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Ministry for Primary Industries
Manatū Ahu Matua

Guidance Document

Guidance Document

Generally Accepted Practice in New Zealand Zoo Containment Facilities

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Title

Guidance Document: Draft Guidance Document for Zoo Containment Facilities

About this document

This document has been developed as a guide to understanding and implementing the requirements set out in the Standard for Zoo Containment Facilities 2018 dated 1 July 2018 (the standard). It was prepared by MPI in collaboration with industry representatives. The document gives examples of how a zoo containment facility can meet the requirements of the standard. It does not replace the requirements contained in the standard.

Related Requirements
Standard for Zoo Containment Facilities 2018

Document history

Version	Version Date	Section Changed	Change(s) Description

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1 Purpose

1.1 Application

(1) This guidance document should be read in conjunction with the Standard for Zoo Containment Facilities 2018 (and by extension EPA Approval APP201517), issued by the Environmental Protection Authority (EPA), approved under section 11(1)(fc) of the Hazardous Substances and New Organisms Act 1996 (HSNO Act).

(2) The Standard for Zoo Containment Facilities is closely linked to the Biosecurity Act 1993 as there are a range of requirements and obligations set out under the Biosecurity Act that are relevant to the operation of a zoo containment facility. For example:

(a) A zoo containment facility must have an approved operator – *Biosecurity Act, section 40*

(b) New organisms held within a zoo containment facility may only be moved to another zoo containment facility, a zoo transitional facility, a biosecurity control area or be exported from New Zealand – *Biosecurity Act, section 29*

(c) An MPI inspector, or other person authorised to do so under the Biosecurity Act, may enter the zoo containment facility at any reasonable time to (among other things) inspect it for the purpose of determining whether this standard, is being complied with – *Biosecurity Act, sections 109 and 126*

(d) An MPI inspector may, in certain circumstances, give directions requiring an operator to remedy a non-compliance or unsatisfactory situation or, in an emergency or in special circumstances, intervene summarily in the management of a zoo containment facility – *Biosecurity Act, section 126.*

(3) **Tip:** refer to **Appendix 1** of this guidance document for a list of other relevant legislation. Note that Appendix 1 is not intended to be an exhaustive list. Other legislation not administered by MPI may also apply such as the Health and Safety at Work Act 2015. It is the responsibility of operators to understand and comply with all applicable legislation.

(4) This guidance document focuses on Part 2 of the Standard for Zoo Containment Facilities and follows the same structure for ease of reference.

1.2 Definitions

(1) Terms in this document have the same meaning as stated in the Standard for Zoo Containment Facilities and a few of them are included within the text in this guidance document where it makes things more easily understood.

1.3 Transitional Provisions

(1) The Standard for Zoo Containment Facilities 2018 came into force on 1 July 2018 and the transitional period ends on 30 June 2019.

(2) A zoo containment facility may, during the transitional period, comply with MAF Biosecurity New Zealand Standard 154.03.04 *Containment Facilities for Zoo Animals*.

2 Guidance on the Requirements for Zoo Containment

2.1 Commencement (Standard 2.1.1)

(1) The standard states that the standard comes into force on 1 July 2018, and replaces the MAF Biosecurity New Zealand Standard 154.03.04 Containment Facilities for Zoo Animals on that date – *Standard for Zoo Containment Facilities, clause 2.1.1.*

(2) No guidance for clause 2.1.1 of the standard (refer to clause 1.3 of this guidance document for transitional provisions).

2.2 Primary requirements (Standard 2.2.1 to 2.2.3)

(1) The **standard** states that the zoo containment facility must be constructed, maintained and operated in compliance with this standard at all times – *Standard for Zoo Containment Facilities, clause 2.2.1*.

(2) No guidance for clause 2.2.1 of the standard as it is covered in the rest of this guidance document.

(3) The **standard** states that the zoo containment facility must be operated in compliance with the requirements of the zoo containment facility's QMS as described in this standard at all times – *Standard for Zoo Containment Facilities, clause 2.2.2*.

(4) No guidance for clause 2.2.2 of the standard as it is covered in s2.9 of this guidance document.

(5) The **standard** states that new organisms held in the zoo containment facility must be held in containment at all times in the zoo containment facility, including during movement between containment areas, and to or from another zoo containment facility, zoo transitional facility, or biosecurity control area – *Standard for Zoo Containment Facilities, clause 2.2.3*.

(6) A **new organism** is defined in the standard as an organism for which an approval has been given under the HSNO Act for importation into containment.

(7) No new organism may be introduced or removed from the zoo containment facility except with written approval from MPI. The following guidance for the transfer of new organisms (in 2.1(10) below) excludes guidance on exporting them from New Zealand as requirements vary depending on the species of new organism and the country to which they are to be exported.

(8) Approval may be given for temporary transfer of a new organism outside of the zoo containment facility for any legitimate purpose, such as veterinary treatment, where the operator has supplied a proposal to the designated MPI inspector prior to moving the new organism, which describes:

  (a) The purpose of the transfer;

  (b) Details of the containment provisions associated with the transport and temporary holding enclosure; and

  (c) A contingency plan to deal with any incidents during the transport of the new organism or if there is an escape.

(9) It is generally accepted that temporary transfers for the purposes of emergency veterinary treatment are permitted without prior MPI approval but the MPI inspector should be notified as soon as practicable. The **standard**requires that general provisions for the containment of new organisms during temporary transfers are included in the QMS).

(10) The following process is recommended for the transfer of new organisms between zoo containment facilities in New Zealand:

(a) The operator applies to the designated MPI inspector prior to moving a new organism to another zoo containment facility or zoo transitional facility;

(b) MPI specifies any conditions in the authorised movement approval and the written authorisation accompanies the new organism during transit;

(c) The sending zoo containment facility provides the receiving facility with copies of all records relevant to the new organism, noting that it is generally accepted that records accompany the new organism and / or are transferred electronically no later than the day the new organism is transferred; and

(d) The transfer of the new organism is recorded in the registers of both facilities.

(e) **Tip**: Refer to the Live Animals IATA regulations for guidance on suitable transport enclosures.

(11) There are many requirements for the importation of a new organism into New Zealand, including but not limited to:

(a) Approval of the organism as a new organism for importation into containment under the Hazardous Substances and New Organisms (HSNO) Act 1996;

(b) A current import health standard to import the new organism from the country of origin; and

(c) A permit to import from MPI.

(12) Early discussion with MPI is suggested because MPI will need to be satisfied that the requirements of the import health standard will be met, and that the proposed zoo transitional facility and containment area for the new organism comply with the standard, before issuing a permit to import.

(13) The transportation of animals by air from overseas or within New Zealand has to meet the requirements of the International Air Transport Association (IATA) Live Animal Regulations, which include specifications for animal transport containers.

