

# **GOVERNMENT GAZETTE**

# **OF THE**

# **REPUBLIC OF NAMIBIA**

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#### **GOVERNMENT NOTICE**

No. 70 Regulations relating to import and export of aquatic organisms and aquaculture products: Aquaculture Act, 2002

# **Government Notice**

# MINISTRY OF FISHERIES AND MARINE RESOURCES

No. 70

REGULATIONS RELATING TO IMPORT AND EXPORT OF AQUATIC ORGANISMS AND AQUACULTURE PRODUCTS: AQUACULTURE ACT, 2002

The Minister of Fisheries and Marine Resources has under section 43 of the Aquaculture Act, 2002 (Act No. 18 of 2002), made the regulations set out in the Schedule.

### A. IYAMBO MINISTER OF FISHERIES AND MARINE RESOURCES

Windhoek, 3 March 2010

SCHEDULE

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# PART I

# DEFINITIONS

### Definitions

**1.** In these regulations a word or expression to which a meaning has been assigned in the Act has that meaning, and unless the context indicates otherwise -

"approved" means approved by the Minister;

"aquatic organisms" or "aquaculture products" includes genetically modified "aquatic organisms" or "aquaculture products";

"Aquaculture (Licensing) Regulations" means the Aquaculture (Licensing) Regulations published under Government Notice No. 246 of 03 December 2003;

"audit" means an evaluation to determine the degree of compliance of quarantine facilities with the standards set out in Annexure G or H;

"biosecurity clearance" means a letter signed by the competent authority releasing aquatic organisms from quarantine detention, and in the case of aquatic organisms released from an introductions and transfers quarantine facility, specifying risk management measures to be complied with;

"competent authority" means -

- (a) in the case of Namibia, the Minister; and
- (b) in the case of any other country, the authority responsible for the control and supervision of the implementation of health measures relating to aquatic organisms;

"exporter" means a person registered as an exporter of aquatic organisms or aquaculture products in terms of regulation 17;

"exporting country" means a country from which a shipment is send to a destination in another country;

"export permit" means a permit issued in terms of regulation 19;

"health certificate" means a certificate issued by a competent authority confirming the health status of a aquatic organisms or aquaculture product;

"importer" means a person registered as an importer of aquatic organisms in terms of regulation 4;

"importing country" means a country that is the final destination to which a shipment is sent:;

"import permit" means a permit issued in terms of regulation 7;

"introduction" means the human assisted movement of aquatic organisms and aquaculture products to an area outside their natural range;

"laboratory" means a laboratory approved by a competent authority for conducting tests on aquatic organisms and aquaculture products;

"operator" means a person who, in terms of regulation 14, is approved or holds a licence to operate a quarantine facility;

"quarantine" means the holding or rearing of aquatic organisms and aquaculture products under conditions that prevent their escape, and the escape of any pathogens the aquatic organisms and aquaculture products may be carrying, into the surrounding environment;

"quarantine officer" means -

- (a) in the case of Namibia, a person designated by the Minister as a quarantine officer; and
- (b) in the case of any other country, a person designated by the competent authority to regulate the operation of a quarantine facility;

"risk assessment" means the process of identifying and estimating the risks associated with the importation of aquatic organisms and aquaculture products and evaluating the consequences of risks;

"risk management measures" means measures developed as a result of risk assessment to prevent the transfer of infectious agents as a result of movement of aquatic organisms and aquaculture products;

"shipment" means a shipment of aquatic organisms or aquaculture products;

"the Act" means the Aquaculture Act, 2002 (Act No. 18 of 2002);

"transfer" means the movement of aquatic organisms or aquaculture products to an area within the established or historical range of the species.

### PART II

## IMPORT OF AQUATIC ORGANISMS

### **Requirements for import of aquatic organisms**

2. A person intending to import aquatic organisms must register as an importer and apply for an import permit in terms of these regulations.

### Application for registration as importer

**3.** An application for registration as an importer must be made to the Minister in the form substantially corresponding with Annexure A.

### Decision on application for registration as importer

- 4. The Minister must consider an application made in terms of regulation 3, and may -
- (a) approve the application and issue to the applicant registration as an importer in the form substantially corresponding with Annexure B; or
- (b) refuse the application.

### **Application for import permit**

**5.** (1) An application for an import permit must be made to the Minister in the form substantially corresponding with Annexure C.

(2) A person intending to import aquatic organisms for the purpose of introduction or transfer must apply, in terms of regulation 21 of the Aquaculture (Licensing) Regulations, for a permit to introduce or transfer aquatic organisms.

### **Risk assessment**

**6.** (1) Before making a decision on an application for an import permit, the Minister may require an applicant to carry out a risk assessment in respect of the aquatic organisms to be imported.

(2) An assessment referred to in subregulation (1), must be carried out in accordance with the law or policy relating to environmental assessment.

### Decision on application for import permit

**7.** The Minister must consider an application for an import permit, taking into account findings of a risk assessment carried out in terms of regulation 6, and may -

- (a) approve the application and issue to the applicant an import permit in the form substantially corresponding with Annexure D;
- (b) approve the application, subject to condition that the applicant complies with further risk management measures, which may include -
  - (i) the quarantine, in the exporting country, of the aquatic organisms to be imported;
  - (ii) diagnostic testing of the aquatic organisms to be imported to ensure that the organisms are free from diseases; or
  - (iii) the issuing of a health certificate by the competent authority of the exporting country; or
- (c) refuse the application.

#### Conditions relating to import of certain aquatic organisms

- 8. The Minister may only approve an application for an import permit -
- (a) relating to the import of aquatic organisms listed in Annexures I or J; or
- (b) relating to the import of aquatic organisms approved for introduction or transfer,

if the applicant is an operator of an quarantine facility or has contractual access to a quarantine facility.

### Additional requirements

**9.** An importer must comply with additional importing requirements that are required by law.

# PART III INSPECTION

### Documents to accompany shipment

- 10. An imported shipment must be accompanied by -
- (a) a copy of the bill of lading;
- (b) the import permit; and
- (c) a copy of the health certificate, if required under regulation 7(b).

### Inspection and transfer of shipment

11. (1) At the port of entry, an inspector or any other person authorised by law must carry out an inspection of an imported shipment, in order to -

- (a) determine the place of origin of the shipment;
- (b) determine the nature and quantity of the shipment; and
- (c) identify the presence of any mortalities or clinical signs of diseases.

(2) An inspector or the person referred to in subregulation (1) may, if he or she considers it necessary and in the exercise of his or her powers, collect samples of a life aquatic organism for laboratory analysis or to confirm the identity of the organism.

(3) An inspector or the person referred to in subregulation (I) must, after carrying out an inspection in terms of subregulation (1) or (2), re-seal the shipment with an approved seal and transfer the shipment to the custody of an operator who must secure the transportation of the shipment under quarantine conditions to the required quarantine facility.

### Costs

**12.** The importer is responsible for the costs, if any, of an inspection, quarantine diagnostics tests, treatment, destruction or disposal of an infected aquatic organism.

# PART IV QUARANTINE FACILITIES

### Application for licence to operate quarantine facility

**13.** (1) A person may not operate a quarantine facility, except in accordance with a licence issued or an approval granted in terms of regulation 14.

- (2) A person intending to operate a quarantine facility for -
- (a) aquatic organisms listed in Annexure I, must apply to the Minister for a licence in the form substantially corresponding with Annexure E.
- (b) purposes of introduction or transfer, must apply in writing to the Minister for approval to operate such a facility.
- (3) A quarantine facility for -

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- (a) aquatic organisms listed in Annexure I; and
- (b) introduction or transfer,

must comply with the standards set out in Annexures G and H, respectively.

#### Decision on application to operate quarantine facility

**14.** The Minister must consider an application made in terms of regulation 13, taking into account the standards set out in Annexure G and H, and may -

- (a) in the case of an application for a licence referred to in regulation 13 2(a) approve the application and issue a licence to the applicant in the form substantially corresponding with Annexure F;
- (b) in the case of a request for approval referred to in regulation 13 2(b) grant the request and issue to the applicant an approval of request;
- (c) approve the application or request, on condition that the applicant complies with additional conditions the Minister may consider necessary to impose; or
- (d) refuse the application.

#### PART V

# EXPORT OF AQUATIC ORGANISMS OR AQUACULTURE PRODUCTS

### Requirements for export of aquatic organisms or aquaculture products

**15.** A person intending to export aquatic organisms or aquaculture products must register as an exporter and apply for an export permit in terms of these regulations.

### Application for registration as exporter

**16.** An application for registration as an exporter must be made to the Minister in the form substantially corresponding with Annexure K.

#### Decision on application for registration as exporter

- 17. The Minister must consider an application for an export permit, and may -
- (a) issue to the applicant registration as an exporter in the form substantially corresponding with Annexure L; or
- (b) refuse the application.

### **Application for export permit**

**18.** (1) An application for export permit must be made to the Minister in the form substantially corresponding with Annexure M.

(2) A person intending to export aquatic organisms listed in Annexure O, must apply to the Minister for a special clearance to export the organisms.

### Decision on application for export permit

**19.** (1) In considering an application for an export permit, the Minister may require the applicant to show that the aquatic organism to be exported complies with -

- (a) the health certification requirements; or
- (b) other applicable requirements, of the importing country or a transit country.

(2) If the Minster is satisfied that the applicant has complied with subregulation (1), the Minister may -

- (a) in the case of an application for an export permit, approve the application and issue to the applicant an export permit in the form substantially corresponding with Annexure N;
- (b) in the case of an application for a special clearance, approve the application and issue to the applicant a special clearance in the form determined by the Minister;
- (c) approve the application subject to conditions the Minister may consider necessary to impose; or
- (d) refuse the application.

### **Additional requirements**

- **20.** (1) An exporter must -
- (a) comply with the requirements of the importing country and any transit country; and
- (b) obtain additional authorisations that may be required by law.
- (2) The Minister may, at the request of an exporter -
- (a) perform the tests for determining the health status of an aquatic organism or aquaculture product to be exported; and
- (b) issue an international aquatic animal health certificate in respect of the aquatic organism or aquaculture product to be exported.

### PART VI GENERAL REQUIREMENTS

### Import and export at approved ports

**21.** (1) Import and export of aquatic organisms or aquaculture products must be done at approved ports.

(2) A person who fails to comply with subregulation (1) commits an offence and is on conviction liable to a fine not exceeding N1000 or to imprisonment for a period not exceeding three months.

### Cancellation or suspension of authorisation

**22.** (1) The Minister may, by notice to the holder of an authorisation cancel or suspend an authorisation granted in terms of these regulations, if -

- (a) the holder of the authorisation fails to comply with a condition of the authorisation or fails to remedy non-compliance with a condition within a reasonable time determined by the Minister, if the Minister has ordered the person to remedy noncompliance;
- (b) the holder of the authorisation, in the application for an authorisation furnished information which is or particulars which are not true;
- (c) the Minister considers that the cancellation or suspension is necessary to protect and conserve the environment; or
- (d) the holder of authorisation contravenes the Act.

(2) Before taking any action in terms of subregulation (1), the Minister must allow the holder of an authorisation to make representations on the matter.

