

# UK LEGISLATION

## "ANNEX G

### SUPPLEMENT TO THE SECRETARY OF STATE'S STANDARDS OF MODERN ZOO PRACTICE

#### **ADDITIONAL STANDARDS FOR UK CETACEAN KEEPING**

These standards include requirements for the keeping of cetaceans, of whatever origin and for whatever purpose. They are intended to supplement the Secretary of the Code of Practice issued by the Health and Safety Executive relating to safety, health and welfare standards for employers and persons at work in zoos under the Health and Safety at Work etc. Act 1974, and the requirements of any other relevant legislation.

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#### **Index to STANDARDS for UK Cetacean Keeping**

- (1) Strandings-S (a-e).
- (2) Construction-C (a-g).
- (3) Water, power and fuel supply emergencies-W (a-c).
- (4) Drainage-D (a-c).
- (5) Storage-ST (a).
- (6) Waste Disposal-WD (a-b).
- (7) Staff Facilities-SF (a-c).
- (8) Space Requirements-SR (a-h).
- (9) Food and Feeding-FO (a-e).
- (10) Aquatic Environment-AE (a-h).
- (11) General Hygiene-GH (a).
- (12) Staff-SA (a-f).
- (13) Separation-SE (a-c).

- (14) Veterinary care-V (a-c).
  - (15) Handling-H (a-b).
  - (16) Transport-T (a-f).
  - (17) Record keeping and publication-RK (a-b).
  - (18) Disposal-DI (a-b).
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(1) STANDINGS (S)

- S (a) Without prejudice to any legal requirements, the Secretary of State's Standards need not apply to emergency arrangements for the nursing of live stranded animals, provided that this is carried out under experienced veterinary supervision, in a manner which presents no risk to the health of any other animal or person, and does not cause unnecessary suffering by prolonging the lives of animals which are obviously diseased, damaged or stressed.
- S (b) Such arrangements may continue for no more than 30 days. Animals which are not well enough for release must then receive care in establishments which fully comply with these Standards.
- S (c) If such facilities are not readily available, without any risk to existing animals, stranded animals with a clear chance of sufficient recovery for release within the next 30 days may continue to be held in the emergency accommodation for up to a further 30 days.
- S (d) If it is obvious at the time of the stranding that no facilities which fully comply with these Standards will be available for the longer term care of the animals, only animals likely to recover within 30 days may be taken to emergency accommodation. All other animals, and those in emergency accommodation which have not recovered after 60 days, must be humanely destroyed, to prevent further suffering.
- S (e) Rescued animals in emergency accommodation may not be displayed to the public.

- S (f) All such animals, and their fate, must be promptly reported to the British Museum (Natural History).

(2) CONSTRUCTION (CO)

- CO (a) Accommodation for cetaceans shall be of sound construction, and maintained in good repair.

- CO (b) Open-air accommodation:

Cetaceans may only be kept in open-air accommodation if the air and water temperature fluctuations are unlikely to result in health or hygiene problems for the animals.

Open-air pools must always be ice-free

- CO (c) Indoor accommodation:

Adequate fresh-air ventilation is required, with a minimum of 10 air changes an hour for air conditioned areas and 20 air changes an hour otherwise.

Measures must be taken to ensure that there are no fumes from water treatment chemicals or other sources, or strong odours.

Lighting must be adequate for routine health and hygiene checks and for cleaning. Artificial light should be in a spectrum as close as possible to that of sunlight and the intensity must not be such as to cause discomfort or distress.

Light and dark must be supplied for periods, in accordance with the seasonal variations of the natural photoperiod.

- CO (d) Cetaceans shall be protected from harassment, including excessive noise.

Recreational swimming with the animals may only be permitted on specific veterinary advice related to the persons concerned, and with adequate insurance cover for this activity.

Cetacean pools will be reserved for the cetaceans and not normally used for any other purpose.

