

**STANDARDS AND REQUIREMENTS FOR THE OPERATION OF  
DOLPHIN FACILITIES IN JAMAICA**

Natural Resources Conservation Authority  
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This document was drafted by the Biodiversity Branch of the National Environment and Planning Agency (NEPA) at the request of the Natural Resources Conservation Authority (NRCA). Its review was facilitated by the Ministry of Local Government and Environment and included input from the following Agencies:

- National Environment and Planning Agency
- Veterinary Services Division, Ministry of Agriculture and Lands
- The Scientific Authority established under the Endangered Species (Protection, Conservation and Regulation of Trade) Act

The document outlines the Standards and Requirements to be attached as conditions to permits and licences issued for the importation of dolphins and the operation of dolphin facilities in Jamaica.

1 October 2007

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## 1.0 Definitions

### 1.1 Dolphin programmes

**“Swim-with-the-dolphin (SWTD) programme”** - An interactive programme where members of the public enter the primary enclosure in which an SWTD-designated dolphin is kept, to interact with the animal. This interaction involves wading alongside, swimming with, touching and petting dolphins. Pushing by dolphins and pulling by dolphins are prohibited as is grasping or holding of the dolphin’s body unless under the direct supervision and explicit instruction of an attendant. The SWTD programme does not include snorkeling, SCUBA diving or the participation of any member(s) of the public audience as a minor segment of an educational presentation or performance of a show.

**“Swim-with-encounter”** – An interactive programme where members of the public enter the primary enclosure to interact (petting only) with a dolphin. This activity is limited to persons floating or standing on a submerged platform in a line in the enclosure to interact with the dolphins.

**“Touch Programme”** – An interactive programme where members of the public stand in knee-high water to pet a dolphin. Swimming and wading with dolphins do not occur.

### 1.2 Dolphin Areas

There are at least two separate enclosures – the primary enclosure and the quarantine area.

The **primary enclosure** is the entire area which the dolphins inhabit. It consists of the buffer and sanctuary areas as well as the interactive area.

The **interactive area** is the area in the primary enclosure where all dolphin programmes described in section 1.1 take place.

The **buffer area** is an area within the primary enclosure used for inter-active dolphin programmes that is off limits to the members of the public and that abuts the interactive area. It must be attractive to the dolphins and be of a size, condition and level of accessibility that does not discourage its use, whether during or outside of dolphin sessions as defined at 1.1 above. Dolphins may be recalled from the buffer areas by the trainers.

The **sanctuary area** is the area in the primary enclosure for the SWTD that is off limits to the public and directly abuts the buffer area. Dolphins cannot be recalled from this area and its purpose is to provide the dolphin with an area to retreat to when it desires to terminate contact with swimmers.

The **quarantine area** has two separate areas, that is, the main enclosure in which all marine mammals are held for fourteen days following importation, as well as a separate quarantine area in which dolphins with infectious or contagious diseases are kept until a veterinary surgeon deems them to be healthy.

### 1.3 Authorized Officers

“Authorized officers” are

- Any person authorized to monitor facilities under the Endangered Species (Protection, Conservation and Regulation of Trade) Act, 2000
- Any person designated as such by the Natural Resources Conservation Authority.
- Any Veterinary Officer employed by the Veterinary Services Division, Ministry of Agriculture.

### 2.0 Importation of dolphins

The importation of dolphins into Jamaica is guided by the policies of the Management Authority taking into account the recommendations of the Scientific Authority established under the Endangered Species (Protection, Conservation and Regulation of Trade) Act. Dolphins are listed as an endangered species under the Convention on the International Trade in Endangered Species (CITES), the provisions of which are included in Jamaica’s Endangered Species Act. Dolphins (the bottlenose dolphin (*Tursiops truncatus*) and the Pantropical spotted dolphin (*Stenella attenuata*)) in Jamaican waters are also listed in the Third Schedule of the Wild Life Protection Act as a protected species.

