaning assigned by the Fisheries Act;

"competent authority" means the Fish Inspection and Quality Control Unit of the Seychelles Bureau of Standards;

"disinfection" means the application of hygienically satisfactory chemical or physical agents and processes to clean surfaces with the intention of eliminating micro-organisms;

"export" means commercial trade with any person outside the territory of Seychelles;

"official control" means any form of control that the competent authority exercises for the verification of compliance with these Regulations;

"traceability" means the ability to trace and follow a aquaculture product, aquaculture feed or other substance intended or expected to be incorporated into an aquaculture product or aquaculture feed, through all stages of production, processing and distribution;

"withdrawal period" means the minimum time before harvest during which treatment with a veterinary medicine must cease to ensure that any residues of veterinary medicines in the edible parts of the aquaculture product are within the limits established for the safety of consumers.

Requirement of permit for aquaculture establishment **4.**(1) No person shall export aquaculture products for human consumption from Seychelles unless they are produced in an aquaculture establishment under and in accordance with a permit granted under these Regulations by the Chief Executive Officer of the Seychelles Bureau of Standards.

- (2) Every aquaculture establishment shall satisfy the conditions contained in Schedules 1 and 2 unless otherwise specified in the permit.
- **5.**(1) Operators of aquaculture establishments shall ensure that aquaculture products under their control satisfy the requirements of these Regulations at all stages of production.

Responsibilities of operators of aquaculture establishments

- (2) If an operator of an aquaculture establishment has reason to believe that an aquaculture product which the operator has produced or distributed is not in compliance with the Regulations or is injurious to human health, the operator shall immediately take steps to withdraw the product in question from the market, and shall inform the competent authority thereof.
- (3) Operators of aquaculture establishments shall collaborate with the competent authority on actions taken to investigate, avoid or reduce risks posed by any product which they have supplied.
- **6.**(1) Notwithstanding the prohibition of specific veterinary medicines and medicinal premixes described in subregulation (2) of this regulation, the following substances shall not be applied to aquaculture products—

Banned substances

- (a) Chloramphenicol and derivatives, e.g. thiamphenicol(TAF);
- (b) Dimetridazole;
- (c) Metronidazole;
- (d) Compounds which produce a nitrofuran metabolite;
- (e) Anabolic substances for growth promotion purposes;
- (f) Malachite green and leucomalachite green.

(2) Veterinary medicines and medicinal premixes for inclusion in aquaculture product feeds shall not be used if their active ingredients are prohibited for use in food animals under the Animal Diseases and Imports Act of 1981.

Permitted veterinary medicines

- 7.(1) No veterinary therapeutic products and medicinal premixes for inclusion in aquaculture products feeds may be applied to living aquaculture products unless they are approved for such use under the terms of relevant legislation controlling the import, distribution and use of medicines.
- (2) Where no specific legislation is in place controlling the import, distribution and use of medicines, the medicines listed in column 1 of Table 1 in Schedule 2 shall be permitted to be applied to living aquaculture products, on the condition that residues present in the aquaculture product placed on the market does not exceed the limit indicated in column 2 of that Table.

Unfit aquaculture products

- **8.**(1) Aquaculture products are to be considered to be unfit for human consumption if—
- (a) they derive from aquaculture products which have been treated by a substance whose use is prohibited under the Animal Diseases and Imports Act of 1981; or
- (b) they derive from aquaculture products which have not been produced in accordance with Schedule 2;
- (2) Unfit aquaculture products intended for sale for human consumption are subject to seizure under the powers granted to authorised officers referred to in section 10 of the Export of Fishery Products Act.

Nomination of the Competent Authority **9.** The Chief Executive Officer may delegate the Chief Executive Officer's functions under these Regulations to the Fish Inspection and Quality Control Unit (hereinafter referred to as the competent authority).

**10.**(1) The competent authority shall undertake control and monitoring of food safety conditions in aquaculture establishments and ascertain whether the requirements of these Regulations are complied with.

Official control of aquaculture products

- (2) The official controls shall include relevant checks set out in the Export of Fishery Products (Sanitary) Regulations, 2010.
- 11. The competent authority shall draw up reports on the inspections for official controls that it has carried out under these Regulations in accordance with Regulation 12 of the Export of Fishery Products (Sanitary) Regulations, 2010.

Inspection reports

**12.**(1) The competent authority shall design and cause to be implemented an annual monitoring programme with the objective of assessing the nature and extent of the compliance of aquaculture establishments with these Regulations.