- CO (e) Pools shall be constructed of materials having a durable, non-toxic, non-porous, waterproof finish, which shall facilitate proper cleaning and disinfection.

Pools shall be designed so that there are no areas with inadequate water circulation.

New pools must be tested during initial use, and all pools must be thoroughly tested every year to check that full water circulation to all areas is being achieved. Immediate steps must be taken to remedy any problems.

Pools must not contain any furniture, apparatus, decoration or other things, which would interfere with the welfare of the animals or with efficient husbandry.

CO (f) Immediate pool surrounds shall be constructed so as to facilitate proper cleaning and disinfection.

No objects, furniture, apparatus, decoration, plants, or other things which could interfere with the welfare of the animals or with efficient husbandry shall be kept, or allowed to remain, in the immediate surroundings of pools.

CO (g) Particular care must be taken during construction and maintenance work, so that animals are not exposed to excessive noise and no foreign bodies, or material, enter pools or are left unattended in the immediate surroundings of pools.

(3) WATER, POWER AND FUEL SUPPLY, AND EMERGENCIES (W)

W (a) Supply of water, power and fuel must be reliable and sufficient to maintain the conditions, including safe storage of food, necessary for the animal's welfare in all circumstances; including readily available alternative provisions for emergencies.

W (b) Alternative emergency accommodation must be arranged in advance, and with the approval of the relevant authorities, to which animals can be taken in the event of total failure of equipment, pools or other emergencies. Any emergency moves must be notified to the relevant authorities, in advance if possible, but in any case at the earliest practicable opportunity.

W (c) Establishments must have advance plans to cope with any foreseeable problems, including industrial disputes and financial difficulties, which might put the animals at risk.

(4) DRAINAGE (D)

D (a) Adequate drainage shall exist for all pools, arranged so that all water can be rapidly eliminated, in a manner which complies with all applicable regulations.

D (b) Drainage must be provided for areas surrounding pools, such that water from these areas will not enter or re-enter pools.

D (c) Waste water and soil/roof run off water must be kept separate from pools.

(5) STORAGE (ST)

ST (a) Safe and suitable storage shall be provided for food supplements, for any medical supplies, for any medical supplies, for water treatment materials and for any other required materials.

(6) WASTE DISPOSAL (WD)

WD (a) In particular, all waste (food remains, faeces, etc.) must be removed from the pool, and from water processing equipment other than the filters, at least daily in order to prevent contamination and infection. Filters must be backwashed as necessary to maintain water quality and there must be suitable arrangements for the disposal of this waste and water.

WD (b) Precautions must be taken to prevent any foreign bodies entering pools. Pools must be thoroughly checked for foreign bodies at least twice a day and animals may be trained to cooperate in keeping pools free of foreign bodies, at the discretion of the establishment and of their veterinary advisors.

(7) STAFF FACILITIES (SF)

SF (a) Showers, lavatories and washbasins must be provided for staff, to ensure the cleanliness necessary for the well-being of the animals.

SF (b) These facilities, and any other staff areas, must be kept clean, tidy and in good repair.

SF (c) Clean uniforms, where appropriate, and protective clothing must be supplied for staff.

(8) STAFF REQUIREMENTS (SR)

In order to provide sufficient space both horizontally and vertically to enable the animals to take exercise, to protect animals from undue dominance or conflict, and to provide for their other needs, enclosures must be provided as follows:

SR (a) General Standards

Each species must be held in social groups typical of that species and only species which are known to be compatible may be held together.

Holding pens, if provided, may only be used briefly, except on direct veterinary advice. Animals should have access to as much water space as possible at all times.

For the purpose of determining dimensions of enclosures for captive Cetacea the average adult body lengths of the « reference species » Tursiops truncatus and Orcinus orca are to be taken as 3.5 metres and 7.5 metres respectively.