(14) It is generally accepted practice that all transfers of new organisms within New Zealand will be in animal transport containers meeting the specifications in the IATA Live Animal Regulations for the species being transported, which are clearly labelled with the name and contact details of both the sender and the recipient.

(15) New organisms that are moved between containment areas in a zoo containment facility should also be enclosed within suitable animal transport containers, unless under the direct control of an animal handler under conditions that have been approved by MPI. **A**nimals that are usually held in a containment area but are taken into the zoo by a handler, such as elephants or invertebrates, must meet the conditions and follow the operational procedures specified in the QMS for this purpose.

2.3 Design and construction (Standard 2.3.1 to 2.3.2)

(1) The **standard** states that the zoo containment facility, including all containment areas, must be designed, constructed, and maintained to ensure that new organisms are held in containment at all times, taking into account all reasonably foreseeable circumstances – *Standard for Zoo Containment Facilities, clause 2.3.1*.

(2) The **standard** states that the design and construction of the zoo containment facility (and any containment areas) must take into account the physical nature, health, and behavioural needs of the new organisms that are, or are intended to be, held in containment in the zoo containment facility – *Standard for Zoo Containment Facilities, clause 2.3.2.*

(3) The following definitions in the standard are useful for understanding these clauses:

(a) **Containment** means restricting a new organism to a secure location or facility to prevent escape of that new organism;

(b) **Containment facility** means a place approved by MPI in accordance with section 39(2A) of the Biosecurity Act, for holding new organisms that should not, whether for the time being or ever, become established in New Zealand; and

(c) **Containment area** means the specified place and / or conditions and operations within the zoo containment facility designated for a specified new organism to prevent escape of that new organism.

(4) A zoo containment facility is usually a building, such as an aquarium or butterfly house, or a zoo perimeter fence, which encloses all of the containment areas and / or new organisms. It is generally accepted that the primary purpose of a zoo perimeter fence is to prevent access by unauthorised persons and exclusion of pests, as much as practicable, but it may also prevent or deter new organisms from escaping from the containment facility if they are outside the designated containment area. **Tip:** the perimeter fence should not be the primary means of containing a new organism outside of the designated containment area unless it has been built to the specifications appropriate for containing that animal.

(5) In most cases, a zoo containment facility will have at least one containment area but it may be that the facility holds all of the new organisms, e.g. a butterfly house in a university; or some of the new organisms, e.g. free-ranging animals in a zoo.

(6) It is generally accepted that to be effective, the perimeter fence should:

(a) be a minimum of 1.8 metres high;

(b) be clearly separated from designated containment areas; and

(c) include a measure to prevent unauthorised persons easily climbing over it, such as being topped with electric fence wires or strands of barbed wire.

(7) A perimeter fence can be a solid wall, or a fence with mesh or solid cladding, and it should be maintained in a good state of repair (see clause 2.4.2 of this guidance document for advice on maintenance inspections).

(8) The first step in the design process for a containment area should be the decision on which species of new organism(s) it will hold and the following questions should be considered:

(a) Has the species been approved as a new organism for importation into containment under the Hazardous Substances and New Organisms (HSNO) Act 1996, by the Environmental Protection Authority?

(b) Is the species available from other New Zealand containment facilities or from a managed breeding programme, such as an Australasian Species Management Programme for members of the Zoo and Aquarium Association (ZAA) or similar international programme?

(c) Is there an Import Health Standard for the species and is an approved zoo transitional facility available if required?

(9) It is generally accepted that there will be supporting evidence, such as international guidelines, for the chosen design and that the design will not be solely driven by available space and budget.

(10) It is recommended that the design process for a containment area includes research into the physical nature, health and behavioural needs of the new organisms because the zoo containment facility is responsible for providing MPI with all evidence required to demonstrate that the containment area will effectively contain the new organisms that are intended to be held. The research may include:

(a) Review of published literature on the physical characteristics of the species, such as size and weight at all ages (including infants)

(b) Review of published literature on physical capability of the species, such as strength, speed, jumping distance and ability to climb or jump

(c) Review of published literature of the behaviour of the species in the wild, for example they may be solitary or live in groups, offspring may naturally disperse at a certain age, etc.

(d) Review of published guidelines for zoo containment areas and zoo animal husbandry, such as recommended enclosure dimensions and construction materials (see Appendix 1 for examples)

(e) Advice from other zoo containment facilities in New Zealand or zoos in other countries that hold the species or similar species, which may include observations through visiting the zoos, copies of plans of their containment areas, etc.

(11) **Tip:** refer to **Appendix 2** of this guidance document for useful references for zoo animal exhibit / containment area design.

(12) It is common practice for zoo containment facilities to have a set of design criteria to specify the information required for a new containment area, which may include:

(a) Budget

(b) Proposed location and size of the containment area

(c) Maximum number of new organisms to be held in the containment area

(d) Containment requirements, such as the height of fences, suitable materials, specifications for glazed viewing windows, etc. **Tip:** the containment requirements should be capable of preventing the escape of new organisms in any eventuality, such as when first released into a new enclosure

(e) Design features and equipment to protect workers and other persons from risks to their health, safety and welfare, as required under the Health and Safety at Work Act 2015

(f) Design features or equipment to facilitate veterinary treatment and health care, such as animal restraint areas

(g) Design features that allow animals to be separated, such as when a female is due to give birth or when a group breaks down

(h) Requirements to meet the welfare needs of the new organisms and ensure compliance with Animal Welfare (Zoos) Code of Welfare 2005, such as provision of drinking water, enclosure substrates, furnishings and behavioural enrichment methods. **Tip:** Caring for Wildlife: The World

Zoo and Aquarium Animal Welfare Strategy 2015 (www.waza.org) is suggested as a useful reference for considering animal welfare needs in the design process.

(13) **MPI strongly recommends** that they should be contacted at the design stage for a zoo containment facility and / or any associated containment areas, so that advice on compliance with the standard can be provided before construction commences. It is suggested that evidence supporting the decisions on the size, containment barriers and construction materials of the containment area design are provided at this time. This evidence may include:

(a) Summary outlining due diligence undertaken to gain confidence that the design will contain the new organisms

(b) References to international guidelines and peer reviewed scientific articles

(c) Reports from engineers and other qualified contractors, testifying design strength and resilience to degradation

(d) Summary of evidence that will be collected during the construction process, such as photographs of construction details that show adherence to the design plans.

(14) **Tip:** failing to contact MPI at the design / planning stage may lead to a requirement for expensive changes if it is unsuitable when inspected. It is less expensive to make any required changes to the design rather than to put things right once the containment facility and / or containment areas have been constructed.

(15) **MPI inspections:** determine if a new containment area is compliant with the standard through a review of the evidence provided and a physical inspection of the new containment area prior to use to ensure that it matches the design and that there are no defects. After approval of the facility?, the new containment area will be included in the scope of MPI verification inspections and all evidence supplied during the approval process will need to be retained and available to MPI on request. If this evidence is lost, it may need to be reproduced by the zoo containment facility if the enclosure is to retain approval as a containment area.