The importation of dolphins into Jamaica requires certificates and permits as follows:

- a Convention on the International Trade in Endangered Species (CITES) export and import permits or re-export certificate
- an Official Health Certificate issued by an official Veterinarian of the Veterinary Services from the exporting country.
- a Natural Resources Conservation Authority (NRCA) Environmental Permit for the Introduction of Species and eco-tourism activities; and
- a Veterinary Services Division Import Permit issued under The Animal (Disease and Importation) Law, 1943.

A NEPA officer as well as a Veterinary Officer must be present at the port of entry on arrival of the dolphin(s) and accompany the dolphin(s) to the quarantine facility. The officers must ensure that the animal(s) is/ are properly housed at the facility. The NEPA officer must also submit to the Chief Executive Officer of the Agency, within two days of the arrival of the dolphin(s) in the island, a report on all transportation activities regarding the dolphin(s).

All dolphins being imported into the island shall have a microchip implanted.

Other permits/licences are required for the operation of the facility. (See 4.1)

## 2.1 Requirements for the Transportation of Dolphins

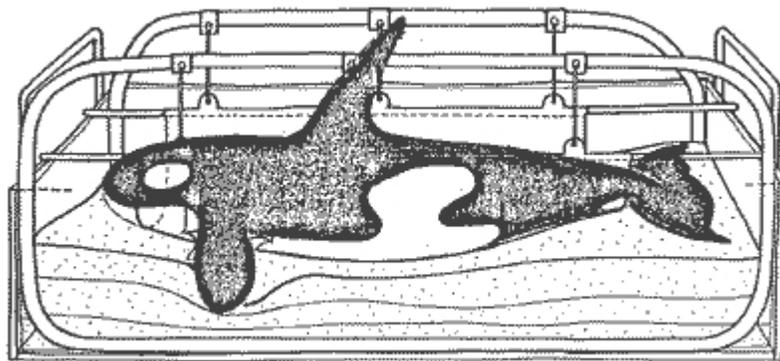
### 2.1.1 Principles of Design of Containers and Packing for Transportation of Dolphins

The animal should be placed on a supported "stretcher" or sling which can be made of canvas or other suitable tough, washable material which allows free passage of water. The stretcher should be fitted with wood or metal poles for carrying or for positioning onto a rack. The stretcher should be custom-fitted to accommodate the animal's length and weight and must be provided with openings for the eyes, flippers, and genital and anal slits. The animal may be positioned directly on the stretcher fabric itself or onto a thin foam pad, chamois, or woolen blanket lining over the fabric. A sheet of muslin or similar light, water-retaining material is then secured so as to cover the animal from a point just behind the blowhole, to the tail. This covering, if kept wet, will serve as protection against drying and will allow for cooling through evaporation. Exposed body surfaces around the head, flippers, and tail should always be coated with a moisture retaining ointment, such as zinc oxide or lanoline, or a similar ointment, care being taken to ensure that there is no obstruction to the animal's blow hole.

The dolphin fitted onto the stretcher should be suspended by the supporting poles in a watertight container. The stretcher should rest lightly on thick foam pads. The foam mattress should be cut away as necessary to accommodate the animal's flippers and fins. Such padding is especially important in the area of the thorax. To further minimize unequal pressure on the thorax, the animal should always be placed in an exact dorsoventral position (Cornwell, 1979; IATA, 1984).

Water should then be added to the container so that approximately one half to two thirds of the animal is immersed. Mechanical hand-sprayers should be available for use when required.

The leak proof container should be constructed of suitable corrosion proof metal, or heavy duty plastic or fibreglass of sufficient strength to house the animal and to withstand the handling involved during transport. It must be of sufficient width to ensure that there is adequate clearance from the animal's flippers. It should be open at the top and should be labeled "Live Animal" on its upper side or in a visible place, with letters not less than 2.5 cm high to indicate the correct position of the container.



Source: <http://www.cites.org/eng/resources/transport/mm4.shtml>

### **2.1.2 Personnel**

- During transportation, trained personnel (a veterinarian and zoo-technician) should be present to monitor the dolphin(s) and must have access to the animal(s) at all times.