SR (b) Width and Breadth

The standard for minimum width and breadth of cetacean pools is based upon the concept of **MINIMUM HORIZONTAL DIMENSION (MHD)** which is defined as:-

‘The diameter of a circular enclosure, or in the case of enclosures of other shapes, the diameter of the largest circle that can be inserted within such an enclosure. Enclosures may be reduced by up to 20% of MHD in one direction providing the same percentage increase is added the MHD at the 90 degree angle. Volume, depth and surface area criteria (if specified) must still be matched.’

This results in MHD for the two ‘reference species’ of:

Tursiops truncatus – 7.0 metres

Orcinus orca – 15.0 metres

SR (c) Volume of primary enclosures

The minimum volume for any primary enclosure (PEV) in which Cetacea are held should not be less than 1,000m<sup>3</sup>.

The minimum volume for a primary enclosure (PEV) containing up to five bottlenose dolphins (Tursiops truncatus) should be 1,000m<sup>3</sup> with each additional animal over five requiring a further 200m<sup>3</sup>.

The minimum volume for a primary enclosure (PEV) containing up to five killer whales (Orcinus orca) should be 12,000m<sup>3</sup> with each additional animal over five requiring a further 2,500m<sup>3</sup>.

Where the Primary Enclosure Volume (PEV) is obtained by the linking of a complex of more than one identifiable enclosure, each must conform to the MHD requirement and the aggregate of the dimensions of these enclosures shall not be less than that of a single enclosure of the required minimum standard.

SR (d) Depth of primary enclosures

Depth of enclosures should be calculated on a similar basis to that for MHD. The **Minimum Vertical Dimension (MVD)** for the area necessary to achieve the minimum volume standard for the species should be equivalent to twice the average body length of the species concerned. Enclosure depths may be varied by up to 20% of the **MVD** to provide a **Minimum Average Enclosure Depth (MAED)** over that area of the pool. The **MAED** for the two ‘reference species’ shall be:

Tursiops truncatus – 5.6 metres  
Orcinus orca – 12 metres

SR (e) Other species:

The accommodation for other species of cetacean must be calculated in accordance with the principles set out in SR (a-d) above.

(f) Mixed species groups :

Where a mixture of species is to be held in the same enclosure, the volume requirements should be the sum of the individual animal volumes for each species times the number of animals of each species held, but subject to the overriding minima required in SR (b-e) above.

(g) Medical facilities :

In addition, all establishments will provide facilities for the medical care of animals. Hospital facilities may contain pools of less than the minimum dimensions, but with due regard for the volumes necessary for water processing in isolation, and must allow easy handling and medication.

(h) Variations :

Shallower areas than those set out in the minimum dimensions may be provided in addition, if indicated by the biology and behaviour of the species held, or by special husbandry requirements.

If other accommodation is required as an integral part of a research proposal, temporary variations might be permitted.

(9) FOOD AND FEEDING (FO)

FO (a) General:

Food for cetaceans shall be wholesome, palatable, and of a standard fit for consumption.

It must be given to the animals in sufficient quantities and its nutritional value, as determined by previous analysis of each batch, must be sufficient to keep the animals healthy. The diet shall be prepared with consideration for species, age, condition, activity, and water and air temperature.

Animals should be weighed and measured regularly (at three monthly intervals subject to veterinary advice) and the results recorded and compared with the expected normal body development for the species. Any necessary changes in the

feeding of individuals in the light of these results must be made. Animals may be trained to cooperate with weighing and measuring, at the discretion of the establishment and of its veterinary advisers.

FO (b) Food:

Food species must be quick-frozen, as soon as practicable after catching, and packaged in containers which are impervious to air and water.

Sufficient quantities of food must be kept on hand to guard against problems with supply, but stocks must be rotated and not stored for excessive periods.

Frozen food must be stored in freezers at a maximum temperature of  $-18^{\circ}\text{C}$ , but preferably kept in the range of  $-25^{\circ}$  to  $-30^{\circ}\text{C}$ .

Food species should be obtained, as far as possible, at seasons when their value as food for cetaceans is optimal.