2.4 Operation of the facility

2.4.1 Compliance with Standard and Quality Management System (Standard 2.4.1)

(1) The **standard** states that the operation of the zoo containment facility must comply with this standard and the zoo containment facility's Quality Management System (QMS) – *Standard for Zoo Containment Facilities, clause 2.4.1.*

(2) The requirements in the standard identify the outcomes to be met to manage risk but do not prescribe the measures that should be in place for this purpose. This provides flexibility to the operator in the choice of measures.

(3) All measures to ensure that the zoo containment facility will be operated to meet the requirements of the standard, such as policies, processes and procedures, should be included or referenced in the QMS. **Tip:** use the recommended Zoo Containment Facility QMS template.

(4) MPI assess the QMS to ensure that it complies with the standard. **Tip:** provide your MPI verifier with a copy of your latest QMS when it has been updated.

(5) **MPI inspections** will then verify that the operator is ensuring compliance against the QMS.

2.4.2 Access to the facility and containment areas (Standard 2.4.2 to 2.4.4)

(1) The **standard** states that the QMS must specify which persons may enter the zoo containment facility and any containment areas, and under what conditions, including what training, supervision or instruction is required to meet the standard – *Standard for Zoo Containment Facilities, clause 2.4.2.*

(2) The complete list of persons that may enter the zoo containment facility will include the operator, all facility staff, volunteer staff, contractors, delivery personnel, MPI verifiers and all other visitors, including the general public. **Tip:** use staff roles rather than names in the QMS as it means it does not require updating when staff change.

(3) It is common practice for a zoo containment facility to have some general conditions for access, such as the entrances should be kept locked when not in active use, and some different conditions for each category of person who may enter.

(4) **Example:** all visitors on approved business should sign a visitor log, read the conditions of entry and depending on the type of their approved business, they may need to be accompanied by a member of staff.

(5) **Example:** the conditions for the general public entering a zoo containment facility and specified containment areas may include:

a) Entry upon payment of a fee
b) Entry restricted to specified times, days or date
c) Access to containment areas prevented unless accompanied by authorised staff, e.g. for an animal encounter
d) Compliance with written rules, e.g. provided on signs, entry tickets or zoo maps
e) Compliance with instructions given by staff
f) Behaviour may be monitored by staff, video cameras, etc.

(6) Entry to containment areas is generally more restricted than entry to the zoo containment facility. It is common practice to list staff roles with approved access to each containment area or a group of containment areas, such as a carnivore section. These staff would also be responsible for monitoring approved access by others, such as trainee keepers, veterinarians or contractors.

(7) **Example:** the conditions for entering a dangerous carnivore enclosure should be documented in a procedure or security plan identifying the secure areas for dangerous carnivores and may include:

a) Location of keys to the dangerous carnivore areas, e.g. in a specified key safe
b) Access to keys restricted to nominated keyholders
c) Entry through the secure access point by a nominated keyholder only, e.g. primary keeper
d) Nominated keyholder is permitted to work with the dangerous carnivores at the zoo containment facility, e.g. approved as competent following specified training in the husbandry and management of dangerous carnivores
e) Compliance with procedures, e.g. a requirement for second competent person to be present when operating doors to areas used by the dangerous carnivores
f) Any approved visitors must comply with instructions given by staff
g) Areas may be monitored by video cameras.

(8) The **standard** states that the zoo containment facility must be designed and operated to prevent access into the zoo containment facility and/or any containment areas except in accordance with the QMS – *Standard for Zoo Containment Facilities, clause 2.4.3.*

(9) Access to the zoo containment facility is prevented if it is a building, such as an aquarium or butterfly house, or it is fully enclosed by a perimeter fence. There should also be processes in place to ensure the security of the zoo containment facility at all times, including a requirement for entrances to be kept locked except when in use.

(10) The perimeter fence of the zoo containment facility will completely surround all containment areas and may be designated for holding specified new organisms, e.g. free-range animals. **Tip:** consider

designing a perimeter fence that will prevent access by undesirable organisms, e.g. cats, mustelids and rodents.

(11) Refer to clause 2.3(6) of this guidance document for guidance on the design of a zoo perimeter fence.

(12) It is generally accepted that regular maintenance inspections of a zoo perimeter fence include:

a) regular visual inspection of the whole perimeter fence with prompt repair of defects, e.g. once each week for a city zoo (where there is a high risk of public access), once every 3 months for a rural zoo (where the risk of public access is lower); and
b) that trees located near the perimeter fence are regularly checked and maintained to minimise the risk of trees or tree limbs falling on the perimeter fence, e.g. trees are inspected and maintained by a qualified arborist at least once each year and after severe weather events.

(13) **Example:** security processes for a zoo containment facility may include:

a) Alarm systems or video cameras for remote monitoring of the building(s) or the perimeter fence
b) Access monitored outside of normal operating hours, e.g. security card access
c) Patrols by security personnel
d) Staff living on-site or next to the zoo containment facility
e) Clear processes and designated responsibilities for dealing with security breaches occurring during or outside of normal operating hours.

(14) **MPI inspections** may include visual inspection of the perimeter and review of visitor logs and records of staff training, contractor induction, perimeter fence maintenance, and security callout events to verify the control of access to the zoo containment facility.

(15) Access to containment areas is prevented if it is a locked building or the keeper entrances to containment areas are enclosed by a secondary public exclusion fence with a locked gate. Public barrier fences and/or viewing windows are two effective methods to deter direct contact with the animals by visitors viewing into the containment areas. There should also be processes in place to ensure the security of the containment areas, including a requirement for entrances to be kept locked except when in use, and access restricted to authorised staff.

(16) Animal exhibit fences will vary depending on the species being contained. Barrier fences should be erected in all situations where the animal exhibit fence would allow potential visitor contact with the animals, e.g. hands could reach through mesh fences or over low walls. To be effective, such barrier fences should be a sufficient distance from the exhibit fence to deter the public from reaching or leaning into exhibits.

(17) **Tip:** dangerous animal public barriers should be difficult to climb or sit upon, and include signs to deter contact, while also designed to allow children views through the barrier to deter parents from dangling children over barriers to see the animals.

(18) Maintenance should include:

a) regular visual inspection of all of the whole perimeter of the containment area with prompt repair of defects, e.g. daily inspection; and
b) that trees located near the animal exhibit fences are regularly checked and maintained to minimise the risk of trees or tree limbs falling on the fence, e.g. trees are inspected and maintained by a qualified arborist at least once each year and after severe weather events.

