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## GENERAL NOTICE

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### NOTICE 1567 OF 2009

#### DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND TOURISM

#### NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT, 2004 (ACT NO. 10 OF 2004)

#### DRAFT MINIMUM STANDARDS FOR THE MANAGEMENT OF CAPTIVE ELEPHANTS

I, Buyelwa Patience Sonjica, Minister of Water and Environmental Affairs, hereby publish in terms of Section 9(1)(a) read with Section 100 of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) for public comment the draft Minimum Standards for the Management of Captive Elephants in the Schedule hereto, as Schedule VII of the national Norms and Standards for the Management of Elephants in South Africa.

Any person who wishes to submit written representations and/or objections to the proposed minimum standards is invited to do so within 30 days of the publication of this notice. All representations and comments must be submitted in writing to the Director-General of the Department of Environmental Affairs:

By post to:           The Director-General: Environmental Affairs and Tourism  
                          Attention: Ms Olga Kumalo  
                          Private Bag X447  
                          Pretoria, 0001

Delivered to:       The Department of Environmental Affairs and Tourism  
                          Attention: Ms Olga Kumalo  
                          Fedsure Forum  
                          North Tower (Room 1212)  
                          315 Pretorius Street  
                          **PRETORIA**

By fax to: (012) 320 7026, and by e-mail to [okumalo@deat.gov.za](mailto:okumalo@deat.gov.za)

Any inquiries in connection with the draft minimum standards can be directed to Ms Olga Kumalo at Tel. (012) 310-3573. Comments received after the closing date may not be considered



BUYELWA SONJICA

MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS

## SCHEDULE

### ANNEXURE VII

#### MINIMUM STANDARDS FOR THE MANAGEMENT OF CAPTIVE ELEPHANTS

##### Section A: Application and purpose

- 1.1 The purpose of these minimum standards is to ensure that elephants are kept and managed in captivity in such a way that:
- (i) social groups are not unnecessarily disrupted;
  - (ii) characteristics and requirements of the species are acknowledged;
  - (iii) a potential threat to the well-being of people is minimized;
  - (iv) it is informed by the best available scientific information;
  - (v) stress and disturbance to elephants are avoided;
  - (vi) the continued important role they play in the nature-based tourism sector does not occur in an inappropriate, inhumane or unethical form or manner; and
  - (vii) they are safeguarded from abuse and neglect.
- 1.2 Where sufficient scientific information is not available, the Precautionary Principle should apply in favour of biodiversity, human safety and care of elephants.
- 1.3 These minimum standards apply to all elephants being kept in captivity.

##### Section B: Requirements for captive elephants

#### 2. Social dynamics

Elephants are highly social animals that live in a matriarchal society with two distinct social organizations (males and cow-calf or breeding herds) with separate behavioral traits. Protection and promotion of elephants' matriarchal clan society is essential to their welfare in captivity.

##### 2.1 Conspecific herds

Elephants must be held in social groups of conspecifics (Asian elephant with Asian elephant and African elephant with African elephant; Clubb and Mason *in press*). Acceptable exceptions are those elephants that are not conspecifics but have formed strong bonds with one another. Bonded animals demonstrate a high level of affiliative behavior such as seeking close physical contact and/or proximity to another on a regular basis and simultaneously demonstrate low levels of agonistic behavior to the other.

**2.2 Minimum cow/calf herd size**

Females tend to form different social groups, including adult female groups or female and calve groups, which must be kept in stable social groups.

- (i) African savanna elephants must be held in groups not smaller than 10 (ten) adults;
- (ii) African woodland and Asian elephants must be held in groups not smaller than 5 (five) adults.

**2.3 Cow/calf herd stability**

- (i) Female calves should never be separated from their mothers.
- (ii) Related females should never be separated from one other.
- (iii) Male calves must not be separated from their mothers before reaching sexual maturity unless the calf exhibits behavior, whether play-fighting or other form of aggression that risks injury to its mother or other herd members.

**2.4 Bonded individuals**

Bonded individuals, conspecific or non-conspecific, must be kept in a socially integrated context in the same physical space and must not be separated from one another.

**2.5 Males and females**

Those institutions electing to hold both males and females must provide separate facilities, including separate night quarters and yards for males, as well as the option of common housing and yards for males and females.