### **2.1.3. Handling**

- The skin of the dolphin(s) must be kept moist by applying water intermittently to protect against over-heating by retaining moisture and applying moisturizing creams. This cream can be a 50:50 mixture of pure Vaseline and pure lanoline or 100% zinc oxide.
- The temperature within the container should remain constant between 14-18°C. Ice must be on hand at all times to maintain the dolphin(s) at this temperature.
- The pectoral flippers of the dolphin(s) must have freedom of movement at all times during the transportation.
- The position of the dolphin(s) must be changed so as to prevent necrosis of the skin at the weight pressure points.
- The dolphin(s) must be monitored so as to avoid sudden movements, struggling, thrashing, and other unnecessary activity, which may cause overheating or physical trauma.
- Once the dolphin(s) has/have arrived at any facility they should not be removed for six weeks. Any removal of the dolphin(s) will require approval from the NRCA as well as the Veterinary Services Division.

### **2.1.4 Feeding**

- Dolphins shall not be transported for more than 36 hours without feeding. While the dolphins are in transit, feeding by an attendant should be done only when necessary to ensure their well-being.

### **2.1.5 General care**

- No attendant must care for more than two (2) animals.
- The attendant must have a mechanical hand sprayer available.

### **2.1.6 Documents**

The transportation of dolphins from the port of entry must be accompanied by copies of the CITES import/export permits and Health Certificates from the exporting country and a Veterinary Services Division, Ministry of Agriculture, Jamaica permit.

### **3.0 Rescued Dolphins**

The procedures/parameters listed in the Rescue Centre Guidelines must be adhered to. Dolphins eligible for rescue are those which have been found stranded along the coastline and cannot be immediately re-floated and returned to the wild because they require medical attention.

The general principles to be adhered to are as follows:

- All rescued animals must be kept in a quarantine area that is closed and not visible to the public.
- At least two assessments of rescued animals will be made by officers from NEPA and the Veterinary Services Division: the first when the animal first enters the Rescue Centre so that a determination of the health of the animal can be made and another once the animal has recovered. A recommendation will be made to the NRCA for a decision to be made on whether the animal can be released or must remain at the facility. While a rescued dolphin is being cared for, it must not be trained or used in the interactive sessions.

### **4.0 Location**

Dolphin facilities shall be located away from sources of trade effluent, sewage contamination, dust and odours. Any artificial area created shall be properly drained and not subject to flooding or any chemical pollution. Natural water areas, such as tidal basins, bays, or estuaries shall be protected from surface runoff, which would impair the water quality.

At all lagoon and similar natural seawater facilities, effective barrier fences or other appropriate barrier devices shall be maintained around all sides of the enclosure and at the landward side below the low tide water level.

Captive dolphins must not be allowed at any time to interact with wild dolphins.

The operator of the facility shall ensure the safety and containment of the dolphins at all times.

#### **4.1 Dolphin Facilities and Enclosure**

The facility must be bounded by a buoyed area in order to control the use of motorized vessels within 150 metres (500 feet) of the dolphin enclosure. Applications for a licence to modify the foreshore and floor of the sea must therefore be made under the Beach Control Act.

## **5.0 Records and Reporting Requirements**

### **5.1 Water Quality Monitoring**

Before an application for a permit for a new facility is considered by the NRCA, at least six months' data must be provided of ambient water quality tests taken during the dry and wet seasons.

For existing facilities, the ambient water quality must comply with the standards specified by NEPA (**Water Quality Standards and Testing Schedule for Dolphin Facilities - Appendix 1**) The facility must provide a monitoring programme, which should include the frequency for testing and the location of the sample stations. This must be approved by the NRCA.

Samples taken must be tested using internationally accepted methods and accredited laboratories. Water samples must be taken by qualified personnel and in accordance with the environmental permit and the water quality testing schedule required by the NRCA permit granted to the facility. If the water quality does not meet the minimum required standards, then the water in the enclosure shall be deemed unsatisfactory. The dolphin(s) should be relocated to an appropriate holding area until the water quality returns to the minimum standards specified by the NRCA.

The report on the results of the water quality tests shall be submitted to NEPA within thirty (30) days of the date of the tests.