### **Keeping of lists**

- 23. (1) The Permanent Secretary must keep or cause to be kept a list of -
- (a) authorisations issued in terms of these regulations;
- (b) aquatic organisms whose importation into Namibia is restricted or prohibited;
- (c) aquatic organisms approved for importation;
- (d) competent authorities from the countries where Namibia's main trading partners are located;
- (e) diseases of aquatic organisms or aquaculture products;
- (f) requirements relating to health certificates for the import of aquatic into Namibia; and
- (g) approved ports for the import or export of aquatic organisms or aquaculture products.

(2) A person may, at the Ministry or at any other offices as the Minister may determine, inspect and on payment of a fee, obtain a copy of a list referred to in subregulation (1).

### ANNEXURES

### Annexure A

### Republic of Namibia Ministry of Fisheries and Marine Resources

# **Application for registration as importer of aquatic organisms** (Regulation 3)

- 1. Name of the applicant:
- 2. Postal and residential address:
- 3. Telephone numbers:
- 4. Name and address of business (if different):
- 5. Fax number and e-mail:
- 6. Type of organism to be imported:
- \_\_\_\_\_ life aquatic organisms
- \_\_\_\_\_ life aquatic organism product (e.g., life eggs, gametes, larvae, etc.)
- biological products (e.g., biological reagents for use in disease diagnosis, sera, inactivated or modified vaccines, genetic material of infectious agents; endocrine tissues from fish or used in fish, etc.).
- 7. Estimated annual volume(s) (specify each type of organism and volume):

- 8. Certificate of registration with the Ministry of Trade and Industry (if applicable):
- 9. Any other relevant information:

I declare that the particulars furnished above are true and correct. I agree that if any particulars are found to be false or incorrect my application will be rejected and if a permit has been issued such permit will be cancelled.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

### Annexure B

Republic of Namibia Ministry of Fisheries and Marine Resources

# **Registration as importer of aquatic organisms** (Regulation 4)

Registration No .:

1.

2.

This registration is valid for ..... from the date of issue.

Issuing officer

Date

# Annexure C

# Republic of Namibia Ministry of Fisheries and Marine Resources

### **Application for a permit to import aquatic organisms** (Regulation 5)

- 1. Name of the applicant:
- 2. Postal and residential address:
- 3. Telephone numbers:
- 4. Fax and e-mail:
- 5. Importer Registration No.
- 6. Type of organism or product to be imported (as applicable, indicate: species, life cycle stage, size and number of aquatic organisms to be imported):
- 7. Name and address of exporter:
- 8. Name of address of supplying hatchery or other facility (if different):
- 9. Documents or information on the health status of proposed stock from which the shipment will originate or of supplying facility.
- 10. Proposed date, method of shipment and approved port of entry:
- 11. Indicate whether the proposed species to be imported is:
- (a) Listed in Annexure J List of aquatic organisms whose importation is restricted or prohibited (if so, attach information showing how the specific restrictions placed on the proposed import will be met).
- (b) Listed in Annexure I List of freshwater and marine ornamental aquatic organisms approved for importation.
- (c) <u>A species of aquatic organisms approved by the Minister for introduction or transfer (attach copy of permit).</u>
- (d) \_\_\_\_\_ Not belonging to categories (a, b or c) (indicate if you wish the species to be considered for listing in Annexure I or J; if so, attach supporting information and justification).
- 12. If the species to be imported belongs to those species of ornamental aquatic organisms listed in Annexure I or J, indicate the ornamental aquatic organism quarantine facility (operator and permit No.) that will receive the shipment.
- 13. Each shipment of aquatic organisms must be approved individually. A copy of the signed entry permit will be sent to the requesting party and a copy must accompany the shipment.

Date: \_\_\_\_\_

### Annexure D

Republic of Namibia Ministry of Fisheries and Marine Resources

# Permit to import aquatic organisms

(Regulation 7)

Permit No.:

1. Importer Registration No.: \_\_\_\_\_

2. Type of organism to be imported (as applicable, indicate: species, life cycle stage, size and number of aquatic organisms to be imported):

3. Name and address of exporter:

- 4. Name of address of supplying hatchery or other facility (if different):
- 5. Date, method of shipment and port of entry:

Date: \_\_\_\_\_

Issuing officer: \_\_\_\_\_

### Annexure E

# Republic of Namibia Ministry of Fisheries and Marine Resources

### Application for a licence to operate a quarantine facility for aquatic organisms listed in Annexure I (Regulation 13)

- 1. Name of the applicant:
- 2. Residential and postal address:
- 3. Telephone numbers:
- 4. Fax and e-mail:
- 5. Location of the ornamental aquatic organisms quarantine facility:
- 6. Name and address of owner of premises (if leased):
- 7. Proposed date for start up of facility (entrance of first shipment):
- 8. Requested date for initial inspection.

Date: \_\_\_\_\_

Signature of applicant:

### Annexure F

# Republic of Namibia Ministry of Fisheries and Marine Resources

# Licence to operate a quarantine facility for aquatic organisms listed in Annexure I (Regulation 14)

License No.:

1. This license is valid for ..... from the date of issue.

2.

3.

Issuing officer \_\_\_\_\_ Date \_\_\_\_\_

### Annexure G

# Republic of Namibia Ministry of Fisheries and Marine Resources

# Standards of construction, security and operation for quarantine facilities for aquatic organisms and aquaculture products listed in Annexure I

### 1. Period of quarantine

- (a) The normal minimum period of quarantine is six weeks for shipments of freshwater ornamental aquatic organisms and three weeks for marine ornamental aquatic organisms.
- (b) If at the end of the specified quarantine period, the quarantine officer has reason to believe that a shipment of aquatic organisms still presents an unacceptable risk of disease or pest introduction, the shipment may be held in quarantine for further investigation, observation, treatment, testing or for any other purpose appropriate to the circumstances. If the risk cannot be effectively managed destruction of the shipment is to be ordered.

### 2. Standards of construction

### 2.1 Location of quarantine facilities

- (a) Quarantine facilities must be located within the local authority area and at an approved port that has a permanently based quarantine officer.
- (b) Premises may not be approved in the vicinity of private or government fish hatcheries, aquaculture facilities, watercourses or areas subject to frequent flooding.

### 2.2 Specifications of quarantine facilities

- (a) A quarantine facility must be accessible and the operator must arrange for such access through property owned, rented or leased by the operator, and such facility must be accessible to the quarantine officer during normal business hours and at such time that shipments are entering or leaving the premises. The operator must notify the quarantine officer of the times when the premises are attended and of any alterations to the normal business hours.
- (b) The quarantine facility must be located within a single operational entity and as such be structurally separated from any other operations. The quarantine facility may share a building with other areas that are used for different purposes, including wholesale or retail activities involving live aquatic organisms or their products. The quarantine facility may not be used as an access way to other parts of the building.
- (c) The quarantine facility must be weatherproof and maintained in a state of good condition.
- (d) The quarantine facility must be located within a secure, lockable building, or within a building that is located in an area surrounded by a lockable person-proof security fence.
- (e) The quarantine facility may not be used for any purpose, other than as a place for the performance of quarantine.
- (f) The holding capacity of the quarantine facility must be commensurate with the proposed quantities and number of species of aquatic organisms to be handled.
- (g) The quarantine facility must have facilities for the sterilization of all equipment that comes into contact with aquatic organisms or tank water during the quarantine period.

The quarantine facility must comply with the following specific construction and equipment requirements:

- (1) Windows must be screened to prevent the entry of insects.
- (2) The floor and walls must be constructed of concrete, tiles or other impervious material to enable hose down and disinfections with retention of all water. The floor must be sufficiently smooth and with sufficient gradient to drain to an approved septic tank, local authority sewerage or enclosed holding tank.
- (3) Floor to wall junctions and all gaps and cracks in the walls, floor and ceiling must be effectively sealed.
- (4) Lighting must be of sufficient intensity to allow proper inspection of all aquatic organisms.
- (5) A floor drainage with an insertable plug or other mechanism to prevent the accidental escape of aquatic organisms or uncontrolled release of water must be installed. Drainage must be to an approved septic tank, local authority sewer or an enclosed holding tank.
- (6) Doors must have a self-closer to ensure that they remain shut after entry or a self-closing insect-proof screen door must be installed.
- (7) Facilities must be provided at the quarantine facility for staff employed and quarantine officers to wash their hands before leaving such facility.
- (8) All tanks used for the holding of aquatic organisms must -
- (a) be identified with permanent numbers so that records for shipments may be correlated with them;
- (b) be fitted with lids or other approved equivalents so as to prevent transmission of pathogens between adjacent tanks due to splash from the aeration or filter system and to prevent the escape of aquatic organisms;
- (c) be arranged in a manner that permits ready access for inspection purposes, including a minimum width of 75 cm for corridors between rows of tanks or tanks and walls;
- (d) contain only sterilizable materials (such as plastic) that do not interfere with inspection; and
- (e) have at least the front transparent to provide good visibility of their contents and be stacked for adequate viewing.
- (9) The use of shared water recirculation systems must be avoided. If separate shipments of aquatic organisms share a common water recirculation system, aquatic organisms may not be approved for release from quarantine until the last shipment to enter the system has satisfactorily completed its quarantine requirements. If diseases or pests of quarantine concern are known or suspected, all aquatic organisms sharing the same water recirculation system may be subject to quarantine risk management measures, including their destruction, treatment or detention beyond the normal quarantine period.
- (10) All entry and exit points to the quarantine facility must prominently display a permanently affixed, professionally made, quarantine sign that states "Quarantine Area Authorised Persons Only", on a yellow background, with black lettering approximately 5 cm in height.

- (11) A suitable wash-up trough must be located in the quarantine area for the cleaning and disinfecting of equipment. An approved disinfectant must be available at the wash-up trough. A suitable draining rack must be provided for air drying of equipment.
- (12) A designated refrigerator or freezer must be provided solely for the storage and preservation of dead aquatic organisms. The refrigerator or freezer must be clearly identified as being for quarantine use only and located within or close to the quarantine area, and if outside the quarantine area it must be lockable.
- (13) Equipment necessary to carry out the disinfection of all wastewater, including wastewater originating from Namibian waters and wastewater originating from other waters used in the quarantine facility, must be supplied.
- (14) Contamination or infestation by pests is to be prevented by ensuring and providing secure storage facilities for food for aquatic organisms.
- (15) A fully stocked first aid cabinet must he provided and maintained.
- (16) Amenities to be provided for use by quarantine officers include access to a desk and chair, a telephone with a direct outside line, toilet facilities, hand washing facilities within the quarantine area and a hygienic means of drying hands, and suitable arrangements for daily cleaning of amenities.

### 3. Standards of operation

### 3.1 Wastewater disposal

### 3.1.1 Freshwater organisms

- (a) All wastewater of domestic origin to be discharged from the quarantine facility and that has not been used for the transport or holding of aquatic organisms must enter directly to an approved septic tank or a local authority sewerage system, or may be sterilized as described under item 3.2, and where wastewater is sterilized, it may be discharged at a place determined by the Minister, but such water may not flow directly into natural waterways.
- (b) All wastewater, whether of foreign or domestic origin, that has been used for the transport or holding of live freshwater organisms or for the cleaning of tanks and associated equipment, must be disinfected using an approved method before disposal.
- (c) Disposal of wastewater must also comply with the applicable law governing the disposal of wastewater.