**3. Nutrition and water**

Elephants must have access to clean, fresh water and a diet designed to maintain health and promote a positive state of well being. Feed and browse must be distributed in a way that promotes full employment of each herd member's appetitive foraging behavior. Free access to water for consumption and bathing is also essential.

**3.1 Nutrition****3.1.1 Feeds**

Elephants must be provided a wholesome, nutritionally complete and balanced diet composed of concentrated feeds (grain and vegetables), grass hays, pasture and living and cut browse.

**3.1.2 Free access to feed or browse**

Hays and fresh browse must be provided in a manner calculated to permit each herd member to engage in non-competitive, appetitive foraging behavior for at least 16 hours per day.

**3.1.3 Nutrients/minerals**

Managers must be aware of mineral deficiencies and excesses in the elephants' diet and must correct them appropriately. When more nutrition information becomes available for elephants, managers must adjust the elephants' diets accordingly.

**3.2 Water****3.2.1 Water supply**

- (i) Elephants must have free continuous access to clean, fresh water at all times, whether elephants are indoors or outdoors.
- (ii) Watering equipment must be kept clean and designed, constructed, placed and maintained to minimize contamination.
- (iii) Placement of water troughs must not result in wetting/fouling of bedding or resting areas.

**3.2.2 Emergency water supply**

A generator or other backup energy source must be in place to ensure that an alternative supply of suitable drinking water is available in case normal supplies fail (e.g. power blackout). Alternatively, there must be a backup plan in place for obtaining water in case of emergency.

**4. Housing, enclosures and handling facilities**

The physical environment in which captive elephants are held must account for their welfare by protecting them from physical discomfort, fear and distress, and simultaneously promote their physical and psychological health and expression of a full range of species-appropriate behaviors.

**4.1 Building design and maintenance**

The keeping facility may not be designed or constructed in such a way that it may cause injuries to the elephant. Injuries are defined as any physical trauma or risk of physical trauma, including but not limited to eyes, ears or trunk tip, or damage to tissue severe enough for the formation of granular scar tissue, or injuries requiring surgical intervention, including debriding procedures.

**4.2 Limiting use of toxic substances in buildings**

Elephants must not be subjected to close contact with toxic materials, surfaces or fumes, such as paints, preservatives or disinfectants.

**4.3 Electrical installations/lighting**

- (i) Electrical installations must be inaccessible to the elephants, well insulated, safeguarded from potential damage, properly grounded, and inspected and tested at least every six months.
- (ii) Lighting levels must be adequate to ensure staff safety.

**4.4 Elephant Restraint Device (ERD)**

- (i) Each facility must be equipped with an ERD subject to routine maintenance, testing and inspection.
- (ii) The ERD must not be in the same enclosure as where elephants are kept overnight.
- (iii) The ERD should offer protection from extreme weather conditions such as wind, rain, and temperature fluctuations.
- (iv) It is recommended that the restraint device open widely enough to allow an elephant to lie down if necessary.
- (v) An ERD should be accessible from multiple holding areas, especially quarantine or isolation/sick stall.
- (vi) Elephants must not be contained in the ERD for purposes other than for veterinary treatment or emergency purposes.

**4.5 Keeper/Staff access**

Facilities must be designed to provide safe keeper/staff access to elephants in multiple areas. Access must include direct, tactile access to multiple animals at one time for husbandry and veterinary purposes, and must be appropriate for protected contact training (see, e.g., Rosenthal and Xanten 1996).

- (i) Facilities must be designed to provide sufficient, safe, shielded access to elephants in holding and transfer areas and exhibits. Amount, type, and location of shielding should be appropriate to the sex and temperament of the individual animals.
- (ii) All gates, hydraulic or manual, must be operated from keeper areas with clear sight lines from keeper area to gates.