The water quality reports must contain the collector's name, exact location, time and date of sampling, results of sampling and weather conditions. The water quality analyses shall be conducted and records kept for the duration of the permit. Notwithstanding the frequency for submission of reports outlined in the permit conditions, copies of the water quality reports must be provided once requested by NEPA.

### **5.2 Records on Dolphins and Operations**

The permittee shall keep and maintain standardized comprehensive and accurate records on each dolphin as well as the activities and planned programmes at the facility.

#### **5.2.1 Names of Dolphins**

The names of dolphins may be changed; however, the NRCA shall be notified within 24 hours. The Permittee shall use coded-microchip implants for the individual identification of the dolphins.

### **5.2.2 Information to be Recorded**

The records which must be kept include:

- (1) Health and medical reports, daily behaviour patterns, feeding, food and nutrition, date of birth, sex, origin, identification number, date and details of acquisition (wild caught – if so, where, or captive bred) and disposition of each dolphin;
- (2) A written programme of veterinary care including protocols, schedules of professional visits and a detailed description of the monitoring programme to be used to detect and identify changes in the behaviour and health of the dolphins;
- (3) Maximum frequency and duration of encounters per cetacean per day as well as a description of the training involved, including actual and/or expected number of hours each dolphin has undergone or will undergo prior to participation in the programme;
- (4) Description of the educational content and agenda of planned interactive sessions;
- (5) An activity log of the number of minutes per day that each animal participated in an interactive session;
- (6) An activity log of the number of human participants per month in the interactive programmes;
- (7) Résumé of the licensee and/or manager, the head trainer attendant, any other attendants, and the attending veterinarian.
- (8) Medication applied – reasons for application, by whom and quantity given.

The records shall be kept for the duration of the permit and made available to authorized officers when requested. The authorized officers must display their identification card to the management staff at the facility. These officers are permitted to inspect the facility and the dolphin(s) present, as well as make and take copies of any records the officers consider necessary for enforcement and compliance.

### **5.3 Quarterly Reports**

Quarterly reports for the periods April-June, July-September, October-December and January-March of each year should be prepared by the facility and be submitted to NRCA on the last working day of January, April, July and October. These reports shall include the following:

- Statistical summaries indicating the number of people that participated in the authorized programmes during the quarter;
- Number of sessions in which each dolphin participated in the authorized programmes. Daily records on the number of sessions in which each dolphin participated shall be kept

by the management of the facility for a period of ten years. The quarterly reports shall be kept by NRCA five years after the death or departure of the dolphin.

- Summarized behavioural observation reports for each dolphin.
- Medical reports which should state clinical history and any blood analyses, relevant medical treatment or medications administered, and other treatments together with any other matters deemed relevant by a veterinarian approved by the Veterinary Services Board.(see also 9.2 below) These records shall be kept by the management of the facility for a period of ten years after the death of a dolphin.
- Detailed descriptions of any encounter that resulted in injury to a human or a dolphin participating in an authorized programme.
- Notification of the removal or addition of a dolphin to an authorized programme and reason(s) for the removal or addition, and health certification of the newly added dolphin should be given to NEPA
- Notification of changes in staff positions including the names and qualifications of new personnel.
- A copy of each dolphin's daily behaviour and feeding records. A written statement on the well-being of the dolphin(s) by the Veterinary Surgeon should be attached.
- A report on the trend of the water quality analyses, manner and date upon which any recommendation(s) made by the designated veterinarian have been implemented.

#### **5.4 Incidents**

All incidents of aggressive behaviour, injury or death to dolphin(s) or human(s) shall be reported to NEPA within 24 hours of the incident. A written report shall be submitted to the Chief Executive Officer of NEPA within seven (7) days of the incident.

In cases where dolphins are used in an interactive session and exhibit unsatisfactory, undesirable or unsafe behaviours, including charging, biting, mounting, or sexual contact with humans, such dolphins shall either be removed from the interactive area or the session shall be terminated. These activities constitute an incident and shall be reported.

When there are more than two incidents during interactive sessions within a year that have been dangerous or harmful to either a dolphin or a human, NEPA will conduct an investigation to determine what actions need to be taken. During this period the dolphins involved in these incidents shall not participate in any interactive programmes.