### **3.1.2** Marine organisms

All wastewater, including foreign water, discharged from the quarantine facility must enter directly to an approved septic tank, local authority sewerage system or may be sterilized as described under item 3.2 and sterilized wastewater may not be discharged directly into natural waterways.

### **3.2** Sterilization of wastewater

Where sterilization of wastewater is required before disposal, it must be sterilized in accordance with one of the following methods:

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### (a) Chlorination

- (i) All water must pass through an approved filter capable of removing suspended organic material before hypochlorite treatment.
- (ii) All water must pass to a retention vessel where sufficient hypochlorite (bleach) must be added to achieve a minimum concentration of 200 parts per million (ppm) (200 mg per liter) at 1 hour post-treatment. Sodium hypochlorite (bleach) must be used at 1.6 milliliters (ml) of hypochlorite solution (12.5% available chlorine) per liter of water, while calcium hypochlorite powder (such as, "Pool Chlor", 65-70% available chlorine) must be used at 0.3 grams (g) of powder per liter of water.
- (iii) Before the treatment period starts, the chlorinated effluent must be brought to a pH between 5.0 and 7.0.
- (iv) Following addition of hypochlorite, wastewater must be agitated for at least 10 minutes to ensure thorough mixing of hypochlorite.
- (v) After a retention period of not less than 1 hour, the chlorine concentration is measured using an approved method. Tanks not achieving a minimum chlorine concentration of 200 ppm (200 mg per liter) at the allotted time must be re-treated until the requirement is met.
- (vi) The chlorine in the wastewater may be neutralized by adding sodium thiosulphate at a rate of 1.25 g (2.5 ml of 50% sodium thiosulphate solution) per liter of treated wastewater, then agitated for not less than 10 minutes before discharge.
- (vii) Chlorination records must be maintained noting: the amount of compound added, the volume of effluent, the time that treatment period commenced, the pH at commencement of the treatment period and the I hour posttreatment concentration.
- (viii) Chlorinated water may not be discharged directly into adjacent waterways.

### (b) Heat treatment

Before discharge, wastewater must be heated to at least 85 degrees celsius for a minimum of 30 minutes. Water heating units must be approved by the competent authority and be fitted with temperature and flow recorders.

### (c) Ultraviolet (UV) light radiation

- (i) All water to be treated must pass through a filter capable of removing suspended organic material before irradiation.
- (ii) Commercial UV water treatment units operating in the spectral range of 190-280 nm
   (254 nm recommended) delivering doses of at least 130 mWs/cm2 are required.

### **3.3** Disinfection of equipment

- (a) Before removal from the quarantine area and before restocking with a new shipment of aquatic organisms, all tanks and tank equipment must be thoroughly cleaned and disinfected with -
  - (i) hypochlorite solution at 200 ppm concentration for 5 minutes;

- (ii) an approved iodophore solution containing iodine at 0.5% available iodine for 5 minutes; or
- (iii) another disinfection procedure approved by the quarantine officer.
- (b) Filter material must be disposed of by incineration, by autoclaving and deep burial or by another approved method.

### 3.4 Disposal of dead aquatic organisms

Dead aquatic organisms may only be disposed of as directed by the competent authority. Aquatic organisms that have died while under quarantine must be held in an approved freezer, an approved refrigerator or preserved using another method as specified by the competent authority until removed for laboratory examination or released for disposal by the quarantine officer. Upon approval, dead aquatic organisms must be disposed of by incineration or by autoclaving and deep burial.

### **3.5** Disposal of packing materials

Wet bags, boxes and cartons must be either disinfected using the methods of disinfection specified under item 3.3 "Disinfection of Equipment" or disposed of by incineration or another method approved by the quarantine officer.

### 4. Work practices

### 4.1 Cleanliness and sanitation

- (a) The quarantine facility and holding tanks must be kept clean at all times. Adequate cleaning facilities (such as pressurized water supplies, brooms and shovels) must be provided to enable maintenance of appropriate standards of hygiene.
- (b) No animals or plants other than aquatic organisms and their live food are permitted in the quarantine area.
- (c) Handling of all packaging material used to transport live aquatic organisms must comply with the following procedures:
  - (i) Damaged bags, damaged polystyrene boxes and cartons that are wet or contaminated with foreign water must be either incinerated or disinfected by an approved method referred to in item 3.3, before disposal.
  - (ii) Imported bags and polystyrene boxes containing leaked water that is not from Namibian waters and that are in good condition may be reused provided they are first disinfected by an approved method.
  - (iii) Boxes and cartons that are free of foreign water may be reused without disinfection.
  - (iv) The use of dedicated equipment (such as nets or cleaning equipment) for each individual tank or tanks connected by a shared water recirculation system is recommended. At minimum all nets and other equipment must be disinfected by an approved method of disinfection before being moved between tanks housing different shipments and before removal from the quarantine area.
  - (v) All equipment, footwear and protective clothing used in the quarantine area must be restricted to that site. Equipment may only be removed from the quarantine area after disinfection in an approved manner.

- (vi) The operator must provide protective clothing (such as waterproof apron and footwear) to staff and visitors to use in the facility. Protective footwear (such as gumboots and aprons) must be kept inside the quarantine area and street footwear must be left outside the quarantine area. Before protective footwear or clothing are removed from the quarantine area they must be cleaned using an approved disinfectant such as Betadine (5% solution). Disposable overshoes may be used provided they are destroyed after use by incineration or by autoclaving followed by deep burial.
- (vii) Wastewater disposal must comply with the applicable law on wastewater disposal, specifications for disposal referred to in item 3.1, and may not flow directly into natural waterways.
- (viii) All filter material must be disinfected before removal from the quarantine area or disposed of by incineration or by autoclaving and deep burial.
- (ix) Staff and visitors who have had contact with water or aquatic organisms must wash their hands and forearms with soap and water before exiting the quarantine facility.

### 4.2 Handling of aquatic organisms

- (a) Upon arrival of a shipment of aquatic organisms at the approved port of entry and following verification of the accuracy of details of the shipment and its preliminary inspection by customs officers, the shipment must be transferred to the custody of the operator who must guarantee the secure transport of the shipment under quarantine conditions to the quarantine facility.
- (b) Upon arrival at the quarantine facility, freshwater organisms must be transferred by net to new water and the foreign water must be subjected to an approved disinfection treatment referred to in item 3.2. Each tank used to contain freshwater aquatic organisms must only contain a single species of organism, and must be kept separate and isolated from other organisms.
- (c) Each tank used to contain marine organisms may contain different species but only from the same shipment.
- (d) If all or part of a shipment of imported aquatic organisms is incorrectly identified or listed by the exporter and includes species not on the list of ornamental aquatic organisms approved for importation, the operator must notify the quarantine officer within seven days of importation. The operator must re-export the unapproved species or have them humanely destroyed under supervision of the quarantine officer.
- (e) The progeny of imported aquatic organisms that breed during the quarantine period may be removed to another tank in the facility but are subject to all quarantine conditions that applied to the parents.
- (f) A standard tank record sheet must be maintained for each tank in accordance with item 6.2.
- (g) Periodically throughout the day the operator must observe all aquatic organisms held in the quarantine facility for signs of illness and abnormal behavior.
- (h) Dead aquatic organisms must be held for inspection by the quarantine officer. All organisms from a given shipment that are found dead on arrival or that die during the quarantine period must be placed in a labeled plastic bag as soon as possible and kept under refrigeration or preserved as specified by the quarantine officer until diagnostic examination is completed. Information on labels must identify the shipment, species, tank number and day of death.

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- (j) Any sudden occurrence of unusual levels of mortality or changes in behavior (such as levels of mortality or illness above 20% of a tank over a five-day period) or unusual signs of disease, parasites or pests must be immediately reported to the quarantine officer.
- (k) The use of any drug or chemical to treat aquatic organisms must have the approval of the competent authority and be recorded on tank record sheets. The use of any treatments may result in the extension of quarantine detention or other measures as deemed necessary by the quarantine officer.
- (1) The operator must ensure that no aquatic organisms leave the quarantine area under any circumstances without the approval of the quarantine officer (for example the granting of a biosecurity clearance), excepting dead organisms moved to a nearby lockable refrigerator or freezer.
- (m) On completion of quarantine freshwater aquatic organisms are to be transferred by net into clean water before release from the quarantine facility.
- (n) Aquatic organisms must be removed from the quarantine area following their satisfactory completion of the quarantine period.

### 5. Occurrence of an outbreak of a serious exotic disease

- (a) If a serious exotic disease is diagnosed the operator must be immediately notified, and in such cases the quarantine officer or other representative of the competent authority may direct the management of disease control. Disease control measures may include the extension of quarantine or the destruction of stock.
- (b) Measures to be taken under paragraph (a) may include:
  - (i) destruction of infected shipments or of all aquatic organisms present in the facility at the time of the outbreak, and their sanitary removal and incineration.
  - (ii) decontamination of the interior of the facility, and all tanks and equipment, and all waters present in the facility at the time of the outbreak.
  - (iii) approval of the competent authority before the re-use of the facility.

# 6. Record keeping requirements

### 6.1 Summary records

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- (a) Summary records in electronic and manual form, of all shipments of aquatic organisms entering the quarantine facility, must be maintained and records may include commercial documents, such as airway bills. The operator must, for auditing purposes, maintain such records for a minimum period of 36 months after release of the aquatic organisms from quarantine, during which time they must upon request, be readily made available to a quarantine officer.
- (b) The following summary information must be recorded for each shipment:
  - (i) Overseas supplier and country of origin;

- (ii) Dates of arrival;
- (iii) Number of each aquatic species, in total and by tank;
- (iv) Details of any accompanying health certificates;
- (v) Details of any clinical signs of disease, and number of affected aquatic organisms, by species and tank;
- (vi) Details of any mortalities, by species and tank;
- (vii) Details of any treatments approved and applied; and
- (viii) Date of release from quarantine.

### 6.2 Tank record sheets

- (a) A corresponding approved tank record sheet must be maintained for each holding tank and must be kept up to date at all times. Tank record sheets must be retained for a minimum of 36 months following release of shipments from quarantine.
- (b) Tank record sheet must display the following information:
  - (i) Tank number;
  - (ii) Number and species of aquatic organisms in tank;
  - (iii) Exporter identification details including country of export;
  - (iv) Importer's name;
  - (v) Date of arrival;
  - (vi) Shipment or airway bill number;
  - (vii) Number/species of aquatic organisms dead on arrival;
  - (viii) Details of any observed disease conditions and number of sick aquatic organisms;
  - (ix) Daily record of number of aquatic organisms deaths in tank;
  - (x) Details of any prophylactic or therapeutic treatments given;
  - (xi) Disposal details;
  - (xii) Disinfection details;
  - (xiii) Signature of authorising quarantine officer and date released; and
  - (xiv) Number of aquatic organisms released.

### 6.3 Logbook

Details of wastewater treatment, including chlorination records, if applicable, filter disposal, general maintenance and auditing must be recorded in a logbook.

# 7. Auditing

- (a) It is the responsibility of the operator to undertake systematic periodic internal audits at least on semiannual basis, to ensure that the standards for the operation of the quarantine facility as outlined in this Annexure are maintained and to identify and correct any deficiencies. The operator must record in the logbook, any variations from the prescribed criteria encountered and the corrective measures taken.
- (b) Periodic external audits of the quarantine facility may be conducted by the quarantine officer or other approved personnel to verify the security and proper functioning of the quarantine facility.