- (iii) Facilities must allow for protected keeper access to elephants during the movement of animals between and within enclosures (Rosenthal and Xanten 1996).
- (iv) Facilities must provide necessary access points to carry out husbandry and veterinary procedures including: holes of different sizes and location to accommodate animals of different sizes and temperament; platforms to allow keepers easy access to elephants' eyes, ears, and back; foot holes that comfortably accommodate an elephant's foot during protracted foot work and allow adequate space for human hands, and save access for health assessment.
- (v) Facility design must allow keepers to work and move through the area without being within trunk reach of elephants. Facilities must allow keepers to interact with single or multiple elephants at the same time and at one location.
- (vi) Facilities must allow separation of individuals for training purposes and/or for animal safety or health purposes.
- (vii) Facilities must have multiple locations where staff may enter the elephants' space once elephants are safely and appropriately restrained for veterinary or emergency purposes.
- (viii) Facilities must be designed to have maximum visual access to elephants to monitor behavior.
- (ix) Holding areas must allow multiple options for separate or group housing to deal with social incompatibilities. Routine and frequent chaining is not an acceptable method for managing social interactions (Brockett, Stoinski, Black, Markowitz and Maple 1999).

#### **4.6 Facilitating introductions**

Appropriate facilities must be available to facilitate all phases of the introduction process of new members to the existing social group. Due to the multiple phases of introduction, including visual and olfactory contact only, to limited tactile contact, to greater tactile contact, to full physical contact, escape areas for animals to retreat to while the relationship is being established, must be available. Facilities must also allow keeper access to safely intervene to disrupt interactions that may lead to potential injury.

#### **4.7 Indoor space allowances**

- (i) Indoor facilities used only for overnight housing must provide at least 60 m<sup>2</sup> (650 ft<sup>2</sup>) of space for each female elephant and for any calf.
- (ii) Indoor facilities used for winter quarters must provide at least 185 m<sup>2</sup> (2000 ft<sup>2</sup>) of space for each female elephant and for any calf.

- (iii) Indoor facilities used only for overnight housing must provide at least 110 m<sup>2</sup> (1200 ft<sup>2</sup>) of space for each male elephant.
- (iv) Indoor facilities used for winter quarters shall provide at least 370 m<sup>2</sup> (4000 ft<sup>2</sup>) of space for each male elephant.

#### **4.8 Flooring**

- (i) Floors must be made of non-slip material, rubberized material or natural substrate and be maintained to reduce the risk of slipping. Ideally artificial flooring would have a rubberized or other coating providing a degree of flexibility, elasticity and thickness comparable to a natural substrate.
- (ii) Floors may not be so rough as to contribute to foot damage.
- (iii) Smooth concrete floors may be grooved or treated with a non-slip coating.
- (iv) Waterproof soft coverings or similar temporary floor covers must be provided to elephants confined to hard indoor surfaces for eight or more hours.
- (v) If floor temperature is regulated in winter enclosures, these temperatures must be moderate to prevent over-drying or burning of feet, nails, body pressure points or other vulnerable parts of the elephant's body.
- (vi) Floors must be graded to ensure good drainage.
- (vii) Floors must be cleaned with sufficient frequency to provide a clean, dry surface for a majority of the time that elephants are confined indoors.

#### **4.9 Special holding areas**

- (i) Each housing unit must include a separate isolation/quarantine area for sick or injured animals of sufficient size to permit the safe and effective delivery of veterinary care and the removal of the animal to a remote necropsy site should it die.
- (ii) The use of chains to restrict animals may only occur in the isolation/ quarantine area, and only for the purpose of delivering veterinary care or for emergency purposes.

#### **4.10 Loading facilities**

- (i) The design of the facility must include an area for loading and unloading of elephants.
- (ii) This area must readily accommodate the loading and unloading of a crate.
- (iii) This area must readily accommodate a rear or side-loading trailer.
- (iv) This loading area should be accessible to the quarantine/isolation area.

**4.11 Freedom of contact and movement**

- (i) The interior must be designed to promote freedom of contact between established group members.
- (ii) Interiors must be designed in a manner that provides a continual flow of movement or "free flow" with no dead ends.
- (iii) Design flexibility should include options allowing elephants to choose physical and visual privacy and barriers to meet their social needs.

**4.12 Confinement**

The interior must be designed to permit the option of confining an individual, pair or grouping to a particular space without preventing movement of the other elephants in and out of the barn.

**4.13 Thermal conditions**

- (i) During winter months, indoor ambient temperatures must be maintained at not less than 16° C (60 F) unless the elephant's behavior indicates a lower temperature is appropriate.
- (ii) Isolation/quarantine holding areas intended for veterinary use must be capable of being heated to 21° C (70 F).
- (iii) During warm weather, indoor ambient temperatures may not exceed 23.5° C (74 F). If ambient temperatures exceed 23.5° C (74 F), access to alternatives like an outdoor night corral or pool must be provided
- (iv) When temperatures fall below 4.5° C (40 F), elephants given access to the outside must be provided simultaneous indoor access or access to an outdoor area heated above 4.5° C (40 F).