## **5.5 Necropsy Reports**

A complete necropsy must be conducted by or under the direct supervision of a licensed veterinarian experienced in marine mammal necropsies on all marine mammals that die in captivity, and on the fetus where there has been a miscarriage/spontaneous abortion or stillbirth and a preliminary report lodged within 48 hours of the death. (See also section 9.2)

If the necropsy is not performed within three (3) hours of the death the animal shall be refrigerated for this purpose. The preliminary necropsy report must be prepared by the marine mammal veterinarian stating all pathological lesions observed, the date of death and the presumptive cause of death. A report of the definite cause of death must be submitted to NEPA within thirty (30) days of the finalization of the report. NRCA may request additional tests to be done. All diagnostic tests conducted on postmortem specimens shall be listed in the report, and the results of each test recorded. The management of the facility at which the marine mammal died must maintain these necropsy records for the duration of the permit and present them to authorized officers when requested.

## **6.0 Staff Requirements**

An adequate number of trained persons responsible for the management of the facility shall be employed.

The permittee of a captive dolphin facility shall retain professional staff consisting of a manager, head trainer/behaviourist, one trainer/supervising attendant per dolphin, attendant, veterinarian and or consulting veterinarian who has no less than two (2) years experience with the care and husbandry of dolphins. The required qualifications are listed below:

- (1) Permittee or Manager - at least one full-time staff member with a minimum of 6 years experience in a professional or managerial position.
- (2) Head Trainer/Behaviourist - at least one full-time staff member with a minimum of 3 years experience in training dolphins for SWTD programmes acquired within the past 5 years or an equivalent amount of experience involving in-water training of dolphins;
- (3) Trainer/Supervising Attendant - at least one full-time staff member with a minimum of 3 years training and/or handling experience involving human/dolphins interaction programmes.
- (4) Attendants - an adequate number of staff members who are trained in the care, behaviour, and training of the dolphins. Attendants shall be designated by the trainer, in consultation with the head trainer/behaviourist and licensee/manager, to conduct and monitor interactive sessions.

- (5) Attending veterinarian - at least one staff or consultant veterinarian who has at least two (2) years full-time experience with dolphin medicine within the past 10 years, and who is licensed to practice veterinary medicine.

## **7.0 Training of Dolphins for Interactive Programmes**

All dolphins used in interactive sessions shall be adequately trained and conditioned in human behaviour so that they respond in the session to the attendants with appropriate behaviour for a safe interaction. The head trainer/behaviourist, trainer/supervising attendant, or attendant shall at all times control the nature and extent of the dolphin interaction with the public during a session, using the trained responses of the animal.

The permittee shall prepare and submit to NRCA for approval written criteria regarding conditions and procedures for the termination and resumption of authorized programmes. The head trainer/behaviourist shall determine when the dolphin programmes (as defined at 1.1) will be terminated or resumed. When termination of the session is caused by illness of the dolphin (s) the veterinarian shall decide when a session may be resumed. In the absence of the head trainer/behaviourist, the trainer/supervising attendant shall determine the termination of a session.

Training of marine mammals shall be done by or under the direct supervision of experienced trainers without physical punishment or abuse being used or inflicted upon the marine mammals.

## **8.0 Food**

### **8.1 Food storage**

Food supplies shall be stored in facilities that will adequately protect such supplies from deterioration, spoilage, mold, contamination by vermin, and any food contamination. In the event of this occurring, food should be immediately and properly disposed of. Refrigerators and freezers shall be used for perishable food and shall be cleaned and maintained to the satisfaction of the Local Public Health Authority.

Frozen fish or other frozen food shall be stored in freezers, which are maintained at a minimum temperature of -18°C (0°F.). The storage duration for food and the method of storage, as well as the thawing of frozen food, shall be conducted in a manner that will minimize contamination and retain the food's nutritive value and wholesome quality until the time of feeding. Food should be stored at 0°F for no longer than the processor's recommended optimum storage dates and time for each food type. Fish shall be stored in stainless steel pails and should not be cut but instead presented to the dolphin whole. Food can be temporarily stored in plastic coolers for feeding and rewarding purposes. Food portions should take into consideration the age, species, condition and size of the marine mammal being fed.