### 8. Security

- (a) Control and security of the quarantine facility are the responsibility of the operator. The quarantine facility must be securely locked when not in active use or when unattended.
- (b) Procedures must be adopted to ensure that access to the premises is limited to authorised persons only. A prominent sign must be displayed at the entrance to the facility to show that it is a quarantine facility and that unauthorised entry is prohibited.
- (c) The unnecessary entry of staff and visitors into the quarantine facility must be avoided. The operator must record the name and address of any visitors and the visit date in a logbook near the entrance.

# Republic of Namibia Ministry of Fisheries and Marine Resources

# Standards of construction, security and operation for quarantine facilities for introductions or transfer of aquatic organisms and aquaculture products

# 1. Period of quarantine

- (a) No set period of quarantine is established. The period of holding in the quarantine facility depends on the results of observation and testing of the imported stock of aquatic organisms and the resulting F1 generation. In all cases, once the competent authority is satisfied that the or a subsequent generation is safe for limited release, the parent stock must be destroyed and the quarantine facility thoroughly disinfected. An application to introduce or transfer aquatic organisms may be subject to condition to maintain the organisms under conditions of strict quarantine for a number of years.
- (b) If, at any point while the imported aquatic organisms and their progeny are under quarantine an infectious disease is detected, the quarantine officer may require treatment and further testing. If the disease is of a serious or untreatable nature, destruction of all aquatic organisms held in the facility is to be ordered and complete disinfection of the building, water and all equipment is necessary before permission to restock is granted.

# 2. Standards of construction

### 2.1 Location of quarantine facilities

The location of an importation and transfer quarantine facility is to be determined on a case by case basis. Premises may not be approved in the vicinity of private or government fish hatcheries, aquaculture facilities, watercourses or areas subject to frequent flooding.

# 2.2 Specifications of quarantine facilities

- (a) A quarantine facility must be accessible and the operator must arrange for access through property owned or leased on a long-term basis by the operator, and such facility must be accessible to a quarantine officer during normal business hours and at such time that aquatic organisms are entering or leaving the premises. The operator must notify the quarantine officer of the times when the premises are attended and any alterations to the regular hours.
- (b) The quarantine facility must be located within a single operational entity that is structurally separated from all other operations and is dedicated solely to the holding of the shipments. A quarantine facility may not share a building having areas that are used for different purposes and must not serve as an access way to other buildings or activities. The quarantine facility may not to be used for any purpose, other than as a place for the performance of quarantine.
- (c) The quarantine facility must be weatherproof and maintained in a state of good repair.
- (d) The quarantine facility must be a secure and lockable building that is surrounded by a lockable person-proof security fence.
- (e) The holding capacity of the quarantine facility must be commensurate with the proposed quantities of the species of aquatic organism for which a permit is granted. Provision must be made for the growth and maturation of the original parent stock and the holding of all F1 and subsequent generations.

(f) The quarantine facility must be equipped for the sterilization of all equipment that comes into contact with aquatic organisms or tank water during the quarantine period.

### 2.3 Specific construction and equipment requirements

- (a) The quarantine facility must comply with the following specific construction and equipment requirements:
  - (i) windows must be screened to prevent the entry of insects;
  - (ii) floors and walls must be constructed of concrete, tiles or other impervious material to enable hose down and disinfection with retention of all wastewater. Floors must be sufficiently smooth and with sufficient gradient to drain to an enclosed holding tanks;
  - (iii) floor to wall junctions and all gaps and cracks in the walls, floors and ceilings must be effectively sealed such that the quarantine area is capable of containing all leaks and floods that might occur;
  - (iv) lighting must be of sufficient intensity to allow proper inspection of all aquatic organisms;
  - (v) floor drainage with an insertable plug or other mechanism to prevent the accidental escape of aquatic organisms or uncontrolled release of water must be installed. Drainage must be to an approved holding tank and the holding tank must be of suitable size to contain the total volume of all tanks used for the holding of aquatic organisms;
  - (vi) doors must have a self-closer to ensure that they remain shut after entry, or there must be a self-closing insect-proof screen door installed; and
  - (vii) access to the quarantine facility must only be through a personnel entrance leading to a separate outer change room provided with facilities for staff and quarantine officers to wash their hands and change outer clothing before entering or leaving the quarantine area;
- (b) All holding tanks for aquatic organisms must -
  - (i) be identified with permanent numbers so that that individual tank records may be correlated with them;
  - be fitted with lids or other approved equivalents so as to prevent transmission of pathogens between adjacent tanks due to splash from the aeration or filter system, and to prevent the escape of aquatic organisms;
  - (iii) have water intake lines equipped with automatic shutoff valves;
  - (iv) be arranged in a manner that permits ready access for inspection purposes, including a minimum width of 75 cm for corridors between rows of tanks or tanks and walls;
  - (v) contain only sterilizable materials (such as plastic) that do not interfere with inspection; and
  - (vi) have at least the front transparent to provide good visibility of their contents, and be stacked for adequate viewing;

- (c) If all aquatic organisms within the facility are considered to have the same quarantine status, the use of a shared water recirculation system is permissible;
- (d) All entry and exit points to the quarantine facility must prominently display a permanently affixed, professionally made, quarantine sign that states "Quarantine Area Authorised Persons Only", on a yellow background, with black lettering approximately 5 cm in height;
- (e) A suitable wash-up trough must be located in the quarantine area for the cleaning and disinfecting of equipment. An approved disinfectant must be available at the wash-up trough. A suitable draining rack must be provided for air drying of equipment;
- (f) designated refrigerator or freezer must be provided solely for the storage and preservation of dead aquatic organisms. The refrigerator or freezer must be clearly identified as being for quarantine use only, be lockable and located within the quarantine area;
- (g) equipment necessary to carry out the disinfection of all wastewater, foreign and domestic waters, used in the quarantine facility, must be supplied;
- (h) secure storage facilities for food used for aquatic organisms must be provided so that contamination or infestation by pests is prevented;
- (i) a fully stocked first aid cabinet must be provided and maintained; and
- (j) amenities to be provided for use by quarantine officers include access to a desk and chair, a telephone with a direct outside line, toilet facilities, hand washing facilities within the quarantine area and a hygienic means of drying hands, and suitable arrangements for daily cleaning of amenities.

### 3. Standards of operation

### 3.1 Influent water

All influent water entering the quarantine facility must be from an approved groundwater source certified to be free from biological material, including any possible infective agents. Alternatively, water from other sources may be used, but it must be filtered to remove suspended matter and then sterilized using a method approved by the competent authority before being used in the quarantine facility.

### **3.2** Wastewater disposal

- (a) All wastewater to be discharged from the quarantine facility must be sterilized as described under item 3.3, and sterilized wastewater may not be discharged directly into natural waterways.
- (b) Disposal of wastewater must comply with the applicable law governing the disposal of wastewater.

### **3.3** Sterilization of wastewater

Wastewater must be sterilized in accordance with one of the following methods:

# (a) Chlorination

(i) All water must pass through an approved filter capable of removing suspended organic material before hypochlorite treatment.

- (ii) All water must pass to a retention vessel where sufficient hypochlorite (bleach) must be added to achieve a minimum concentration of 200 parts per million (ppm) (200 mg per liter at 1 hour post-treatment. Sodium hypochlorite (bleach) must be used at 1.6 milliliters (ml) of hypochlorite solution (12.5% available chlorine) per liter of water, while calcium hypochlorite powder (e.g., "Pool Chlor", 65-70% available chlorine) must be used at 0.3 grams (g) of powder per liter of water.
- (iii) Before the treatment period starts, the chlorinated effluent must be brought to a pH between 5.0 and 7.0.
- (iv) Following addition of hypochlorite, wastewater must be agitated for at least 10 minutes to ensure thorough mixing of hypochlorite.
- (v) After a retention period of not less than 1 hour, the chlorine concentration must be measured, using an approved method. Tanks not achieving a minimum chlorine concentration of 200 ppm (200 mg per liter) at the allotted time must he re-treated until the requirement is met.
- (vi) The chlorine in the wastewater may he neutralized by adding sodium thiosulphate at a rate of 1.25 g (2.5 ml of 50% sodium thiosulphate solution) per liter of treated wastewater, then agitated for not less than 10 minutes before discharge.
- (vii) Chlorination records must he maintained noting, the amount of compound added, the volume of effluent, the time that treatment period commenced, the pH at commencement of the treatment period and the 1 hour posttreatment concentration.
- (viii) Chlorinated water may not be discharged directly into adjacent waterways.

### (b) Heat treatment

Before discharge, wastewater must be heated to at least 85 degrees celsius for a minimum of 30 minutes. Water heating units must be approved by the competent authority and be fitted with temperature and flow recorders.

### (c) Ultraviolet (UV) light radiation

- (a) All water to be treated must pass through a filter capable of removing suspended organic material before irradiation.
- (b) Commercial UV water treatment units operating in the spectral range of 190-280 nm (254 nm recommended) delivering doses of at least 130 mWs/cm2 are required.

### **3.4 Disinfection of equipment**

- (a) Before removal from the quarantine area and before any restocking, all tanks and tank equipment must be thoroughly cleaned and disinfected with -
  - (i) hypochlorite solution at 200 ppm concentration for 5 minutes or with;
  - (ii) an approved iodophore solution containing iodine at 0.5% available iodine for 5 minutes; or
  - (iii) another disinfection procedure approved by the quarantine officer.
- (b) Filter material must be disposed of by autoclaving followed by incineration or deep burial.

### 3.5 Disposal of dead aquatic organisms

Dead aquatic organisms may only be disposed of as directed by the competent authority. Aquatic organisms that have died during quarantine must be held in an approved freezer, an approved refrigerator or preserved using another method as specified by the competent authority until removed for laboratory examination or released for disposal by the quarantine officer. Upon approval, dead aquatic organisms must be disposed of by sterilization, followed by incineration or deep burial.

### **3.6 Disposal of packing materials**

All containers (such as bags, boxes and cartons) used to hold aquatic organisms during transit must be disinfected using the methods of disinfection specified under item 3.4 "Disinfection of Equipment" and then disposed of by incineration, deep burial or another method approved by the quarantine officer.

### 4. Work practices

### 4.1 Cleanliness and sanitation

- (a) The quarantine facility and holding tanks must be kept clean at all times. Adequate cleaning facilities (such as pressurized water supplies, brooms and shovels) must be provided to enable maintenance of appropriate standards of hygiene.
- (b) No animals other than aquatic organisms and live food for aquatic organisms are permitted in the quarantine area. All feeds used within the quarantine facility must before use be approved by the quarantine officer and be of assured sanitary condition. Live foods may not be used unless no other alternative food is acceptable to the organisms under quarantine. Live foods must be certified to the specifications set by the competent authority to ensure their freedom from potential disease agents.
- (c) Equipment used in the handling of aquatic organisms and tank cleaning and maintenance may not be shared between tanks. A separate set of equipment (such as nets and cleaning equipment) must be kept for each tank operated on an individual water filtration system. If several tanks are linked by a shared water recirculation system, a single set of equipment may be used for all tanks within the shared system.
- (d) All nets and other equipment must be regularly disinfected by an approved method of disinfection. Equipment or other material is not to be removed from the quarantine area during the period that the shipment is under quarantine conditions. In exceptional circumstances and with the written approval of the quarantine officer and his verification that proper disinfection has been accomplished, a request to remove specific items of equipment may be granted.
- (e) All footwear and protective clothing used in the quarantine area must be restricted to that site.
- (f) The operator must provide protective clothing (such as jumpsuits, waterproof apron or outer-wear and rubberized footwear) to staff and visitors to use in the quarantine facility. Protective clothing must be kept inside the quarantine area, but street footwear must be left outside the quarantine area and within the changing area. Protective clothing that must be routinely washed may be removed from the quarantine area after washing for the purpose of drying. During the period in which aquatic organisms are under quarantine, protective clothing, with the exception of washed clothes removed for drying, must be removed only for destruction. If removal of unusable protective clothing is necessary, it must first be sterilized by autoclaving or use of an approved disinfectant such as Betadine (5% solution) and then removed and destroyed by incineration under the supervision of the quarantine officer.