(19) **Example:** security processes for containment areas may include:

a) Alarm systems or video cameras for remote monitoring of the building or animal exhibit fences, which are sometimes monitored by security contractors outside normal operating hours
b) Access monitored, e.g. security card access
c) Access limited to authorised staff or persons accompanied by them, e.g. by restricted access to keys
d) Staff living on-site or next to the zoo containment facility

e) Clear processes and designated responsibilities for dealing with security breaches occurring during or outside of normal operating hours.

(20) The **standard** states that all entrances and exits to and from the zoo containment facility and any containment areas must be clearly identified, including specifying who may use those entrances and exits – *Standard for Zoo Containment Facilities, clause 2.4.4*.

(21) Each entrance and exit of the zoo containment facility should be uniquely identified, e.g. numbered or named.

(22) A prominent sign should be displayed at all entrances and exits of the zoo containment facility to show:

a) The identification number or name of the entrance or exit;
b) that the premise is a zoo; and
c) that unauthorised entry of people and any accompanying animals is prohibited.

(23) The zoo containment facility's QMS will include a site map to fulfil clause 2.9.4 of the standard. All entrances and exits should be shown on the site map and clearly marked with the unique identification. It is common practice for the QMS to include a list of who may use each entrance or exit. Alternatively, the prominent sign on each entrance or exit should specify who may use it, e.g. a sign may state "staff and authorised contractors only".

2.4.3 Training and staffing (Standard 2.4.5 to 2.4.6)

(1) The **standard** states that the zoo containment facility must have sufficient staff with appropriate

(2) qualifications, expertise, knowledge, and training to ensure that the containment of all new organisms held within the zoo containment facility is effectively maintained at all times, including during and after business hours, public holidays and periods when some staff may be unavailable – *Standard for Zoo Containment Facilities, clause 2.4.5.*

(3) At all times, the operator is responsible for ensuring that the facility is operated in accordance with the standard and should therefore be able to demonstrate that there are sufficient staff for this purpose.

(4) The number and variety of staff roles at a zoo containment facility will vary depending on the size and complexity of the organisation. Whilst all staff have a role in the containment of new organisms held at the facility and any staff shortage has the potential to compromise compliance with this standard, containment is a significant area of responsibility for those staff looking after the animals, e.g. zoo keepers.

(5) One method to demonstrate adequate numbers of animal care staff is to benchmark with other zoo containment facilities, using a ratio of the number of animals to the number of keepers at each facility.

(6) **Tip:** consider the whole animal collection, not just new organisms in containment, and allow for animals requiring a high level of staff time, such as dangerous animals, or large groups of animals requiring minimal care, such as invertebrates or fish.

(7) **Example:** A medium-sized zoo containment facility in New Zealand houses 240 animals, of which about 50% are new organisms including some dangerous animals, may need a minimum of 15 animal care staff. A zoo of this size may need a minimum of nine animal care staff working each day.

(8) Fully competent animal care staff in New Zealand zoo containment facilities may have:

(a) a biological science degree or the New Zealand Certificate in Animal Management (Captive Wild Animals), or equivalent (see **Appendix 3**), and at least two years relevant practical animal husbandry experience; or

(b) demonstrated expertise and knowledge in animal care and at least five years relevant practical animal husbandry experience.

(9) It is generally accepted practice that at least half (fifty percent) of staff responsible for the care of the new organisms in the zoo containment facility must be fully competent.

(10) **Example:** a zoo containment facility with eight animal care staff where:

(a) All of the animals are new organisms, requires at least four of them to be fully competent

(b) Half of the animals are new organisms and half are native fauna, requires at least two of them to be fully competent.

(11) It is suggested that an inexperienced operator of a zoo containment facility would benefit from mentoring by an established zoo operator.

(12) There should be a programme of continuous staff training and development at the zoo containment facility to ensure that all staff know the basic principles for the containment of new organisms and any associated biosecurity risks.

(13) Continuous training of all animal care staff should also ensure that they:

(a) know what to do and know how to do it;

(b) know how to recognise when things could go wrong and what to do if they do go wrong; and

(c) do what they have been trained to do.

(14) Operators should ensure that training:

(a) is regularly carried out for new and existing staff;

(b) is carried out by competent a trainer, usually someone with delegated responsibility for training due to qualifications, experience, seniority or familiarity with the procedures;

(c) uses effective methods, such as practical assessments, to determine the competency of all staff undergoing training; and

(d) is recorded in individual staff training records.

(15) **MPI inspections** may include a review of training programmes and records of staff training, and further verification may be obtained through staff interviews to confirm the level of competency and the training received.

(16) The **standard** states that the zoo containment facility's QMS must describe the staffing requirements to operate the zoo containment facility, including qualifications, expertise, knowledge, training, supervision and operational staffing levels – *Standard for Zoo Containment Facilities, clause 2.4.6.*

(17) It is suggested that the QMS should include a current organisation / staff chart showing all positions and reporting lines in the zoo containment facility.

(18) The QMS should also include the minimum experience and staffing levels required to operate the zoo containment facility, including sufficient staff to execute contingency plans, and how these are maintained during public holidays and when staff are on leave, including sick leave.

(19) The QMS should also include or refer to, job descriptions and minimum qualifications for all zoo positions and the training provided to all staff.

(20) **MPI inspections** may include a review of staff rosters to verify that minimum staffing levels are adequately maintained. Warning signs that staffing is too low may include:

(a) Basic animal care tasks take the entire day, with no time for training or process improvements;

(b) Some staff have not had 2 consecutive days off work in the last 2 weeks; or

(c) Staff are often deviating from normal process, e.g. leaving cleaning equipment out, jobs not completed fully.

2.4.4 Waste and equipment (Standard 2.4.7 to 2.4.8)

(1) The **standard** states that any waste (including biological material) that may harbour new organisms or heritable material from new organisms, must be treated to ensure that new organisms and any heritable material are killed prior to discarding outside the new organism's specified containment area – *Standard for Zoo Containment Facilities, clause 2.4.7.*

(2) The **standard** states that any equipment used in a containment area that may harbour new organisms or heritable material from new organisms, must be treated to ensure that new organisms and any heritable material are removed prior to the equipment being used for another purpose or being removed from the zoo containment facility – *Standard for Zoo Containment Facilities, clause 2.4.8.*

(3) Two definitions in the standard are useful for understanding these clauses:

(a) **Waste** means unusable or unwanted substances or materials (including water, liquids, solids or air); and

(b) **Heritable material**, in relation to a new organism, means viable biological material, including gametes and spores, arising from the new organism that can, without human intervention, regenerate the new organism or reproduce a new generation of the same species of the new organism.

(4) Waste in a zoo containment facility will not include dead new organisms, but the harvested reproductive cells or the developmental stage of an organism, e.g. viable eggs, are to be considered as a new organism and subject to the containment requirements of this standard (refer to definition of an organism in the standard).