A generator of sufficient capacity to provide adequate power in the event of a power shortage to run all refrigerators and freezers for the storage of food shall be installed and maintained in good working order.

## **8.2 Food Preparation**

The area established for food preparation shall be sterilized both in the mornings and evenings. Cleaning, disinfecting and the sanitation of food preparation area equipment and facilities shall be established. Kitchens and other food handling areas where animal food is prepared shall be cleaned at least once daily and sanitized at least once every week. Sanitization shall be accomplished by washing with hot water (82°C/180°F or higher) and soap or detergent in a mechanical dishwasher, or by washing all soiled surfaces with a detergent solution followed by a safe and effective disinfectant, or by cleansing and sanitizing agents. All containers and utensils used for holding, thawing or preparing food for dolphins shall be cleaned and sanitized after each feeding.

Food may be thawed using cold water or under refrigeration. The thawed product shall be kept iced or refrigerated before feeding. All foods shall be fed to the marine mammals within 24 hours, following the removal of such foods from the freezer for thawing.

Pesticides and other potentially toxic agents must be labelled and stored in containers away from food preparation surface areas.

All attendants and other personnel preparing the food shall be required to attend a lecture on food preparation and handling. Food preparation training sessions shall be conducted so as to minimize bacterial or chemical contamination and to assure the wholesomeness and nutritive value of the food. This lecture on food preparation and handling should be done only by the Ministry of Health, Jamaica.

## **8.3 Feeding**

Marine mammals' food shall be wholesome, palatable, and free from contamination, and shall contain adequate quantity and nutritive value to maintain healthy animals. The diet shall be prepared with consideration for age, species, condition, size, and type of marine mammal being fed. Marine mammals shall be offered food at least once a day, except as directed by veterinary treatment or professionally accepted practices.

Food receptacles, if used, shall be located so as to be accessible to all marine mammals and shall be placed so as to minimize contamination of the food contained therein. Such food receptacles shall be cleaned and sanitized after each use.

Food shall be given by an employee or attendant who has the necessary knowledge to assure that each marine mammal receives an adequate quantity of food. Such employee or attendant is required to have the ability to recognize deviations from a normal state of good health in each marine mammal, so that the food intake can be adjusted accordingly. Such employee or attendant must assure that the marine mammals receive the proper amount and type of food. Only food supplied by the management of the facility shall be fed to the dolphins.

There shall be no feeding of the dolphins by the public.

## **9.0 Health**

### **9.1 Parasite Programme**

A safe and effective programme for the control of internal and external parasites shall be established and maintained. Insecticides/acaricides or other such chemical agents shall not be applied in the primary enclosure housing marine mammals except when deemed essential by an attending veterinarian. These substances, which include cleansing and sanitizing agents, pesticides and other potentially toxic agents, must be stored in properly labeled containers in secured cabinets located in areas which will prevent the contamination of food storage or preparation surfaces.

### **9.2 Health Assessment and Physical Examination**

All veterinarians must have experience and be certified in marine mammal husbandry and medicine.

The veterinarian shall conduct a complete physical examination of each dolphin every six (6) months. The examination shall include identification (name, microchip number, sex, and age), weight and length; checking of girth, skin, eyes, mouth, blow hole, cardio-respiratory system, genitalia and faeces; a discussion with the staff member familiar with the animal's care and a review of the behavioural (including appetite), feeding and medical records of the animal. The examination shall also include a complete blood count and serum chemistry analysis. Faecal and blow-hole smears shall be obtained for cytology and parasite evaluation.

A veterinary surgeon shall make monthly site visits which will include ascertaining the nutritional and reproductive status of each dolphin, examination of the behavioural, feeding and medical records of the animal as well as discussions with the animal care staff on each animal. The veterinary surgeon shall also observe an authorized programme.