- (g) A footbath containing hypochlorite, Betadine or another approved disinfectant must be maintained at the entrance of the quarantine area proper. The bath must be routinely replenished for adequate disinfection and a record of bath maintenance maintained. A sign stating "Footwear must be Immersed in Footbath On Exit/Entry from Quarantine Area" must be appropriately displayed.
- (h) Wastewater disposals must comply with the applicable law governing wastewater disposal, be by an approved method referred to in item 3.2, and must not flow directly into natural waterways.
- (i) All filter material must be disinfected by autoclaving or another method approved by the quarantine officer before removal from the quarantine facility and then disposed of by incineration or deep burial.
- (j) Staff and visitors who have had contact with water or aquatic organisms must wash their hands and forearms with soap and water before exiting the quarantine facility.

### 4.2 Handling of aquatic organisms

- (a) Upon arrival of a shipment of aquatic organisms at the approved port of entry, and following verification of the accuracy of details of the shipment and its preliminary inspection and clearance by customs officers, the shipment must be resealed by the quarantine officer with an approved tamperproof seal (such as a tyden seal, lead seal or a padlock) and must be transferred to the custody of the operator, who must guarantee the secure transport of the aquatic organisms, under quarantine conditions, to the quarantine facility.
- (b) Upon their arrival at the quarantine facility, the integrity of the seal must be verified by the quarantine officer, the seal removed and the organisms transferred by net to new water. Foreign water must be subjected to an approved disinfection treatment referred to in item 3.4.
- (c) If a shipment of imported aquatic organisms is incorrectly represented in any manner, the shipment may be destroyed under supervision of the quarantine officer.
- (d) The progeny of any aquatic organisms that breed during the quarantine period may be removed to another tank or room in the facility but are subject to all quarantine conditions.
- (e) A standard tank record sheet must be maintained for each tank, in accordance with item 6.2.
- (f) Periodically during the day, the operator must observe all aquatic organisms for signs of illness and abnormal behavior.
- (g) All dead aquatic organisms must be held for inspection by the quarantine officer. All organisms found dead on arrival or that die during the quarantine period must be placed in a labeled plastic bag as soon as possible and kept under refrigeration or preserved as specified by the quarantine officer until examination is completed. Information on labels must identify the shipment, species, tank number, number of mortalities and date of death.
- (h) Any equipment that has been in contact with dead aquatic organisms must be disinfected before re-use.
- (i) Any unusual levels of mortality, changes in behavior or unusual signs of disease, parasites or pests must be immediately reported to the quarantine officer.

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- (j) The use of any drug or chemical to treat aquatic organisms must before use be approved by the competent authority and be recorded on tank record sheets.
- (k) The operator must ensure that aquatic organisms do not leave the quarantine area under any circumstances without the approval of the quarantine officer (such as the granting of biosecurity clearance).
- (l) On approval by the competent authority, F1 or subsequent generation aquatic organisms may be released from the introductions and transfers quarantine facility for limited trials in aquaculture facilities or in enclosed water bodies. The competent authority may specify the precise conditions, period and any further risk management measures under which the aquatic organisms are to be maintained. On completion of quarantine, aquatic organisms must be transferred by net into clean water before removal from the quarantine facility.
- (m) All original stock and any F1 or subsequent generation aquatic organisms not approved for release from quarantine must remain under quarantine conditions.
- (n) When determined by the competent authority or at the request of the operator, the operation of the quarantine facility may be terminated under the direct supervision of the quarantine officer, and in such a case, all remaining aquatic organisms, including all original parent stock, must be humanely killed by a method approved by the quarantine officer, sterilized by autoclaving, and then disposed of by incineration or deep burial. The quarantine facility and all tanks and equipment must be thoroughly cleaned and disinfected using approved disinfectants and all filters, clothing and other similar materials autoclaved or disinfected and then destroyed by incineration or deep burial. Upon written sanitary certification by the quarantine officer, the premises may then be disposed of as the operator considers appropriate, or may be used as the basis for a new application for an approved quarantine facility.

### 5. Occurrence of an outbreak of a serious exotic disease

- (a) If a serious exotic disease is diagnosed, the operator must be immediately notified, and in such cases, the quarantine officer or other representative of the competent authority may direct the management of disease control. Disease control measures may include the extension of quarantine or the destruction of stock.
- (b) Measures referred to in paragraph (a) may include -
  - (i) destruction of infected shipments or of all aquatic organisms present in the facility at the time of the outbreak, and their sanitary treatment, removal and incineration.
  - (ii) decontamination of the interior of the facility, all tanks and equipment, and all waters present in the facility at the time of the outbreak.
  - (iii) approval of the competent authority before the reuse of the facility.

### 6. Record keeping requirements

### 6.1 Summary records

(a) A complete history of all shipments of aquatic organisms entering the quarantine facility must be maintained. The operator must, for auditing purposes, maintain such records for a minimum period of 36 months after closure of the quarantine facility, during which time they must, upon request, be readily made available to a quarantine officer.

- (b) The following summary information concerning the quarantined stock must be recorded:
  - (i) overseas supplier, country of origin and waybill;
  - (ii) date of arrival of parent stock;
  - (iii) date(s) of release of F1 or subsequent generation from quarantine;
  - (iv) total number of organisms in original shipment(s) and total mortalities in each shipment upon arrival;
  - (v) original number of organisms stocked in each tank;
  - (vi) details of any clinical signs of disease, number of affected individuals, by tank;
  - (vii) details of any mortalities, by tank;
  - (viii) details of any health certificates;
  - (ix) details of any F1 progeny produced (date and number) and their corresponding transfer tank number;
  - (x) for parent stock, and for any F1 or subsequent generation aquatic organisms that for any reason have not been approved for release from quarantine upon termination of the quarantine licence, number and size of aquatic organisms destroyed, date and method of destruction and disposal, and signature of the quarantine officer; and
  - (xi) for F1 or subsequent generation aquatic organisms, if approved for limited release from quarantine: number and size of aquatic organisms released, date of release, destination, summary of any risk management measures or restrictions to be employed and signature of the quarantine officer.

### 6.2 Tank record sheets

- (a) A corresponding approved tank record sheet must be maintained -for each holding tank and must be kept up to date at all times. Tank record sheets must be retained for a minimum of 36 months following release from quarantine of the portion of the shipment held in the specific tank or their destruction.
- (b) This tank record sheet must display the following information:
  - (i) Tank number;
  - (ii) Number of aquatic organisms in tank;
  - (iii) Exporter identification details including country of export;
  - (iv) Importer's name;
  - (v) Date of arrival;
  - (vi) Shipment or airway bill number;
  - (vii) Number of aquatic organisms dead on arrival;

- (viii) Details of any observed disease conditions and number of sick aquatic organ organisms;
- (ix) Daily record of number of aquatic organisms deaths in tank;
- (x) Details of any prophylactic or therapeutic treatments given;
- (xi) Disposal details;
- (xii) Disinfection details;
- (xiii) Details of any F1 progeny produce (date and number) and their corresponding transfer tank number.
- (xiv) Details of wastewater treatment, including chlorination records, if applicable, filter disposal, internal audit, and general maintenance must be recorded in a logbook.
- (xv) A separate logbook must be used to record details of the entry and exit of authorised personnel into the quarantine facility.

### 7. Auditing

- (a) It is the responsibility of the operator to undertake systematic periodic internal audits at least on a quarterly basis, to ensure that the standards for the operation of the introductions and transfers quarantine facility as outlined in this Annexure are maintained and to identify and correct any deficiencies. The operator must record in the logbook, any variations from the prescribed criteria encountered and the corrective measures taken.
- (b) Periodic external audits of the quarantine facility may be conducted by the quarantine officer or other approved person to verify the security and proper functioning of the quarantine facility.

### 8. Security

- (a) Control and security of the quarantine facility is of the utmost importance; and is the responsibility of the operator. The quarantine facility and its perimeter fencing must be securely locked when the facility is not in active use or when unattended.
- (b) Procedures must be adopted to ensure that access to the premises is limited to authorised persons only. Signs must be prominently displayed on all sides of the external perimeter fencing and on all entrances to the facility to show that it is an introductions and transfers quarantine facility and that unauthorised entry is prohibited.
- (c) The entry of staff into the quarantine facility must be restricted to the minimum required to perform necessary maintenance and observation of the quarantined organisms. A list of authorised staff must be provided to the quarantine officer by the operator. Except in an emergency situation, no other persons must enter the quarantine facility unless written approval has been obtained from the quarantine officer.
- (d) A logbook of all entry and exit into and out of the quarantine facility must he maintained. All personnel entering the facility must enter the following information:
  - (i) Name of authorised person;
  - (ii) Date of entry/exit;

- (iii) Time of entry;
- (iv) Reason for entry;
- (v) Time of exit;
- (vi) Signature at exit; and
- (vii) Notation of any irregularities.
- (e) Signature at Exit indicates that the exiting staff member has confirmed that the quarantine area was in proper order at the time of his or her exit and that the premises have been left in a secure manner. The operator must ensure that all staff comply with these requirements and must verify the accuracy of record keeping on a weekly basis. The logbook must be made available for examination by the quarantine officer upon request.

### 9. Contingency plans

The operator must develop a contingency plan addressing actions to be taken in the event of a vehicle breakdown during the transport of aquatic organisms from customs arrival to the quarantine facility, and any on-site emergencies that may arise, such as fire, floods, electrical failure or breakdown of essential equipment such as aerators or pumps). In the case of an emergency, the quarantine officer must be notified immediately.