Annual monitoring programmes

- (2) The monitoring programmes described in subregulation (1) shall take into account the risks of different food safety hazards in aquaculture feeds and aquaculture products and the criteria described in Schedule 2, and shall include the following parameters—
  - (a) heavy metals;
  - (b) residues of veterinary medicines whose use in aquaculture is permitted under the Pharmacy Act;
  - (c) residues of substances whose use in aquaculture is banned under the Animal Disease and Imports Act of 1981 and the Pharmacy Act;
  - (d) residues of organochlorine and organophosphate contaminants of the environment;

- (e) mycotoxins;
- (f) other hazards in aquaculture products which are identified as relevant to food safety conditions of products.
- (4) The monitoring programme shall specify the sampling plan and the methods of analysis including detection limits to be applied, along with the residue levels which will precipitate follow up actions.
- (5) The competent authority shall prepare an annual report describing the monitoring programme, the results and the outcome of any follow up action, and submit the report to the Minister.

Annual inspection programme and annual report

13. The competent authority shall prepare an annual programme and annual report of official control and monitoring activities it has carried out under these Regulations in accordance with the Export of Fishery Products (Sanitary) Regulations, 2010.

Duties of authorised officers

- **14.**(1) Authorised officers acting in the course of their duties shall at all times act with integrity, transparency and confidentiality.
- (2) Information relating to any individual business which is obtained by an officer during the course of official controls or other activities under these Regulations shall not be disclosed without the consent in writing of the person carrying on the business, except—
  - (a) so far as may be necessary for the purposes of these Regulations; or
  - (b) for the purposes of any legal proceedings.

#### **SCHEDULE 1**

Reg. 4(2)

## $Hygiene\ and\ management\ requirements\ of\ aquaculture\ establishments$

#### Site location and selection

- 1. Aquaculture operations should be located in areas where the risk of contamination with hazardous chemical effluents is minimal and where sources of pollution can be controlled.
- 2. Aquaculture operations should be sited at a safe distance from potential sources of water contamination in order to ensure protection of products from contamination.
- 3. The immediate vicinity of aquaculture operations should be free of potential sources of water contamination and in particular should not be located downstream and close to—
  - (a) industrial activity;
  - (b) intensive agriculture (especially animal husbandry);
  - (c) densely populated areas or urban areas;
  - (d) hospitals;
  - (e) major roads.
- 4. Before building a land-based aquaculture facility, a survey of the soil should be conducted in order to determine the concentration and extent of any parameters which are of importance for the safety of end products, including heavy metals and pesticide residues. Such an analysis should be conducted as a condition of the permit required under Regulation 4.
- 5. Cages, pens or any other form of aquaculture enclosures or water intakes should be sited away from routes of water-borne traffic, and preferably upstream of any water-borne traffic.
- 6. Cages, pens or any other form of aquaculture enclosures or water intakes

should be sited away from, and preferably upstream of, any natural or artificial discharges of contamination.

#### Aquaculture site facilities

- 7. All aquaculture establishments shall have an adequate number of flush toilets for the use of staff.
- 8. There shall be an adequate number of wash hand basins, and an adequate supply of single use towels or appliances for drying the hands.
- 9. Sanitary facilities should be located so as to ensure that there is no risk of contamination of fish ponds.

#### Pond preparation

- 10. Weeds, rubbish and debris should be removed before preparing aquaculture ponds for filling with water.
- 11. If necessary ponds should be conditioned with lime and left for a period of at least two weeks before filling and stocking.
- 12. At least once each year the pond should be drained, allowed to dry out and, if required, re-conditioned with lime.

## Aquaculture feeds and feed materials

- 13. Aquaculture feed stored at the aquaculture facility should be held in a properly constructed and well-ventilated facility, and protected from the entry of insects, birds and rodents.
- 14. Slaughterhouse waste and offal from mammalian food animals may only be used as a food for fish if it is first cooked.
- 15. Compound feed should not be used for feeding fish unless the user is informed of the composition, including any supplements added by the manufacturer.
- 16. Compound feed treated with veterinary medical supplements (including hormones and antibiotics) are considered to be veterinary medicines to which Schedule 2 applies.