**4.14 Ventilation**

- (i) Effective ventilation of all indoor spaces must be provided.
- (ii) Air movement must be at low velocity to avoid drafts and shall exclude ingress of rain or snow.

**4.15 Outdoor space allowances, design and maintenance**

- (i) Elephants must be allowed to stay outdoors as much as possible. Institutions must design keeping facilities that allow elephants free access to the outdoors day and night, in the absence of adverse weather, safety or health conditions.
- (ii) Outdoor exhibit space must be of sufficient size and complexity.

- (iii) Healthy elephants must have sufficient space to travel a minimum of 10 km (7 miles) on a daily basis while engaged in natural behavior such as foraging, feeding, exploring and socializing.
- (iv) All elephants must have access to useable pasture year round and grassy pasture for at least 6 months of the year.
- (v) A variety of substrates and substrate types must be provided including different types of clean dirt, mulch, sand, well-established grasses and sedges.
- (vi) Outdoor space must be graded for effective drainage (AZA 2003).
- (vii) Outdoor holding/exhibit spaces must include multiple dry areas capable of routine cleaning on which feed, minerals, etc., may be placed.
- (viii) Outdoor exhibit space must include a variety of slopes and terrain sufficient to allow and encourage significant muscular activity.
- (ix) Slopes and terrain must be of sufficient height to provide viewing vistas for the elephants
- (x) Configuration of the exhibit area must include destinations, such as quiet pools, trees, rock features, and options for the elephants to socialize or to avoid socializing.
- (xi) Outdoor space must be cleaned of solid waste at least once a day unless the space is large enough to allow pasture rotation (AZA 2003).
- (xii) Outdoor exhibit/holding areas must provide space to separate an individual to address behavioral issues or to provide safe and effective veterinary care.
- (xiii) Outdoor exhibit/holding areas must provide multiple sites for wet (mud) and dry (dust) wallows.

#### **4.16 Fencing**

- (i) Fencing, including doors and gates, must be maintained in good condition and must be capable of withstanding the force of an adult elephant.
- (ii) Doors and gates must be configured to prevent elephant escapes and to protect staff.
- (iii) All fencing or other containment systems must prevent contact between elephants and the public.
- (iv) Back-up generators must be on line to operate hydraulic or electrically powered doors or gates.

#### **4.17 Thermoregulation**

Outdoor holding and exhibit areas must provide elephants with a variety of options for thermoregulation to allow the elephant to maintain an appropriate core temperature.

**4.18 Wind breaks**

Effective windbreaks of sufficient height and density must be provided.

**4.19 Sun /Shade**

Sufficient shade from the sun, with or without wind, must be available whenever an elephant is on exhibit or in an outdoor-holding area.

**4.20 Outdoor water features**

- (i) All outdoor exhibit areas must provide access to one or more pools of sufficient size and depth to allow several adult elephants to submerge simultaneously.
- (ii) All outdoor pools must be equipped with high-volume filtration systems or other systems ensuring sufficient water exchange to avoid build-up of waste materials.
- (iii) Pools should have multiple entry points to prevent one elephant trapping another in the pool.
- (iv) Entry into the pools should be gradually stepped or sloped to allow elephants easy access, and should be surfaced to allow good footing while preventing foot or skin abrasions.

**4.21 Tactile**

- (i) Varied rubbing surfaces at varied heights must be installed in both indoor and outdoor exhibit areas. These are particularly useful if near a pool.
- (ii) Both wet and dry wallows must be provided in indoor and outdoor exhibit areas.

**4.22 Auditory**

Low frequency noise must be minimized due to elephants' sensitivity to these sounds.

**5. Training**

The following methods may not be used in the training of elephants:

- (i) Use of physical punishment or the instrumental application of pain or any other physical discomfort intended to reduce the occurrence of a behavior;
- (ii) Food, water or sleep deprivation;
- (iii) Instrumental use of electricity;
- (iv) Use of any objects to hit, poke, prod or coerce the elephant;

- (v) If all other methods have been exhausted, the use of negative reinforcement or undesirable stimulus if it inflicts pain upon or causes unnecessary suffering to the elephant.