Where there has been a significant change in the reproductive status of a dolphin, such as a miscarriage/spontaneous abortion or stillbirth, in addition to the complete necropsy to be conducted on the fetus by or under the direct supervision of a licensed veterinarian experienced in marine mammal necropsies (Section 5.5), there should be a complete examination of the mother and a preliminary report lodged within 48 hours of the incident, followed by submission of a full written report within the month.

All other veterinary reports must be submitted with the quarterly reports to NEPA.

### **9.3 Quarantine and Security**

A quarantine programme of at least 14 days for imported and rescued dolphins shall be instituted and adhered to, based on conditions specified by the Veterinary Services Division. A proper quarantine area must be present at the facility so that imported or rescued dolphins are placed in a separate body of water (pool), that is, an area where the water does not flow from the quarantine area to the other holding area(s).

Newly acquired marine mammals shall be isolated from resident marine mammals until determined to be in good health. Communicable disease conditions in a newly acquired marine mammal must be treated before it is placed with other resident marine mammals.

Any marine mammal exposed to a diseased animal shall be isolated for observation for a period of time as determined by the attending veterinarian. All injured dolphins shall be removed from the primary enclosure and placed in the quarantine area until treatment has been completed and health restored. No additional animal shall be introduced into the quarantine area prior to such cleaning and sanitizing procedures prescribed by the attending veterinarian.

#### **9.4 Dolphin Sanctuary Area**

A sanctuary area shall be provided for the dolphin(s) should they wish to terminate any human/dolphin interaction or terminate their participation in any programme. Food rations should not be withheld from the dolphins if they do not interact with the public during encounters and enter either the buffer or sanctuary areas.

#### **9.5 Contingency Plan**

A contingency plan for animals shall be required for exceptional circumstances such as changes in water quality and natural disasters and shall be submitted to NEPA prior to the commencement of an authorized programme.

### **10.0 Public Contact with Dolphins**

All dolphins participating in the interactive sessions must be in good health and must not be undergoing treatment for an infection or illness.

All dolphins must be handled in an appropriate manner in order to minimize risk of harm to the public or the dolphins.

If guests are visibly harassing a dolphin, the animal must be taken out of the programme.

#### **10.1 Education programme**

An education programme on the dolphin's biology and natural history, marine environment and conservation, and the relationships of dolphins and other marine animals to their natural environment shall be developed and implemented for both staff and guests. The facility shall provide the basic information for the education programme.

#### **10.2 Liability Insurance**

A Public Liability Insurance Policy shall be required under the Jamaica Tourist Board Act, 1985. A copy of the Policy must be submitted to TPDCo and the NEPA and other relevant documents as required for the operation of this type of attraction.

## **11.0 Swim-with-the dolphin (SWTD) standards**

All SWTD programmes shall limit interaction between dolphins and humans so that the interaction does not harm the dolphins, does not remove the element of choice from the dolphins by actions such as recalling the animal from the sanctuary area, and does not elicit unsatisfactory, undesirable or unsafe behaviours from the dolphins. All SWTD programmes shall prohibit grasping or holding of the dolphin's body unless under the direct supervision and explicit instruction of an attendant.

- The primary enclosure for SWTD shall contain an interactive area, a buffer area and a sanctuary area. Movement of the dolphins into the buffer or sanctuary area shall not be restricted in any way.
- All SWTD programme interactive sessions shall have at least two attendants or other authorized SWTD personnel (i.e. head trainer/behaviourist or trainer/supervising attendant). At least one attendant shall be positioned out of the water. One or more attendants or other authorized SWTD personnel may be positioned in the water.
- At least one member of staff shall monitor activities from deck-side, out of the water, during each SWTD programme.
- Each dolphin shall not exceed two (2) hours per day exposure to human swim participants and each session must not exceed 30 minutes, and each participating dolphin must have at least one rest period in each 24 hours of at least 10 continuous hours without public interaction.
- Dolphins which because of old age or displays of unsafe behaviour are no longer suitable for the programme shall be cared for in the sanctuary area or re-exported.
- A dolphin that has exhibited unsafe behaviour and has been deemed unsuitable for SWTD programmes should not be maintained in the primary enclosure when SWTD sessions occur. The dolphin should be relocated to the quarantine area.
- Daily observation of the dolphin(s) shall be made by the person in charge of the mammals or a member of staff working under his/her direct supervision.