(5) Compliance with clauses 2.4.7 and 2.4.8 of the standard are commonly achieved as follows:

(a) Waste from new organisms that are birds, mammals or large reptiles, does not require any treatment for compliance with this standard, although it may do so for other purposes, e.g. dead animals are usually incinerated or deeply buried for compliance with local by-laws

(b) Waste from new organisms that are invertebrates, such as butterflies or spiders, or small reptiles, may contain eggs or larval stages, so should be incinerated at high temperatures or frozen at a minimum temperature of -18ºC for at least seven days in the containment facility before disposal

(c) Green waste from butterfly houses should be incinerated at high temperatures or frozen at a minimum temperature of -18ºC for at least seven days in the containment facility before disposal; or alternatively, can be composted within the containment area and used as plant mulch within the butterfly house

(d) Decontamination of small items of equipment used with invertebrates can either be autoclaved at a high temperature or frozen at a minimum temperature of -18ºC for at least seven days before removal from the containment area (note that some invertebrate containment facilities routinely store equipment, such as cleaning implements and protective clothing, in a freezer)

(e) Large items of equipment used with invertebrates can be decontaminated through the use of appropriate disinfectant, following manufacturer's recommendations, before removal

(f) Waste from new organisms that are maintained in aquariums, such as amphibians, freshwater fish, marine fish and marine invertebrates, may contain juveniles, larvae or eggs, so should be treated through the route of discharge, such as into a septic tank, or through treatment prior to discharge, such as chlorination or ultra violet light

(g) Equipment used with aquatic new organisms, requires use of appropriate treatment, such as chlorination, following manufacturer's recommendations, before disposal or removal from the zoo containment facility

(h) Marine systems that discharge their waste water directly into the environment must demonstrate effective control measures that eliminate the risk of accidentally introducing viable biological material (including eggs and larvae) into the marine environment.

(6) **MPI inspections** may require the zoo containment facility to demonstrate that waste, including discharged waste water, does not present any risk to the environment, e.g. by accidental release of juveniles, larvae or eggs.

2.4.5 Contingency plans (Standard 2.4.9 to 2.4.12)

(1) The **standard** states that the zoo containment facility's QMS must contain a contingency plan – *Standard for Zoo Containment Facilities, clause 2.4.9.*

(2) The **standard** states that contingency plans must be able to be implemented immediately if a contingency occurs – *Standard for Zoo Containment Facilities, clause 2.4.10.*

(3) *Clause 2.4.11* of the **standard** states that the contingency plan must, at a minimum, include plans for the following contingencies:

(a) Fire;

(b) Unauthorised access to the containment area(s) or zoo containment facility;

(c) Breach of containment;

(d) Natural weather events including earthquake, flood, and extreme wind; and

(e) Zoo containment facility closure following the occurrence of another contingency.

(4) The contingency plan should include procedures for emergencies that take place both during and outside of normal operating hours and include timelines for the inspection of the containment facility and / or containment areas under both circumstances.

(5) The contingency plan should include the process and allocated responsibility for contacting MPI as soon as possible when the contingency plan is implemented.

(6) It is generally accepted practice for zoo containment facilities to have separate plans for breach of containment by dangerous and non-dangerous animals, with the former usually including procedures for the use of firearms for the destruction of the animal by trained staff, if required.

(7) It is also common practice for zoo containment facilities to include plans for other emergency events in the contingency plan that are unlikely to require notification of MPI where there is no containment breach, such as bomb threat, hazardous substance spill or infectious disease outbreak, although there is a requirement to report the presence of any new organisms or notifiable organisms to MPI under the Biosecurity Act.

(8) The operator or delegate needs to immediately report any death of a person caused by a new organism, to the Police, WorkSafe, EPA and MPI. There is also a requirement for WorkSafe to be notified if a new organism causes a person injury defined as a notifiable event under section 24 of the Health and Safety at Work Act 2015, and MPI should also be contacted in these circumstances.

(9) There should be regular training / drills / desk-top drills for all contingencies identified in the zoo's contingency plan and these should include one concerning breach of containment of a new organism at least once every three months. **Tip:** these should test staff knowledge and competence, include a debrief to determine what went well and what did not, and identify any changes made to improve the contingency plan.

(10) **MPI inspections** may include a review of:

(a) Any corrective actions carried out after implementation of a contingency plan

(b) Records of emergency drills, contingency plan training and associated debriefs

(c) Any changes made to improve the contingency plan following emergency drills and training.

(11) The **standard** states that the contingency plan must include timeline(s) for disposal and / or relocation of new organisms to other zoo transitional facilities or zoo containment facilities where necessary and maintenance of staffing levels and competencies during a zoo containment facility closure period – *Standard for Zoo Containment Facilities, clause 2.4.12.*

(12) Closure of the zoo containment facility may be permanent or temporary due to events such as earthquakes or infectious disease outbreaks whilst the biosecurity risk is managed.

(13) Staffing levels and competencies should be maintained during a closure period even though the zoo is unlikely to generate revenue and the requirements for financial resourcing during contingencies are stated in clause 2.7.5 of the standard.

(14) The time required for the disposal and / or relocation of new organisms to other zoo facilities should not be under estimated, e.g. it took 12 months to transfer all of the animals from Franklin Zoo and a larger zoo containment facility is likely to take at least two years.

(15) **MPI inspections** may seek evidence such as a written commitment from the owner of the zoo containment facility, which may be the operator, that staffing levels and competencies will be maintained during a closure period and any supporting policies or procedures for this purpose. There should also be a review of the financial resourcing for a closure period, as required under clauses 2.7.5 and 2.7.6 of the standard.

(16) **Example:** a zoo containment facility owned by a local authority may have:

(a) written commitment from the Council's Chief Executive Officer that staffing levels and competencies will be maintained during a closure period; or

(b) evidence of a Council Resolution making such a commitment.

2.5 Significant modifications to the construction and/or operation of the facility subsequent to the facility approval (Standard 2.5.1 to 2.5.2)

(1) The **standard** states that the operator must obtain an approval from MPI for any significant modification to the construction and / or the operation of the zoo containment facility prior to the significant modification occurring. However, in exceptional circumstances where this is not possible, the approval must subsequently be obtained from MPI as soon as reasonably practicable – *Standard for Zoo Containment Facilities, clause 2.5.1.*

(2) The **standard** states that when notifying MPI of any significant modification, the operator must supply sufficient evidence to enable MPI to assess whether the significant modification complies, or will comply, with the standard – *Standard for Zoo Containment Facilities, clause 2.5.2.*

(3) A significant modification, as defined in the standard, is one that may impact on the ability to securely contain the new organisms held in containment.

(4) Any new or altered containment area should be considered a significant modification to the construction of the zoo containment facility, whereas day-to-day maintenance or renewal of a containment area should not because the design remains unchanged.

(5) It is recommended that the operator of a zoo containment facility consults with MPI prior to starting work on a new or altered containment area to enable MPI to determine whether it will comply with the standard. MPI may require supporting evidence for this purpose, such as industry guidelines and preliminary designs or plans, where available, and may seek advice from the Zoo Advisory Panel.