#### Harvesting, equipment and materials

- 17. Harvesting areas and methods within the aquaculture facility should be designed and constructed for easy, fast and hygienic operation.
- 18. All equipment used for harvesting, catching, sorting, grading, conveying and transporting of aquaculture products should be designed for their rapid and efficient handling without causing mechanical damage.
- 19. Equipment, containers and utensils coming into contact with aquaculture products should be designed and constructed to ensure that they can be adequately cleaned, disinfected and maintained to avoid contamination.
- 20. All surfaces of boxes, implements and other equipment which come into contact with aquaculture products should be of corrosive resistant material which is smooth and easy to clean, or be designed for a single use only.
- 21. If re-usable boxes are used to carry aquaculture products from the production area, then a suitable means of cleaning with water and detergent, and disinfection should be provided

## Personal hygiene

- 22. Any person working at an aquaculture facility shall maintain a reasonable standard of personal hygiene and take all necessary precautions to prevent the contamination of the aquaculture products.
- 23. Any cut or wounds on hands and forearms shall immediately be covered by a suitable water-proof dressing.
- 24. Persons suffering from infectious diseases, or from a helminthic parasitic infection, or who have infected wounds, boils or other skin infections, or who are suffering from diarrhoea are not permitted to work in an aquaculture operation.
- 25. Personnel who work in aquaculture operations shall, on their appointment and in one year intervals thereafter, undertake a health test

to ensure that they do not suffer from any of the above conditions. Health documents of every person shall be kept at the facility and shall be available to the competent authority on request.

26. Any person entering an aquaculture establishment must refrain from spitting or eating food, urinating or defecating, except in areas or locations designated for these purposes, which must be away from production areas.

#### First aid box

- 27. Each aquaculture facility shall be provided with a first aid box, which should contain at the minimum—
  - (a) a sufficient quantity of impermeable dressings;
  - (b) antiseptic cream or disinfectant;
  - (c) cotton wool and adhesive tape.

#### Exclusion of animals

28. Domestic animals should be excluded from aquaculture operations and areas adjacent to ponds.

#### Cleaning and Disinfection schedule

- 29. Areas around the ponds should be kept clean and free from rubbish, waste aquaculture products and items not associated with the aquaculture operation.
- 29. A permanent written cleaning and disinfection schedule should be drawn up to ensure that all parts of the aquaculture facilities and equipment therein are cleaned appropriately and regularly.
- 30. A named person should be responsible for implementation of the schedule.
- 31. The schedule should be available for inspection at all times.
- 32. Aquaculture personnel should be trained in the use of special cleaning tools, methods of dismantling equipment for cleaning and should be

knowledgeable in the significance of contamination and the hazards involved.

#### Pest control systems

- 33. A permanent written pest control schedule should be drawn up to ensure that all parts of the aquaculture facilities and equipment remain free from infestations of insect and rodent pests.
- 34. A named person should be responsible for implementation of the schedule.
- 35. The schedule should be available for inspection at all times.

#### Record keeping and batch identification

- 36. Effective records should be kept of each batch of aquaculture products grown in each pond, and of veterinary drug regimes, feeding methods and quantities, pond fertilisers added and any results of water quality parameters.
- 37. The records should be kept for a period of one year after harvest.
- 38. Each batch of aquaculture products leaving the farm for market or for processing should be allocated a batch number which relates it to the information records described below.
- 39. Each batch of aquaculture products leaving the aquaculture operation for placing on the market should be marked to include the following information—
  - (a) Permit number of the aquaculture establishment;
  - (b) Name of the enterprise;
  - (c) Date of harvesting;
  - (d) Species;
  - (e) Batch number.

#### **Traceability**

- 40. The traceability of aquaculture products, feeds used in aquaculture systems, and any other substance intended to be, or expected to be, incorporated into an aquaculture product or aquaculture feed shall be established at all stages of production, processing and distribution.
- 41. Operators of aquaculture establishments shall be able to identify any person from whom they have been supplied with aquaculture products, an aquaculture feed, or any substance intended to be, or expected to be, incorporated into an aquaculture product or aquaculture feed. To this end, such operators shall have in place systems and procedures which allow for this information to be made available to the competent authority on demand.
- 42. Operators of aquaculture establishments shall have in place systems and procedures to identify the other businesses to which their products have been supplied. This information shall be made available to the competent authority on demand.
- 43. Aquaculture products or aquaculture feed which is placed on the market or is likely to be placed on the market shall be labelled or otherwise identified through relevant documentation or other information to ensure its traceability.
- 44. Each operator of an aquaculture establishment must prepare a written recall plan detailing the procedures to be followed in the case that a batch of aquaculture products which has left the possession of the operator should be withdrawn from being placed on the market.