In determining the minimum space required in each area, four factors must be satisfied: the horizontal dimension, depth, volume, and surface area.

- The horizontal dimension (HD) (the diameter of a circular pool of water) for each area shall be at least three times the average body length of the dolphin. To determine the size of a rectangular shaped pool, increase the calculated HD by 20% to find the length and decrease the calculated HD by 20% to find the width.

- The minimum surface area (floor area) required for each area is calculated as for:

(a) Two dolphins:

$$\text{Surface Area (SA)} = \left( \frac{3 \times \text{average adult body length (L)}}{2} \right)^2 \times 3.14 = 53.04\text{m}^2$$

(b) Three dolphins =  $\frac{(3L)^2 \times 3.14}{2} = 106.08\text{m}^2$

(c) Additional SA for each animal in excess of three SA =  $\frac{(2L)^2 \times 3.14}{2} = 23.57 \text{ m}^2$

- The average depth for sea pens, lagoons, ponds and similar natural enclosures at low tide shall be at least 2.74 metres (9 feet). Also, the average depth of any man-made enclosure or other structure not subject to tidal action shall be at least 2.74 metres (9 feet).
- The minimum volume required for each animal is = S A x 2.74m
- The ratio of human participants to dolphins in the SWTD shall not exceed 3:1. The ratio of human participants to attendants or head trainer/behaviourist or trainer/supervising attendant shall not exceed 3:1. A description of any changes made in the SWTD programme shall be submitted to the NRCA at least 60 days prior to programme implementation.

## 12.0 Swim-with-encounter Programmes

Swim-with encounters require an educational presentation at the edge of the primary enclosure before the interactive (petting) session can take place.

- The ratio of human participants in swim-with-encounters shall not exceed 10:1.
- All swim with encounter interactive sessions shall have at least two attendants or other authorized swim-with-encounter personnel (i.e. head trainer/behaviourist or trainer/supervising attendant). At least one attendant shall be positioned out of the water. One or more attendants or other authorized personnel may be positioned in the water.

## 13.0 Touch Programmes

The dolphin touch programme requires educational presentation with the dolphins at the edge of the enclosure. This programme includes the petting of the animal and excludes any other direct contact with the dolphin(s) by a human while swimming.

- Dolphins that exhibit any undesirable behaviour shall be removed immediately from the dolphin touch programmes.

- All touch programmes shall have at least one attendant or other authorized touch programme personnel (i.e. head trainer/behaviourist or trainer/supervising attendant). The attendant or other authorized personnel shall be positioned in the water.
- The human participant/dolphin ratio for the dolphin touch programme shall not exceed 10:1 and the dolphin touch programme shall not exceed 45 minutes duration.

**APPENDIX I.**

**Water Quality Standards and Testing Schedule for Dolphin Facilities**

<b>Dolphin Guidelines</b>	<b>Frequency</b>	<b>Criteria</b>	<b>Rational</b>
Biochemical Oxygen Demand	Monthly	1.16mg/l	Ensure no fouling of water from activities within dolphin enclosure and land-based activities at the facility. e.g. excreta and any left over food given to animals.
Faecal Coliform Bacteria	a. Every two weeks. If any single sample exceeds 400 MPN/100m, then,  b. Re-sample within 5 days of the first sample. If sample still exceed 400 MPN/100ml, then,  c. Sample every 7 days for one month to ensure that conditions return to normal	At least 75% of samples analysed must be <100 MPN/100ml	Recreational health standard currently used by Blue Flag Programme
Phosphate(PO <sub>4</sub> )	Monthly	Must not exceed historical average for area  (To be established jointly by NEPA and proponent from 6 months of monitoring data)	To assess for impacts from facility.
Nitrate (NO <sub>3</sub> )	Monthly	Must not exceed historical average for area  (To be established jointly by NEPA and proponent from 6 months of monitoring data)	To assess for impacts from facility

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