### Annexure I

### Republic of Namibia Ministry of Fisheries and Marine Resources

### List of freshwater and marine ornamental aquatic organisms approved for importation

Freshwater aquarium fishes<sup>1</sup>

### Scientific Name

Anostomus anostomus (Linnaeus) Aphyocharax anisitsi Eigenmann & Kennedy Aphyosemion australe (Rachow) Aphyosemion bivittatum (Lonnber) Aplocheilus lineatus (Valenciennes) Arnoldichthys spilopterus (Boulenger) Astronotus ocellatus (Agassiz) Astyanax jordani (Hubbs & Innes)

Bedotia geayi Pellegrin Betta splendens Regan Boraras maculatus (Duncker) Botia hymenophysa (Bleeker) Botia macracanthus (Bleeker) Botia sidthimunki Klausewitz Brachygobius xanthozona (Bleeker) Brycinus longipinnis (Gunther)

Carnegiella strigata (Gunther) Chilodus punctatus Muller & Troschel Colisa lalia (Hamilton) Copella arnoldi (Regan) Corydoras aeneus (Gill) Corydoras arcuatus Elwin Corydoras julii Steindachner Corydoras paleatus (Jenyns) Corynopoma riisei Gill

Danio albolineatus (Blyth) Danio frankei (Meinken) Danio malabaricus (Jerdon) Danio nigrofasciatus (Day) Danio rerio (Hamilton) Dermogenys pusilla Kuhl and van Hasselt

Elassoma evergladei Jordon Epalzeorhynchus bicolor (Smith) Epiplatys dageti moroviae

*Fundulopanchax arnoldi* (Boulenger) *Fundulopanchax sjostedti* (Lonnberg) *Common name* striped headstander bloodfin tetra

lyretail panchax twostripe lyretail striped panchax Niger tetra oscar blind cave fish

red-tailed silverside Siamese fighting fish dwarf rasbora tiger loach clown loach dwarf botia bumblebee fish longfin tetra

marbled hatchetfish spotted headstander dwarf gourami splash tetra bronze corydoras skunk corydoras leopard corydoras peppered corydoras swordtail characin

pearl danio leopard danio Malabar danio dwarf danio zebra danio wrestling halfbeak

Everglades pygmy sunfish readtail sharkminnow Arnoult & Daget

Arnold's killi blue gularis *Family* Characiformes Characidae

Aplocheilidae Aplocheilidae Aplocheilidae Alestidae Cichlidae Characidae

Bedotidae Belontidae Cyprinidae Cobitidae Cobitidae Gobitidae Gobidae Characiformes

Gasteropelecidae Chilodontidae Belontidae Lebiasinidae Callichthyidae Callichthyidae Callichthyidae Callichthyidae Callichthyidae Characidae

Cyprinidae Cyprinidae Cyprinidae Cyprinidae Hemiramphidae

Elassomatidae Cyprinidae Aplocheilidae

Aplocheilidae Aplocheilidae

<sup>1</sup>Note that goldfish (Carassius auratus auratus) and Koi (Cyprinus carpio) are placed in Annexure J.

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Gasteropelecus sternicla (Linnaeus) Gnathonemus petersii (Gunther) Gyrinocheilus aymonieri (Tirant) Gymnocorymbus ternetzi (Boulenger)

Hasemania melanura Ellis Helostoma temminckii Cuvier<sup>2</sup> Hemigrammus erythrozonus Durbin Hemigrammus ocellifer (Steindachner) Hemigrammus pulcher Ladiges Hemigrammus rhodostomus Ahl Heterandria formosa Girard Hyphessobrycon anisiti (Eigenmann) Hypessobrycon eques (Steindachner) *Hypessobrycon erythrostigma* (Fowler) Hypessobrycon flammeus Myers Hypessobrycon herbertaxelrodi Gery Hypessobrycon heterorabdus (Ulrey) Hypessobrycon rosaceus Durbin Hypessobrycon pulchripinnis Ahl Hypessobrycon scholzei Ahl Hyphessobrycon sweglesi (Gery) Hyphessobrycon megalopterus (Eigenmann)

Jordanella floridae Goode & Bean

Kryptopterus bicirrhis (Valenciennes)

*Leporinus fasciatus* (Bloch) *Limia melanogaster* (Gunther)

Macropodus opercularis (Linnaeus) Marosatherina ladigesi (Ahl) Melanotaenia maccullochi Ogilby Metynnis hypsauchen (Muller & Troschel) Moenkhausia pittieri Eigenmann Monodactylus argenteus (Linnaeus)

Nannacara anomola Regan Nannostomus beckfordi Gunther Nannostomus eques Steindachner Nannostomus marginatus Eigenmann Nannostomus trifasciatus Steindachner Nematobrycon palmeri Eigenmann

Otocinchus vittatus Regan

Pangio kuhlii (Valenciennes) Pantodon buchholzi Peters Paracheirodon axelrodi (Schultz) river hatchetfish elephantnose fish Chinese algae-eater black tetra

copper tetra kissing gourami glow light tetra head-and-taillight tetra garnet tetra rummy-nose tetra least killifish Buenos Aires tetra<sup>3</sup> serpa tetra<sup>4</sup> bleeding-heart tetra flame tetra black neon tetra flag tetra rosy tetra lemon tetra blackline tetra red phantom tetra black phantom tetra

flag-fish

glass catfish

banded leporinus blackbelly limia

paradise -fish Celebes rainbow-fish Macculloch'srainbowfish silver dollar diamond tetra silver moony

goldeneye cichlid golden pencilfish brown pencilfish dwarf pencilfish threestripe pencilfish emperor tetra

coolie loach, kuhlie loach freshwater butterflyfish cardnal tetra Gastropelecidae Mormyridae Gyrinochei lidae Characidae

Characidae Helostomatidae Characidae Characidae Characidae Characidae Poeciliidae Characidae Characidae

Cyprinodontidae

Siluridae

Anostomidae Poeciliidae

Belontiidae Telmatherinidae Melanotaeniidae Characidae Characidae Monodactylidae

Cichlidae Lebiasinidae Lebiasinidae Lebiasinidae Characidae

Loricariidae

Cobitidae Pantodontidae Characidae

<sup>&</sup>lt;sup>2</sup>Note that although this species is a widely traded ornamental fish, it can grow to 30 cm in length and is an important commercial food fish cultured in Asia.

<sup>&</sup>lt;sup>3</sup>No FishBase common name available. Name is from American Fisheries Society.

<sup>&</sup>lt;sup>4</sup>AFS common name - belongs to a complex of "blood" tetras.

Paracheirodon innesi (Myers) Parambassis lala (Hamilton) Phenacogrammus interruptus (Boulenger) Poecilia latipinna (Lesueur)<sup>5</sup> Poecilia sphenops Valenciennes Pseudosphromenus capanus (Cuvier) Pristella maxillaris (Ulrey) Pterophyllum scalare (Lichtenstein) Puntius conchonius (Hamilton) Puntius everetti (Boulenger) Puntius lineatus (Duncker) Puntius nigrofasciatus (Gunther) Puntius oligolepis (Bleeker) *Puntius pentazona* (Boulander) Puntius semifasciolatus (Gunther) Puntius tetrazona (Bleeker) Puntius titteya Deraniyagala

Rasbora dorsiocellata Duncker Rasbora heteromorpha Duncker Rasbora somphongsi Meinken Rasbora pauciperforata Weber & de Beaufort Rasbora trilineata Steindachner Rineloricaria parva (Boulenger) Rivulus cylindracaeus Poey

Symphysodon aequifasciatus Pellegrin Symphysodon discus Heckel

Tanichthys albonubes Lin Tetraodon fluviatilis Hamilton Thayeria boehlkei Weitzman Trichogaster labiosus Day Trichogaster leerii (Bleeker)<sup>6</sup> Trichogaster microlepis (Gunther)<sup>7</sup> Trichopis pumila (Arnold)

Xiphophorus hellerii Heckel Xiphophorus maculatus (Gunther)<sup>8</sup> Xiphophorus variants (Meek)<sup>9</sup>

Characidae neon tetra highfin glassy perchlet Ambassidae Congo tetra Alestidae sailfin molly Poeciliidae molly Poeciliidae spiketail paradisefish Belontiidae x-ray tetra Characidae freshwater anglefish Cichlidae Cyprinidae rosy barb clown barb Cyprinidae lined barb black ruby barb checkered barb fiveband barb Chinese barb Sumatra barb cherry barb eyespot rasbora harlequin rasbora redstripe rasbora three-lined rasbora green rivulus blue discus red discus white cloud minnow green pufferfish blackline penguinfish thick lipped gourami pearl gourami moonlight gourami pygmy gourami

green swordtail southern platyfish variable platyfish

Cyprinidae Cyprinidae

Cyprinidae Loricariidae Rivulidae

Cichlidae Cichlidae

Cyprinidae Tetraodontidae Characidae Belontiidae Belontiidae Belontiidae Belontiidae

Poeciliidae Poeciliidae Poeciliidae

<sup>&</sup>lt;sup>5</sup>Requires further consideration. Several countries report adverse ecological impact after introduction. <sup>6</sup>Has aquaculture importance in Asia; maximum size is 12.0 cm.

<sup>&</sup>lt;sup>7</sup>Has minor commercial importance in Asia; maximum size in 13 cm.

<sup>&</sup>lt;sup>8</sup>At least one country reports adverse ecological impact after introduction.

<sup>&</sup>lt;sup>9</sup>At least one country reports adverse ecological impact after introduction.

### Annexure J

# Republic of Namibia Ministry of Fisheries and Marine Resources

#### List of aquatic organisms whose importation is restricted or prohibited

For the purpose of this Annexure "CITES" means the Convention on International Trade in Endangered Species of Wild Fauna and Flora drafted as a result of a resolution adopted in 1963 at a meeting of members of IUCN (The World Conservation Union), and the text of the Convention was finally agreed at a meeting of representatives of 80 countries in Washington DC., United States of America, on 3 March 1973, and on I July 1975 CITES entered in force.

Category I: Ornamental species that may be imported under certain health conditions:

Scienti	fic name	English common name
1.	Cyprinus carpio	Koi carp, coloured carp

Restriction: the species must originate from a country, area or stock certified as free from koi herpes virus (KEW).

2.	Carassius auratus	Goldfish

Restrictions:

- (i) An international health certificate must be obtained from the exporting country attesting that the species is free from spring viraemia of carp virus (SVCV), goldfish haematopoietic necrosis virus (GFHNV) and *Aeromonas salmonicida*.
- (ii) Goldfish must be treated with an effective parasiticide (e.g., Trichlorfon, formaldehyde, sodium chloride) during the 7 days before it being exported to Namibia to eliminate infestation by the gill flukes *Dactylogyrus vastator* and *Dactylogyrus extensus*.

# **Category II. Species listed by the Convention on International Trade in Endangered Species** (CITES):

Trade in these species of aquatic organisms and their products requires appropriate CITES permit, as well as approval by the Minister and relevant government departments.

**Appendix I** includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances.

**Appendix II** includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilisation that is incompatible with their survival.

**Appendix III** contains species that are protected in at least one country, which has asked other CITES parties for assistance in controlling the trade.