(6) **Tip:** failing to contact MPI at the planning stage may lead to a requirement for expensive changes if it is unsuitable when inspected.

(7) It is recommended that the operator of a zoo containment facility seeks MPI approval for any alteration of the zoo containment facility's perimeter fence, including buildings that form part of the perimeter, as this also impacts on the containment of the new organisms held in the facility.

(8) MPI may also be advised of interim measures to maintain containment of the new organisms whilst construction work is carried out.

(9) **Example:** interim measures during construction work may include:

(a) New organisms moved to an alternative enclosure whilst alterations are carried out on their usual containment area (**Tip:** the temporary area must also have MPI approval to hold that species of new organism)

(b) New organisms confined to part of the containment area, such as the night quarters, whilst work is carried out on the rest of the containment area (**Tip:** have measures in place to prevent direct contact between contractors and new organisms)

(c) Temporary fencing erected to maintain the integrity of the perimeter fence whilst a new zoo entrance building is constructed.

(10) **MPI inspection** of a new or altered containment area is generally required before it is used.

(11) Significant modifications to the operation of the zoo containment facility will generally result in changes to the QMS, which have to be provided to MPI for approval as soon as practicable following any changes as required under clause 2.9.10 of the standard.

2.6 Register and identification of new organisms held in the zoo containment facility (Standard 2.6.1 to 2.6.3)

(1) The **standard** states that records must be kept of the current location of all new organisms held in the zoo containment facility (for example, the containment area in which they are held), together with the species, number, gender, and identification (where practicable), in a form that is easily accessible and that allows MPI to determine what new organisms are held in any containment area – *Standard for Zoo Containment Facilities, clause 2.6.1.*

(2) The information required for the register, including location (containment area), species, number, gender, and identification can be recorded in the Zoo Information Management System (ZIMS) for those zoo containment facilities that are members of Species360 (www.species360.org).

(3) ZIMS can also be used to record the health status and behaviour of individual animals and the containment areas in which they are held. **Tip:** It can also be used to record containment area maintenance records, including details of significant modifications as required under clause 2.10.1 of the standard.

(4) Examples of records are included in the Zoo Containment Facility QMS template. These may be particularly useful where the zoo containment facility is not a member of Species360.

(5) The **standard** states that the zoo containment facility's QMS must record the approvals under the HSNO Act under which each new organism held in the facility has been imported into containment – *Standard for Zoo Containment Facilities, clause 2.6.2.*

(6) This information can be recorded in ZIMS, in which case this may be stated in the QMS. A zoo containment facility that is not a member of Species360 may use the template suggested for this purpose in the Zoo Containment Facility QMS template, or a similar system which also achieves the required traceability.

(7) The **standard** states that all new organisms must be readily identifiable through a system of visual or electronic identification and, in the case of vertebrates, this must allow individual specimens to be distinguished – *Standard for Zoo Containment Facilities, clause 2.6.3.*

(8) **Example:** common identification methods for vertebrates include:

(a) Visual characteristics, e.g. different markings on African wild dogs (**Tip:** reference photographs can be maintained in ZIMS)

(b) Transponder with unique number – used for most animals larger than a frog

(c) Numbered and / or coloured ear tag – commonly used for hoofed stock

(d) Numbered metal band – used for birds

(e) Coloured split ring – used for birds.

(9) Invertebrates, including marine invertebrates, are usually identified by enclosure, which will be uniquely numbered. An enclosure may house a single specimen, e.g. tarantula in a vivarium; or a group of invertebrates, e.g. a butterfly house, where identification can be at species level and number of individuals of each species held in the enclosure.

2.7 Organisational structure and management

2.7.1 Management and decision-making structures (Standard 2.7.1 to 2.7.2)

(1) The **standard** states that the zoo containment facility's QMS must contain a clearly defined management structure that describes the roles and responsibilities of all persons having responsibility for complying with the requirements of this standard, including who has responsibility for day-to-day management of the zoo containment facility – *Standard for Zoo Containment Facilities, clause 2.7.1.*

(2) The **standard** states that the QMS must contain recorded decision-making processes that describe how any decisions that may relate to, or have an effect on, containment, will be made in a timely manner by persons with the appropriate level of financial and managerial delegation – *Standard for Zoo Containment Facilities, clause 2.7.2.*

(3) The Zoo Containment Facility QMS template includes space for the information required by clauses 2.7.1 and 2.7.2 of the standard.

2.7.2 Manager to be on call at all times (Standard 2.7.3 to 2.7.4)

(1) The **standard** states that at all times, there must be a manager on call who is responsible for the day-to-day management of the zoo containment facility – *Standard for Zoo Containment Facilities, clause 2.7.3.*

(2) There should always be a nominated duty manager who can be immediately contacted at all times during normal operating hours and has full authority to make decisions, including immediate implementation of a contingency plan if a contingency (containment breach, etc.) occurs.

(3) The duty manager should usually remain onsite at the zoo containment facility at all times during normal operating hours and if not, will delegate the duty manager's responsibility to another staff member whilst offsite.

(4) There should be a manager on call at all times outside of normal operating hours and they should be able to be onsite at the zoo containment facility within 30 minutes of being contacted if a contingency occurs, or be able to delegate to another staff member who is able to be onsite within 30 minutes.

(5) **Example:** common ways to ensure that there is a duty manager during normal operating hours are:

(a) The operator of the zoo containment facility is the duty manager when working on site and delegates responsibility to another staff member whilst offsite. **Tip:** include a clear chain of command in the QMS

(b) The duty manager on each day is established in a roster system

(c) The operator is duty manager when working onsite and there is a duty manager roster system in place to cover days when the operator is unavailable, e.g. days off.

(6) **Example:** common ways to ensure that there is a manager on call after normal operating hours:

(a) The operator is on call at all times after normal operating hours and can be onsite within 30 minutes of being contacted

(b) The operator is on call at all times after normal operating hours and delegates another staff member to attend the zoo containment facility within 30 minutes if there is a callout

(c) There is a callout list in place that lists staff to be contacted if a contingency occurs after normal operating hours

(d) There is a callout list that is listed in order of priority, where the first person on the list is contacted but, if not available, then the next is contacted and so on. **Tip:** this is best used where the zoo containment facility is monitored by a security firm or is owned by a local authority, which operates a call centre.

(7) The **standard** states that the manager on call must have access to resources and any authority necessary to ensure the zoo containment facility operates in accordance with this standard and the zoo containment facility's QMS – *Standard for Zoo Containment Facilities, clause 2.7.4.*

(8) No guidance for clause 2.7.4 of the standard.