FO (c) Food preparation:

All chemical and bacterial contamination must be avoided when preparing food.

The thawing and preparation of food must be done in a manner which will assure that the food retains its nutritive and wholesome quality.

The thawed product shall be kept refrigerated until a reasonable time before feeding.

All foods shall be fed to the animals within 24 hours of removal from freezers for thawing, or properly discarded. Discarded food must not be kept, even temporarily, in fresh food storage areas.

Food supplements should be added to the diet in accordance with veterinary advice.

Food supplements must be handled, stored, and stocks rotated, in an appropriate manner.

FO (d) Feeding:

Animals must be offered foods at least twice a day, except on veterinary instructions.

Animals must be individually fed, by a trained person who must be sufficiently competent to see that each animal receives an appropriated quantity of food, and to observe variations in eating habits in order to ensure good health.



Feeding by the public shall only be permitted on veterinary advice and must only be done in the presence and under the supervision of at least two experienced, uniformed staff. Only food supplied by the establishment may be fed to animals.

The food taken by each animal at each feed must be recorded, as well as any variations in feeding behaviour.

FO (e) Hygiene :

All utensils used in the preparation and distribution of food must be cleaned after use. The kitchens and areas for handling food must be washed down daily and treated with cleaning products (e.g. hot water, detergents, disinfectants, etc.). Such products must not be harmful to animals, and must not be stored in areas used for storing food.

(10) THE AQUATIC ENVIRONMENT (AE)

AE (a) General:

The pools shall not contain water which would be detrimental to the health of the animals contained therein.

The coliform bacteria content of the pool must not exceed 100 MPN (most probable number) per 100ml of water. Should the count exceed this level, the condition must be corrected immediately.

The levels of fungi and other pathogens, as well as of nitrogenous compounds, in pools must be low. Should higher levels be observed, the condition must be corrected immediately.

When the water is chemically treated, the chemicals shall be added so as not to cause harm or discomfort to the animals.

Closed systems:

AE (b) pH:

The pH of pool water must be maintained within the range 7.6-8.0, with a normal guide level of 7.8.

AE (c) Salinity:

For marine species, salt content of the pool water must be maintained near the average normally encountered by the species in the wild, and in any case within the upper region of the range 1.5-3.5%.

AE (d) Operating policy:

Establishments must determine all the normal operating water treatment parameters and investigate promptly if these are not being achieved.

Establishments must have a clear policy on pool water renewal if specific bacterial and pathogen content, nitrogenous compound content, combined chlorine content or any other limits are exceeded, and cannot be brought under control within a specified period.

Establishments must determine these limits, except those mentioned above, and periods in the light of their experience with their system but the limits should not be far outside the normal operating range, and the periods hours or, at most, days.

AE (e) Training:

Establishments must ensure that all relevant staff are thoroughly instructed in the theory and practice of water treatment at the establishment, as well as in the general theory and practice of water treatment in cetacean pools.

AE (f) The contents of grids, meshes, skimmers and similar equipment must be carefully monitored, as well as in the general theory and practice of water treatment in cetacean pools.

AE (g) Water treatment equipment must have sufficient extra provision to allow efficient processing to continue during maintenance and partial breakdowns.

Open systems:

AE (h) Establishments using untreated water in open systems must monitor water quality closely.

Daily checks of the water for pathogens, nitrogenous compounds and other pollutants, pH and salinity must be made.

Operating parameters for water quality must be set up, and if these are impossible to maintain at any time, water must be treated. There must, therefore, be provision of sufficient water treatment equipment to ensure the maintenance of water quality at all times.

(11) GENERAL HYGIENE (GH)

GH (a) Any pool containing an animal with an infectious or contagious disease must be operated in isolation from the rest of the system.

Such a pool, related equipment and surroundings, must be cleaned and disinfected after the removal of the animal, as directed by the veterinary advisers, before any other animal is admitted to the area.