CITES APPENDIX			
I II III			
	CLASS REPTILIA (REPTILES)	I	
TESTUDINATA			
Dermatemydidae Central American	n river turtle		
	Dermatemys mawii		
Platysternidae Big-headed turtle			
	Platysternon megacephalum		
Emydidae Box turtle, freshwater tu			
	Annamemys annamensis		
Batagur baska	Tintamentys antamensis		
	Callagur borneoensis		
	Clemmys insculpta		
Clemmys muhlenbergi	<i>Cuora</i> spp.		
Geoclemys hamiltonii			
, i i i i i i i i i i i i i i i i i i i	Heosemys depressa		
	Heosemys		
	Heosemys grandis Heosemys leytensis		
	Heosemys spinosa		
	Hieremys annandalii		
	<i>Kachuga</i> spp. (Except the species		
Kachuga tecta	in Appendix I)		
huchuzu leelu	Leucocephalon yuwonoi		
	Mauremys mutica		
Melanochelys tricarinata			
Morenia ocellata	Orlitia borneensis		
	Pyxidea mouhotii		
	Siebenrockiella crassicollis		
	<i>Terrapene</i> spp. (Except the species		
Terrapene coahuila	included in Appendix I)		
Cheloniidae Marine turtle			
Cheloniidae spp.			
Dermochelyidae Leatherback turtle			
Dermochelys coriacea			
Trionychidae Softshell turtle			
Apalone ater Aspideretes gangeticus			
Aspideretes hurum			
Aspideretes nigricans			
	Chitra spp.		
	Lissemys punctata Pelochelys spp.		
	- cooncept spp.	Trionyx triunguis (Ghana)	
Pelomedusidae Afro-American sid	e-necked turtles	, <u> </u>	
	Erymnochelys madagascariensis		
		Pelomedusa subrufa (Ghana)	
	Peltocephalus dumeriliana		
		Pelusios adansonii (Ghana) Pelusios castaneus (Ghana)	
		Pelusios gabonensis (Ghana)	
		Pelusios niger (Ghana)	
	Podocnemis spp.		

Chelidae Austro-American side-necked turtle				
Pseudemydura umbrina	Pseudemydura umbrina			
CROCODYLIA Alligators, caimat	ns, crocodiles			
	CROCODYLIA spp.			
	Except the species included in Appendix I)			
Alligatoridae Alligators, caimans				
Alligator sinensis				
Caiman crocodilus apaporiensis				
Caiman latirostris (Except the				
population of Argentina. which is				
included in Appendix II)				
Melanosuchus niger (Except the				
population of Ecuador, which is				
included in Appendix II. and is				
subject to a zero annual export quota until an annual export quota				
has been approved by Secretariat				
and the IUCN/SSC Crocodile Spe-				
cialist Group)				
Crocodylidae	·			
Crocodylus acutus				
Crocodylus cataphractus				
Crocodylus intermedius				
Crocodylus mindorensis				
Crocodylus moreletii				
<i>Crocodylus niloticus</i> (Except the populations of Botswana. Ethiopia.				
Kenya, Madagascar. Malawi. Mo-				
zambique. South Africa, Uganda,				
the United Republic of Tanzania				
[subject to an annual export quota				
of no more than 1000 wild speci-				
mens including hunting trophies.				
in addition to ranched specimens].				
Zambia arid Zimbabwe; these populations are included in Ap-				
populations are included in Ap- pendix II)				
Crocodylus palustris				
Crocodylus porosus (Except the				
populations of Australia, Indone-				
sia and Papua New Guinea, which				
are included in Appendix II)				
Crocodylus rhombifer Crocodylus siamensis				
Osteolaemus tetraspis				
Tomistoma schlegelii				
CLASS AMPHIBIA (AMPHIBIANS)				
ANURA				
Ranidae Frogs				
	Euphlyctis hexadactylus			
	Hoplobatrachus tigerimus			
CAUDATA				
Ambystomidae Axolotls				
-	Ambystoma dumerilii			
	Ambystoma mexicanum			

ORECTOLOBIFORMES         Rhincodontidae Whale shark         ILAMNIFORMES         Lamnidae Great white shark         Cetorhinidae Basking shark         CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Spp.         (Except the species included in Appendix 1)         Acipenser trevirostrum         Acipenser staria         OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Catostomidae Cui-ui         Chastingtes cuips         SILURIFORMES         SYNONATHFORMES         Syngnathidae Pipfishes, senhorses         Syngnathidae Pipfishes, senhorses         Syngnathidae Pipfishes, senhorses         Syngnathidae Pipefishes, senhorses	CL	ASS ELASMOBRANCHII (SHARK	(S)		
Rhincodon typus         LAMNIFORMES         Lamnidae Great white shark         Carcharodon carcharias (Australia)         Cetorhinus maximus         CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Paddlefish, sturgeons         ACIPENSERIFORMES spp. (Except the species included in Appendix 1)         Acipenser intervirostrum Acipenser trevirostrum Acipenser trevirostrum Acipenser sturio         OSTEOGLOSSIFORMES         OSTEOGLOSSIFORMES         OSteoglossidae Arapaima, bonytongue         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus julleni         Catecobarbus geertsi         Probarbus julleni         Catecobarbus geertsi         Pangasidae Pangasid catfish         Pangasidae Pang	ORECTOLOBIFORMES	· · · · · · · · · · · · · · · · · · ·			
LAMNIFORMES         Lamnidae Great white shark         Cetorhinidae Basking shark         Cetorhinidae Basking shark         Cetorhinidae Basking shark         CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Paddlefish, sturgeons         ACIPENSERIFORMES Paddlefish, sturgeons         Acipenseridae Sturgeons         Acipenseridae Sturgeons         Acipenser brevirostrum         Acipenser sturio         OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue         Scleropages formosus         Cyprinidae Blind carps, placesok         Probarbus jullieni         Caccobarbus geertsi         Probarbus jullieni         Catostomidae Cui-ui         Charmistes cujus         SILURIFORMES         Syngnathidae Pipefishes, seahorses         Hippocampus spp. (Enters into May 2004)         PERCIFORMES         Sociaenidae Totoaba         Totoaba macdonaldi         CLASS SARCOPTERYGII (LUNGFISHES)         COELACANTHFORMES         Latimeria spp.         CHARDISE         CERATODONTIFORMES         CERATODONTIFORMES         COELACANTHFORMES         COELACANTHFORMES         COELACANTHFORMES	Rhincodontidae Whale shark				
Lamnidae Great white shark       Carcharodon carcharias <ul> <li>Carcharodon carcharias</li> <li>Carcharodon carcharias</li> <li>Cetorhinidae Basking shark</li> <li>Cetorhinus maximus</li> <li>CLASS ACTINOPTERYGII (FISH)</li> </ul> ACIPENSERIFORMES Paddlefish, sturgeons           ACIPENSERIFORMES Spp. (Except the species included in Appendix 1)           Acipenser brevirostrum Acipenser brevirostrum Acipenser sturio           OSTEOGLOSSIFORMES           Osteoglossidae Arapaima, bonytongue           Scleropages formosus           CYPRINIPORMES           Cypenidae Blind carps, placesok           Probarbus jullieni         Caecobarbus geertsi           Catsomidae Cui-ui         Chasmistes cujus           SILURIFORMES         SILURIFORMES           Syngnathidae Pipefishes, seahorses         Hippocampus spp. (Enters into May 2004)           PERCIFORMES         Siaanidae Totoaba           Sciaenidae Totoaba         CLASS SARCOPTERYGII (LUNGFISHES)           COELACANTHIFORMES         E           CARADODITIFORMES         E         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C		Rhincodon typus			
Cetorhinidae Basking shark       Carcharodon carcharias (Australia)         Cetorhinus maximus       (Australia)         CLASS ACTINOPTERYGII (FISH)       ACIPENSERIFORMES Paddlefish. sturgeons         ACIPENSERIFORMES Paddlefish. sturgeons       ACIPENSERIFORMES spp.         Acipenser brevirostrum       Acipenser sturio         OSTEOGLOSSIFORMES       OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue       Arapaima gigas         Scleropages formosus       Arapaima gigas         CYPRINIFORMES       Caccobarbus geertsi         Probarbus jullieni       Caecobarbus geertsi         Chasmistes cujus       SILURIFORMES         SILURIFORMES       Syngnathidae Pipefishes, seahorses         Bind carps, placesok       Singus         Pangasiidae Pangasid caffish       Pangasiidae Pipefishes, seahorses         Syngnathidae Pipefishes, seahorses       Hippocampus spp. (Enters into May 2004)         PERCIFORMES       SaccoPTERYGII (LUNGFISHES)         Sciaenidae Totoaba       Totoaba macdonaldi         CLASS SARCOPTERYGII (LUNGFISHES)       COELACANTHIFORMES         CACLACANTHIFORMES       CLASS SARCOPTERYGII (LUNGFISHES)         COELACANTHIFORMES       CEACODONTIFORMES         CACIPTICARTING SPP.       CEACANTHIFORMES         CERATODONTIFORMES       CL	LAMNIFORMES				
Cetorhinidae Basking shark       (Australia)         Cetorhinus maximus       CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Paddlefish, sturgeons       ACIPENSERIFORMES spp. (Except the species included in Appendix 1)         Acipenseridae Sturgeons       ACIPENSERIFORMES spp. (Except the species included in Appendix 1)         Acipenser brevirostrum Acipenser sturio       Acipenser sturio         OSTEOGLOSSIFORMES       OSteoglossidae Arapaima, bonytongue         Scleropages formosus       Arapaima gigas         CYPRINIFORMES       Cyprinidae Blind carps, placesok         Probarbus jullieni       Caecobarbus geertsi         Probarbus jullieni       Caecobarbus geertsi         Pangasicinoclon gigas       SILURIFORMES         SILURIFORMES       Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish       Pangasiidae Cui-ui         Chasmistes cujus       SI         SYNGNATHIFORMES       Syngnathidae Pipefishes, seahorses         Mippocampus spp. (Enters into May 2004)       PERCIFORMES         Sciaenidae Totoaba       CLASS SARCOPTERYGII (LUNGFISHES)         COELACANTHIFORMES       Latimeria spp.         CERATODONTIFORMES       CEratodonidiae Australian lungfish	Lamnidae Great white shark				
Cetorhinidae Basking shark       Cetorhinus maximus         CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Paddlefish, sturgeons         ACIPENSERIFORMES spp.         (Except the species included in Appendix 1)         Acipenseridae Sturgeons         Acipenser brevirostrum         Acipenser sturio         OSTEOGLOSSIFORMES         OSteoglossidae Arapaima, bonytongue         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Catostomidae Cui-ui         Chasmistes cujus         SILURFORMES         Syngnathidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasicinoclon gigas         Syngnathidae Pipefishes, seahorses         Hippocampus spp.         (Enters into May 2004)         PERCIFORMES         Sociaenidae Totoaba         Totoaba macdonaldi         CLASS SARCOPTERYGII (LUNGFISHES)         COELACANTHIFORMES         Latimeria spp.         CERATODONTIFORMES         Ceratodontidae Australian lungfish			Carcharodon carcharias		
Cetorhinus maximus         CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Paddlefish, sturgeons         ACIPENSERIFORMES spp.         (Except the species included in Appendix 1)         Acipenser brevirostrum         Acipenser sturio         OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Caccobarbus geertsi         Probarbus jullieni         Catostomidae Cui-ui         Chasmistes cujus         SILURIFORMES         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasicinoclon gigas         SYNGNATHIFORMES         Syngnathidae Pipefishes, seahorses         Hippocampus spp.         (Enters into May 2004)         PERCIFORMES         Sciaenidae Totoaba         Totoaba macdonaldi         CLASS SARCOPTERYGII (LUNGFISHES)         COELACANTHIFORMES         Sciaenidae Coelacanths         Latimeria spp.         CERATODONTIFORMES         Ceratodontidae Au			(Australia)		
CLASS ACTINOPTERYGII (FISH)         ACIPENSERIFORMES Paddlefish, sturgeons         ACIPENSERIFORMES spp. (Except the species included in Appendix 1)         Acipenser brevirostrum Acipenser sturio         Osteoglossidae Arapaina, bonytongue         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Caecobarbus geertsi         Probarbus jullieni         Catostomidae Cui-ui         Chostomidae Surgeon         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasichae Pangasid catfish         Pangasindae Pangasid catfish         Pangasidae Pangasid catfish         CECIFORMES         Sciaenidae Totoaba         Totodaba macdonaldi	Cetorhinidae Basking shark				
ACIPENSERIFORMES Paddlefish, sturgeons         ACIPENSERIFORMES spp. (Except the species included in Appendix 1)         Acipenser brevirostrum Acipenser sturio         OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Catostomidae Cui-ui         Chasmistes cujus         SILURIFORMES         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasicinoclon gigas         SYNGNATHIFORMES         Syngnathidae Pipefishes, seahorses         Hippocampus spp. (Enters into May 2004)         PERCIFORMES         Sciaenidae Totoaba         Totoaba macdonaldi         COELACANTHIFORMES         Latimeridae Coelacanths         Latimeridae pp.         CERATODONTIFORMES         Ceratodontidae Australian lungfish		Cetorhinus maximus			
ACIPENSERIFORMES spp. (Except the species included in Appendix 1)         Acipenser data Sturgeons         Acipenser sturio         OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue         Arapaina gigas         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Caecobarbus geertsi         Probarbus jullieni         Catostomidae Cui-ui         Chasmistes cujus         SILURIFORMES         Pangasiidae Pangasid catfish         Pangasiidae Pangasid catfish         Pangasiidae Pipefishes, seahorses         Hippocampus spp. (Enters into May 2004)         PERCIFORMES         Syngnathidae Pipefishes, seahorses         Latimeridae Coelacanths         Latimeridae Coelacanths         Latimeridae Coelacanths         Latimeria spp.         CERATODONTIFORMES         Ceratodontidae Australian lungfish		CLASS ACTINOPTERYGII (FISH)			
(Except the species included in Appendix 1)         Acipenseridae Sturgeons         Acipenser sturio         OSTEOGLOSSIFORMES         Osteoglossidae Arapaima, bonytongue         Scleropages formosus         Arapaima gigas         Scleropages formosus         CYPRINIFORMES         Cyprinidae Blind carps, placesok         Probarbus jullieni         Catostomidae Cui-ui         Chasmistes cujus         SILURIFORMES         Pangasitidae Pangasid catfish         Pangasicinoclon gigas         SYNGNATHIFORMES         Syngnathidae Pipefishes, seahorses         Kitters into May 2004)         PERCIFORMES         Sciaenidae Totoaba         Totoaba macdonaldi         CLASS SARCOPTERYGII (LUNGFISHES)         COELACANTHIFORMES         Latimeridae Coelacanths         Latimeridae Coelacanths         Latimeridae Australian lungfish	ACIPENSERIFORMES Paddlefish	n, sturgeons			
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Latimeria spp.         CERATODONTIFORMES         Ceratodontidae Australian lungfish					
CERATODONTIFORMES Ceratodontidae Australian lungfish					
Ceratodontidae Australian lungfish					
Neoceraioaus jorsieri		Neoceratodus forsteri			