## Minimum monitoring requirements for the internal control system

- 45. Monitoring programmes should be implemented by the operator of an aquaculture establishment to check that
  - (a) waste and debris e.g. dead or diseased aquaculture products do not build up and are disposed of in a hygienic manner;
  - (b) personal hygiene and health standards are maintained;

- (c) the pest control programme is implemented;
- (d) cleaning and disinfecting programmes are implemented;
- (e) quality of water and ice supply is maintained;
- (f) aquaculture feeds, feed supplements and other additives applied to aquaculture products do not contain any substances whose use is prohibited by law;
- (g) withdrawal periods observed in relation to treatment of aquaculture products by permitted veterinary medicines are effective in relation to meeting the requirements for maximum residue limits of those medicines in the final product.
- 46. The results of all monitoring actions and of any corrective actions taken after monitoring must be recorded.

#### **SCHEDULE 2**

Reg. 4(2)

# VETERINARY MEDICINE CONDITIONS FOR AQUACULTURE ESTABLISHMENTS

#### Permitted Veterinary Medicines

Table 1: Permitted veterinary medicines for use in aquaculture and Maximum Residue Limits in aquaculture products

Compound	Maximum Residue Limit 1
Penicillins	
Amoxicyllin	50μ/kg

Ampicillin	50μg/kg
Quinolones	
Flumequin	600μg/kg
Sarafloxacin	30μg/kg
Oxolinic acid	300μg/kg
Tetracyclines	
Chlorotetracyline	100μg/kg
Oxy tetracycline	100μg/kg
Tetracycline	100μg/kg
Acyl urea derivatives	
Diflubenzuron	1000 μg/kg
Teflubenzuron	500μg/kg
Pyrethroids	
Cypermethrin	50μg/kg
Macrolides	
Erythromycin	200μg/kg
Others	
Sulphonamides	100μg/kg
Trimethroprim	50μg/kg
Tosylchloramide sodium	Not subject to MRL
Tricaine mesilate (MS222)	Not subject to MRL
Formalin	Not subject to MRL
Methyltestosterone <sup>2</sup>	Not subject to MRL

Notes: <sup>1</sup> All MRLs in skin and muscle in commercial proportions <sup>2</sup> Permitted for tilapia hatchery operations

#### Handling and administration of Veterinary Medicines

1. Therapeutic treatment with veterinary medicines of diseases in aquaculture should be carried out only on the basis of a diagnosis by a veterinarian, a qualified fish disease specialist or a qualified aquaculture technician.

- 2. Prophylactic and therapeutic treatment with veterinary medicines of fish diseases in aquaculture should be carried out under the supervision of a veterinarian, a qualified fish disease specialist or a qualified aquaculture technician.
- 3. Veterinary medicines should be used according to manufacturers' instructions and note should be taken of all warning statements and contra-indications for use, and in particular instructions in relation to withdrawal periods.
- 4. Each individual dose and administration of veterinary medicines (including compound feeds containing veterinary supplements) should be recorded in a book kept at the facility for that purpose, specifying date and nature of treatment, identification of aquaculture products and duration of withdrawal period.
- 5. The entries in the register are to be signed by the veterinarian, a qualified fish disease specialist or a qualified aquaculture technician responsible for administering the drug programme.
- 6. Aquaculture products which are being treated with a veterinary medicine should be kept separate from those which are not being treated, and be easy to identify as a separate batch.

## Harvesting and withdrawal period

- 7. Withdrawal periods under different conditions of each veterinary medicine used and for each species to which it is applied must be established by the operator of the aquaculture establishment and recorded in the register held by the operator of the aquaculture establishment.
- 8. Aquaculture products must not be harvested before the end of the withdrawal period.
- 9. The amount of any veterinary drug residue in the harvested aquaculture product must not exceed any maximum residue limit specified under this or other legislation.

10. If aquaculture products which are treated with a veterinary medicine are sold live for on-growing before the end of the withdrawal period, then the buyer must be informed in writing by the seller.

#### Requirements for marketing

- 11. If the Aquaculture products is consigned for placing on the market for human consumption, then the producer should certify to the processor in writing that either:
  - (a) no veterinary medicines have been applied; or
  - (b) if they have been applied, that minimum withdrawal periods have been observed for the named medicines.
- 12. Persons receiving aquaculture products for subsequent placing on the market, in addition to the checks defined in Schedule 1, must undertake checks to ensure that—
  - (a) they do not accept production batches in which undeclared drug treatments have been administered;
  - (b) where veterinary medicines have been applied, that minimum withdrawal periods have been observed and maximum residue limits are not exceeded;
  - (c) No prohibited substances are present.

MADE this 15th day of November, 2010.

PETER SINON
MINISTER OF INVESTMENT,
NATURAL RESOURCES AND INDUSTRY