(12) STAFF (SA)

- SA (a) A sufficient number of adequately trained and competent staff must be employed to maintain the prescribed level of husbandry at all times.
- SA (b) Staff must be encouraged to improve their knowledge and practical skills through recognised training courses and a clear professional career structure.
- SA (c) The senior staff in day to day contact with the animals must have representation at the highest management levels, to ensure full consideration of the needs of the animals, and authority to call for veterinary advice when required.
- SA (d) Any training of cetaceans shall be done by or under the personal supervision of experienced trainers.
- SA (e) Records will be kept of the behaviour of each individual at each training session and at each performance.
- SA (f) All trainers and other required details must be registered under the Performing Animals (Regulation) Act 1925.

(13) SEPARATION (SE)

- SE (a) Animals which are not compatible shall not be housed in the same enclosure.
- SE (b) Animals must be given access to other compatible animals, except when temporarily maintained in isolation on medical advice.
- SE (c) No single specimens of any species may be kept.

(14) VETERINARY CARE (V)

- V (a) A daily report must be made concerning the health and behaviour of each animal.
- V (b) Any unusual or interesting behaviour noted by any staff during the day must be recorded and included in the daily reports.
- V (c) A complete post mortem examination by a veterinary surgeon or practitioner, with training and experience of animal pathology, must be carried out on all dead animals. Copies of the reports must be kept by establishments and submitted to the appropriate authorities.

(15) HANDLING (H)

- H (a) Handling cetaceans shall be kept to a minimum and shall be carried out as expeditiously and carefully as possible, in a manner that does not cause unnecessary discomfort, overheating, behavioural stress, or physical harm.

Animals should be trained to cooperate with handling and with regular veterinary procedures.

- H (b) Animals may only be displayed for periods of time and under conditions consistent with their good health and welfare, as determined by the veterinary advisers.

In particular, precautions must be taken to prevent visitors transmitting any pathogens to the animals.

(16) TRANSPORT (T)

- T (a) Except in emergency, only animals certified by an experienced veterinary surgeon or practitioner to be capable of withstanding the journey, may be transported.

- T (b) Except in emergency, no animals may be moved unless all the circumstances at the present and proposed accommodation have been taken into account.

- T (c) At least two suitably trained attendants must accompany every consignment and each attendant must have no more than two animals in their care.

- T (d) Attendants must have the means and the authority to deal with unexpected problems arising en route.

- T (e) Animals should not be kept in transport containers for longer than 24 hours, although for longer journeys this period may be extended on veterinary advice.

- T (f) For all transport, advance arrangements must be made at points along the route for animals to be removed to suitable water enclosures if holdups or health problems develop.

(17) RECORD KEEPING AND PUBLICATION (RK)

- RK (a) Except in emergency, only animals certified by an experienced veterinary surgeon or practitioner to be capable of withstanding the journey, may be transported.

All papers and other information pertaining to each animal from previous locations must be kept safely.

Permanent back-up copies of all records will be kept and stored safely.

Animals moving to new locations will be accompanied by copies of all records relevant to those animals.

RK (b) The records will provide at least the following information:

The correct identification, scientific name and any personal name(s) and identity number (s);

The origin (i.e. Details of the wild population and social group or of the parents and their origin, and of any previous location);

The dates of acquisition and disposal, with details of circumstances and addresses;

The date or estimated date of birth;

Any distinctive markings;

Clinical data, including details of and dates when any form of treatment was given, results of routine health examinations and the daily health reports;

Growth and development, including weight and length on arrival and the routine weight and length measurements;

Social behaviour and social status, including any incompatibility and conflicts and the daily behaviour reports;

Temperament and response to training and handling, and the daily training report;

Breeding, and the details of any offspring; and

The date of death and the results of the post mortem reports.

(18) DISPOSAL (DI)

DI (a) Animals may not normally be sent to establishments which do not fully comply with these Standards.

DI (b) Exceptions might be made where no suitable accommodation is available and the current circumstances of the animal would be significantly improved by such a move.