2.7.3 Financial resourcing (Standard 2.7.5 to 2.7.6)

(1) The **standard** states that the operator must ensure that there is adequate financial resourcing, management capability, and expertise to ensure that this standard can be complied with during contingencies – *Standard for Zoo Containment Facilities, clause 2.7.5.*

(2) The financial resourcing should always cover the operating expenses and asset maintenance and may cover capital expenditure for renewals or new assets.

(3) Typically, operating expenses will be offset by revenue such as admission fees, donations and grants, which may be subsidised by the individual or organisation that owns and / or operates the zoo containment facility.

(4) It is generally accepted that adequate financial resourcing is in place for the normal day-to-day operation of a zoo containment facility where it has been operating in accordance with the standard, but contingencies, such as fire, earthquake or flooding, will result in extra costs and may result in lost revenue due to temporary or permanent closure.

(5) The individual or organisation that owns and / or operates the zoo containment facility will require a cash reserve in order to satisfy clause 2.7.5 of the standard. **Tip:** it is recommended that this reserve would cover the full cost of operating for three months without any revenue.

(6) Insurance must be in place to cover damaged or written off assets and business interruption insurance should also be considered in addition to the cash reserve. **Tip:** cash reserve is still necessary because there is usually a time lag before insurance claims are paid out and such insurance cover can only be claimed if there is physical damage to the zoo containment facility and would not cover a closure due to another cause, such as disease outbreak.

(7) Permanent closure of a zoo containment facility may take one to two years and it is not appropriate for the operator to rely on fundraising to cover operational costs during that period, including for the disposal or relocation of new organisms.

(8) The **standard** states that evidence of financial resourcing, including business plans, budgets and financial records, must be made available to MPI, upon request – *Standard for Zoo Containment Facilities, clause 2.7.6.*

(9) **MPI inspections:** the zoo containment facility's accountant / accounts auditor should be available for an interview with MPI, if required during MPI verification inspections, and the minimum evidence that should be reviewed to provide evidence of current adequate financial resourcing is:

(a) insurance to cover damaged or written off assets, noting that animals are unlikely to be insured;

(b) financial statements for the past two years; and

(c) the budget for the current year.

(10) The expenditure budget should not be less than the operating costs shown in the audited accounts unless there is a clear reason for this, e.g. an old exhibit has been closed down because it was expensive to operate.

(11) There may be an expectation for an increased operating budget where the zoo containment facility has not been operating in accordance with the standard.

(12) There are a number of additional documents that may be available, particularly for zoo containment facilities owned by a local authority, to provide evidence of adequate budgets for the renewal of assets, such as:

(a) Asset management plan

(b) Business plan

(c) Capital expenditure budget

(d) Zoo development plan.

2.8 Requirements for monitoring and inspection

2.8.1 Qualifications of persons carrying out internal inspection, monitoring and audit (Standard 2.8.1)

(1) The **standard** states that all internal inspection, monitoring, and audits required in this standard, including those specified in clauses 2.8.2 to 2.8.6, must be carried out by trained staff, or by an external party with appropriate knowledge and expertise – *Standard for Zoo Containment Facilities, clause 2.8.1.*

(2) The operator of a zoo containment facilities may delegate quality / compliance management to an individual or individuals who have:

(a) Good knowledge of quality assurance concepts and principles; or

(b) Experience in managing compliance of accredited quality systems, such as ISO 9001, Good Manufacturing Practice (GMP), IANZ accreditation, etc.

2.8.2 Internal inspection and monitoring (Standard 2.8.2 to 2.8.4)

(1) The **standard** states that the zoo containment facility, including all containment areas and structures relevant to containment (such as fences, walls, windows, and waste treatments), must be inspected and monitored at regular intervals, appropriate to those containment areas and structures, to ensure the requirements of this standard, the zoo containment facility's QMS, and any relevant HSNO Act approval for new organisms are being complied with – *Standard for Zoo Containment Facilities, clause 2.8.2.*

(2) **Example:** inspection and monitoring at regular intervals may include:

(a) Daily visual inspection of the perimeter of containment areas

(b) Regular visual inspection of the whole perimeter fence of the zoo containment facility

(c) Annual inspection by a qualified arborist of all trees located near the zoo perimeter fence and all containment areas, with additional inspections following events such as earthquakes or severe weather, noting that the operator will also need to have a process to manage any containment risk posed by trees outside the fence that are owned by neighbouring properties

(d) Annual engineer's inspections of the integrity of welded mesh used in a dangerous animal exhibit.

(3) It is a requirement under clause 2.10.1 of the standard to keep records of any inspections carried out, including non-compliances, corrective actions and closure reports.

(4) **Example:** records for inspections of the zoo perimeter fence should include in each case the date of the inspections, the name of the person did it, and where applicable:

(a) non-compliances will usually be the discovery of damage or deterioration requiring repair;

(b) corrective actions will usually be the maintenance required to fix the damage or deterioration; and

(c) the closure report will usually be written confirmation that the maintenance has been completed.

(5) The **standard** states that the activities undertaken in operating the zoo containment facility, including all containment systems, policies, and procedures, must be monitored, evaluated, and reviewed at regular intervals to ensure containment is being achieved, and this standard and the zoo containment facility's QMS are being complied with – *Standard for Zoo Containment Facilities, clause 2.8.3.*

(6) There should be a programme to regularly monitor, evaluate and review all systems, policies and procedures, as it provides clear evidence of a well-run organisation, creating confidence in containment systems, health and safety practices and all other regulated processes.

(7) **Example:** managers at a New Zealand zoo have carried out regular micro audits of staff whilst they carry out various tasks and processes, using an audit sheet that includes zoo containment and health and safety topics. It not only identifies improvements but also confirms where things are done right.

(8) It is a requirement under clause 2.10.1 to keep records of any changes to the QMS, which are likely to occur after reviewing systems, policies and procedures, as well as keeping records of monitoring and inspections as given in clause 2.8.2 (3) of this guidance document.

(9) The **standard** states that the zoo containment facility must be inspected as soon as possible after a contingency that has, or may have, compromised containment has occurred, to ensure containment is being maintained – *Standard for Zoo Containment Facilities, clause 2.8.4.*

(10) The timeline for inspection of the containment facility and / or containment areas should be included in the contingency plan for relevant situations, such as earthquakes, storms, flooding, fire, and there should be a safe procedure in place for inspecting dangerous animal enclosures, e.g. from within an enclosed vehicle.

(11) **Tip:** more examples of contingencies requiring inspection are provided in the Zoo Containment Facility QMS template.

2.8.3 Internal audits (Standard 2.8.5 to 2.8.6)

(1) *Clause 2.8.5* of the **standard** states that internal audits of the zoo containment facility must be carried out at least once every six months to:

(a) assess whether the requirements of this standard and any relevant HSNO Act approval are being met;

(b) assess whether the zoo containment facility's procedures and policies are effective in maintaining containment and achieving the requirements of this standard; and

(c) ensure the zoo containment facility's QMS reflects any relevant changes in the zoo containment facility and its operation.