PHYLUM ANNELIDA				
CLASS HIRUDINOIDEA (LEECHES) ARHYNCHOBDELLIDA				
Hirudinidae Medicinal leech				
	Hirudo medicinalis			
	PHYLUM MOLLUSCA			
CI	LASS BIVALVIA (CAMS. MUSSEL	LS)		
VENERIDA				
Tridaenidae Giant clams				
	Tridacnida spp.			
UNIONIDA				
Unionidae Freshwater mussels pear	ly mussels			
Conradilla caelata				
Dromus dromas	Cyprogenia aberti			
Epioblasma curtisi				
Epioblasma florentina				
Epioblasma sampsoni Epioblasma sulcata perobliqua				
Epioblasma torulosa				
gubernaculum				
	Epioblasma torulosa rangiana			
Epiioblasma torulosa torulosa Epioblasma turgidula				
Epioblasma walkeri				
Fusconaia cuneolus				
Fusconaia edgariana Lampsilis higginsii				
Lampsilis orbiculata				
orbiculata				
Lampsilis satur				
Lampsilis virescens Plethobasus cicatricosus				
Plethobasus cooperianus				
	Pleurobema clava			
Pleurobema plenum Potamilus capax				
Quadrula intermedia				
Quadrula sparsa				
Toxolasma cylindrella Unio nickliniana				
Unio tampicoensi				
tecomatensis				
Villosa trabalis				
CLASS GASTROPODA (SNAILS AND CONCHES)				
MESOGASTROPODA				
Strombidae Queen conch	~			
	Strombus gigas			
PHYLUM CNIDARIA CLASS ANTHOZOA (CORALS, SEA ANEMONES)				
HELIOPORACEA Blue corals				
	Helioporidae (Includes only			
	Heliopora coerulea)			

STOLONIFERA			
Tubiporidae Organ-pipe corals			
	Tubiporidae spp.		
ANTIPATHARIA Black corals			
	ANTIPATHARIA spp.		
SCLERACTINIA Stony corals			
	SCLERACTINIA spp.		
CLASS HYDROZOA (SEA FERNS, FIRE CORALS, STINGING MEDUSAE)			
MILLEPORINA			
Milleporidae Fire corals			
	Milleporidae spp.		
STYLASTERINA			
Stylasteridae Lace corals			
	Stylasteridae spp.		

# Annexure K

# Republic of Namibia Ministry of Fisheries and Marine Resources

# Application for registration as an exporter of aquatic organisms or aquaculture products (Regulation 16)

- 1. Name of the applicant:
- 2. Postal and Residential address:
- 3. Telephone numbers:
- 4. Name and address of business ( if different)
- 5. Fax and e-mail:
- 6. Type of commodity to be exported:
  - \_\_\_\_\_ life aquatic organisms
  - life aquatic organism product e.g., life eggs, gametes, larvae, etc.)
  - biological products (e.g., biological reagents for use in disease diagnosis, sera, inactivated or modified vaccines, genetic material of infectious agents; endocrine tissues from fish or used in fish, etc.
- 7. Estimated annual volume(s) specify each type of commodity and volume):
- 8. Certificate of Registration with the Ministry of Trade and Industry (if applicable):
- 9. Any other relevant information:

I declare that the particulars furnished above are true and correct. I agree that if any particulars are found to be false or incorrect my application will be rejected and if a license has been issued such license will be cancelled.

Date:

Signature: \_\_\_\_\_

#### Annexure L

## Republic of Namibia Ministry of Fisheries and Marine Resources

# **Registration as exporter of aquatic organisms or aquaculture products** (Regulation 17)

Registration No.:

This Registration is valid for ..... from the date of issue.

Authorising Officer

Date

### Annexure M

# Republic of Namibia Ministry of Fisheries and Marine Resources

# Application for permit to export aquatic organisms or aquaculture products (Regulation 18)

- 1. Name of the applicant:
- 2. Residential and postal address:
- 3. Telephone numbers:
- 4. Address (mailing address):
- 5. Name of address of supplier (if different):
- 6. Type of organism or product to be exported (as applicable, indicate: species, life cycle stage, size and number of aquatic organisms to be exported):
- 7. Country of destination:
- 8. Country (ies) of transshipment (if any):
- 9. Name and address of importer:
- 10. If application involves live aquatic organisms, do you require assistance to meet the health certification requirements of the importing country? (attach health certification requirements, if known).
- 11. Proposed date, method of shipment and port of exit:
- 12. If it is a live aquatic organism, indicate source of origin as:
  - () cultured indicate hatchery or other production facility

or

- () wild caught indicate precise source
- 13. Each shipment of live aquatic organisms, aquatic organism products or other commodity must be approved individually. A copy of the signed export permit will be sent to the requesting party and a copy must accompany the shipment.

Date: \_\_\_\_\_

Signature of applicant: \_\_\_\_\_

#### Annexure N

# Republic of Namibia Ministry of Fisheries and Marine Resources

# **Permit to export live aquatic organisms or aquaculture products** (Regulation 19)

Permit No.:

..... of ..... is hereby authorised under section 28 of the Aquaculture Act, 2002 and regulation 19 to export live aquatic organisms, aquatic organism products and other commodities subject to the following terms and conditions:

- 1. Exporter's registration No.
- 2. aquatic organisms to be exported:
- 3. Name and address of exporter:
- 4. Date, method of shipment and port of exit:
- 5. Country of destination:
- 6. Country (ies) of transshipment (if any):
- 7. Name and address of importer:
- 8. If application involves living aquatic organisms, health certification requirements of the importing country are attached.
- 9. If it is a live aquatic organism, indicate either:

() cultured indicate hatchery or other production facility

or

() wild caught indicate precise source

Date: \_\_\_\_\_ Authorising Officer \_\_\_\_\_

#### Annexure O

# Republic of Namibia Ministry of Fisheries and Marine Resources

## List of aquatic organisms or aquaculture products whose exportation is prohibited

## Live aquatic organisms originating from natural waters

- (a) No species of wild-caught aquatic organism may be exported without the specific approval of the Minister.
- (b) Exportation of the following fishes of conservation concern is expressly prohibited:

Scientific name	Common name	Distribution	
	Freshwate	r species	
Austroglanis sclateri	Rock catfish	Apparently rare, endemic to Orange River System	
Barbus breviceps	Shorthead barb	Isolated pools in Otjhipa Mountains near the Kunene River	
Barbus hospes	Narmaqua barb	Endemic to lower Orange River and Fish River, abundant but vulnerable	
Barhus kimberleyensis	Largemouth yellowfish	Present but declining in the Orange River System	
Chetia welwitschi	Angolan happy	Known only from museum specimens, but present in the Kunene River	
Clairiallabes platyprosopos	Broadhead catfish	Rare red data species from the Okavango and upper Zambezi rivers	
Clariallabes sp.		Undescribed; found in the Kunene River in 1992	
Clarias cavernicola	Cave catfish	Endangered; endemic to the Algamas Cave near Otavi, threatened by lowering water table	
Kneria maydelli	Kunene kneria	Known only from the Kunene River	
Nothobranchius sp.	Caprivi killifish	Endangered; endemic to the Caprivi Region; undescribed, threatened by road building and pollution	
Sargochromis coulteri	Kunene happy	Endemic to the Kunene River, although abundant	
Schwetzochromis mechadoi	Kunene dwarf happy	Endemic to the Kunene River	
Thoracochromis albolabris	Thick-lipped happy	Endemic to the Kunene River	
Thoracochromis buysi	Namib happy	Endemic to the Kunene River, although abundant	
Tilapia guinesana	Otjikoto tilapia	Endangered; endemic to Namibian sinkhole lakes, threatened by lowering of water table in Lake Guinas, which will impede breeding.	
	Marine/Brackishwater Fishes		
Dicrolene pallidus		Endemic brackishwater/marine species	

#### Annexure P

## Republic of Namibia Ministry of Fisheries and Marine Resources

### Lists of approved ports

(Regulation 21)

## Airports

- 1. Chief Hosea Kutako International Airport, Windhoek
- 2. Walvis Bay
- 3. Lüderitz
- 4. Oranjemund

### **Border crossings**

- 1. Ariamsvlei
- 2. Noordoewer
- 3. Vioolsdrif
- 4. Ngoma Bridge
- 5. Wanela
- 6. Oshikongo
- 7. Mohembo