## **6. Education/ Contact**

### **6.1 Exposure to contact**

- (i) Very strict security measures must be in place at all times to avoid the risk of injuries to members of the public, handlers or elephants.
- (ii) Every operator must ensure that only suitable elephants are to be used for contact.
- (iii) Elephants must be closely monitored to ensure that no sick or injured elephants are used in contact.
- (iv) Musth elephants must be managed in accordance with the management plan of the operation that will have been presented in accordance with the registration requirements in terms of the Threatened or Protected Species (TOPS) regulations.
- (v) Elephants must be given enough free time and must not be overused.
- (vi) Exposure to contact must be stimulating for the elephant as well.
- (vii) Exposure to contact must in no way increase the risk of injury to the elephant.

### **6.2 Education and conservation**

Education programs aimed at educating the public and youth through interactions with elephants must be carried out with respect to the elephants involved and due consideration to their well being.

### **6.3 The use of captive elephants in advertising and the Film Trade**

- (i) A registered Elephant Trainer must be present on set during scenes involving elephants.
- (ii) It is the responsibility of the Elephant Trainer and the animal care officer to ensure that no abuse of the elephants takes place during filming.

## **7. Identification and Monitoring**

### **7.1 Marking of captive elephants**

Each elephant should be individually identified by means of:

- (i) A combination of ear nicks, tears and holes and vein pattern. This can either be done by a drawing or by a good photograph, or both.

- (ii) Tusk peculiarities can be described, such as single tusks, asymmetrical tusk growth, tusklessness, broken tusks etc. Tusks alone are not a good identification marker as they may break off or grow and therefore change.
- (iii) Owners of captive/trained elephants should establish and maintain a database with the capacity to record the growth and development of individual elephants- preferably by way of a set of photographs.
- (iv) Other conspicuous markings such as tail shape, broken tail, trunk tip missing etc. can be noted to help identification.
- (v) A card system with a different card allocated to each individual will also make recognition in the field easier.
- (vi) This information must included in the management plans for captive elephants and be used by relevant authorities to monitor the ownership of captive elephants as prescribed and assist with any disputes in the case of an escaped elephant or of injury to humans.

## **7.2 Documentation and record-keeping**

Every elephant program must maintain the following written protocols, documentation and records:

- (i) Programmatic policies for elephant training and management;
- (ii) Written behavioral profile for each elephant that is updated annually;
- (iii) Written protocols for behaviors defined;
- (iv) Written protocols for keeper safety;
- (v) Emergency response protocol;
- (vi) Written daily exercise program for each individual animal;
- (vii) Written environmental enrichment plan, schedule for enrichment (weekly or monthly) and assessment of enrichment activities;
- (viii) Incident reports of any cases in which elephants show aggression towards keepers or the public, regardless if any injury actually results;
- (ix) Daily training records for each elephant;
- (x) Temporary records and/or charts to track specific behavioral problems or issues; and
- (xi) Daily behavioral, physiological, and health records including, but not limited to musth data, reproductive behavior and developmental behaviors.

## **8. Prohibited Practices**

The following practices are prohibited in any keeping facility:

- (i) The use of guides to intentionally puncture, lacerate or inflict harm upon an elephant;
- (ii) Restriction of an elephant's movement for a period of time longer than required to perform a necessary husbandry procedure, or to restrain elephants in transit;
- (iii) The retention or restriction of food or water;
- (iv) Sleep deprivation;
- (v) Insertion of any implement into any bodily orifice, unless directed by a veterinarian;
- (vi) Striking any part of the elephant's body with any object with the intention to cause bodily harm, pain or injury;
- (vii) Withholding veterinary care for any reason;
- (viii) Social isolation from other elephants of the group.

#### 9. RESTRICTION OF FACILITIES FOR THE CAPTIVE KEEPING OF ELEPHANTS

The captive keeping of elephants will be restricted to the following facilities only:

- (i) Elephant Back Safaris
  - (ii) Elephant Interaction Experiences
  - (iii) Both elephant back safaris and interaction
  - (iv) Commercial exhibition facilities (zoo's, circuses or travelling exhibitions)
  - (v) Rehabilitation facilities
  - (vi) Sanctuaries
-