(2) The people carrying out internal audits should be adequately trained and, where possible, be independent, for example, staff should not audit the areas for which they are responsible for compliance.

(3) A clear scope and objectives should be set for internal audits and although each audit may be a sample, the full range of operational processes that are in place to meet the standard should be audited annually. It is also important to identify and document the evidence that will be used to ensure that all of the requirements of the standard are met.

(4) It is common practice to have audits that include physical inspection of a sample of areas in the zoo containment facility as well as a desktop review. **Tip:** there is a useful internal audit template in the recommended Zoo Containment Facility QMS template.

(5) *Clause 2.8.6* of the **standard** states that a written internal audit report must be provided to MPI within 10 working days of the completion of each internal audit and must include the following, at a minimum:

(a) the scope of the audit;

(b) any non-compliances and the status of any corrective action(s) put in place to remedy and prevent their recurrence;

(c) any recommendations and whether these have been agreed to by the operator;

(d) the name of the person who undertook the audit; and

(e) the areas of the zoo containment facility that were physically inspected.

(6) Internal audits should always be documented, even when no non-compliances are identified, as MPI relies on this documented evidence to provide confidence that the requirements are being met.

(7) Any non-compliance identified during an internal audit should be transferred to the facility's non-compliance register, including a description of the issue, the immediate corrective actions taken, root cause, target dates for implementation of any remaining corrective and preventative actions, and the person responsible for actioning these. The register should be updated with details once any remaining action items have been completed.

(8) **MPI inspections:** will usually include assessment of the results of the internal audit process to ensure that it is adequate, and the implementation of corrective actions arising from them in order to ensure compliance with the standard. Effective operator control and ownership of compliance is demonstrated when internal audit findings accurately reflect the compliance status of the facility. Operator control is considered to be lacking where MPI routinely identifies non-compliances that have not been identified by the zoo containment facility's internal audits. This reduced confidence in operator control may lead to increased inspection frequency by MPI.

(9) **Tip:** internal audits may be timed completely separately from MPI inspections so that written internal audit reports are submitted prior to the inspection.

2.9 Quality Management System

2.9.1 Quality Management System (QMS) (Standard 2.9.1 to 2.9.6)

(1) The **standard** states that the operator must prepare and maintain a QMS for each zoo containment facility in respect of which the person is approved as the operator – *Standard for Zoo Containment Facilities, clause 2.9.1.*

(2) The **standard** states that a QMS for each zoo containment facility must be supplied to MPI to enable MPI to assess whether the QMS complies with this standard before the relevant zoo containment facility is approved under the Biosecurity Act – *Standard for Zoo Containment Facilities, clause 2.9.2.*

(3) Refer to clauses 2.9.3 to 2.9.6 of the **standard** for the required content of the zoo containment facility's QMS.

(4) **Tip:** use the recommended Zoo Containment Facility QMS template to ensure that it includes the required content or lay out your own QMS in a similar way. This will help keep the cost down for the MPI assessment of your QMS because it can be done faster.

2.9.2 Review of the QMS (Standard 2.9.7 to 2.9.10)

(1) The **standard** states that the operator must review and update the zoo containment facility's QMS and any policies or procedures referred to in the QMS, where necessary, at least once every 12 months – *Standard for Zoo Containment Facilities, clause 2.9.7.*

(2) The **standard** states that relevant parts of the QMS and any relevant policies, processes, or procedures must be reviewed and updated prior to the acquisition of a species of new organism new to the zoo containment facility, and following any breach of containment or other failure to comply with this standard or the QMS. The purpose of the review is to ensure that compliance with this standard can still be achieved – *Standard for Zoo Containment Facilities, clause 2.9.8.*

(3) The **standard** states that records must be kept of all QMS reviews and updates – *Standard for Zoo Containment Facilities, clause 2.9.9.*

(4) The **standard** states that a copy of the QMS, or the modified part of the QMS, must be provided to MPI as soon as practicable following any changes (including the addition of new containment areas) to the QMS – *Standard for Zoo Containment Facilities, clause 2.9.10.*

(5) **MPI inspections:** will usually include review of evidence of procedure and policy review, which should occur throughout the year and in conjunction with the zoo containment facility's internal audit process. The evidence may include:

(a) Minutes from review meetings

(b) Procedure amendment history

(c) Improvements identified and implemented following non-compliances.

2.10 Requirements to keep records (Standard 2.10.1 to 2.10.2)

(1) Refer to clauses 2.10.1 and 2.10.2 of the **standard** for the full requirements, noting that records act as evidence of compliance with the standard and the zoo containment facility's QMS and are kept for a minimum of seven years.

(2) The QMS must describe the records that are held for this purpose (Standard for Zoo Containment Facilities 2018, clause 2.9.5(f)) and some of the records may be included as part of the QMS. These may include but are not limited to:

(a) zoo containment facility plans and specifications,

(b) zoo containment area plans and specifications,

(c) details of QMS reviews and updates.

(3) Refer to section 2.6 of this document for guidance on the information required for the register of new organisms held within the zoo containment facility.

2.11 Transitional period (Standard 2.11.1 to 2.11.2)

(1) The transitional period allows time for the operator to revise or develop policies, processes and procedures to ensure that the zoo containment facility will be operated to meet the requirements of the Standard for Zoo Containment Facilities 2018, and to prepare a QMS that complies with the standard.

(2) See clause 2.9 of this document for guidance on the preparation of a QMS for a zoo containment facility that should be in place and approved by 30 June 2019.

3 Appendices

Appendix 1: Other legislation affecting zoo containment facilities

Biosecurity Act 1993;

See section 1.1 (2) of this Guidance document for description of the sections of the Biosecurity Act which are most applicable.

Hazardous Substances and New Organisms Act; (HSNO);

Part 5 of the Act (Assessment of hazardous substances and new organisms) contains those sections most applicable to Zoo Containment Facilities:

Sections:
26 Determination of new organism or hazardous substance,
27 Types of HSNO Act approval,
34 Application for approval to import or release
38 Determination of applications to import or release
39 Importation or development of new organisms in containment
45B Animals in circus or zoological garden deemed approved under section 255 and
50 Prohibited organisms.

Zoo Animals Containment Facilities

Issued by the Environmental Protection Authority (EPA), approved under section 11(1)(fc) of the Hazardous Substances and New Organisms Act 1996 (HSNO Act). This standard describes the requirements for building, maintaining, and operating zoo containment facilities, that hold new organisms. This standard is approved by the EPA under the HSNO Act and is enforced by MPI under the Biosecurity Act.

In addition to the requirements of this standard, the EPA may impose requirements for containment of new organisms through controls in the HSNO Act approval for those new organisms, which would also need to be complied with.

Approval APP201517

This HNSO approval lists the species of animals eligible for import into New Zealand and outlines requirements that Zoo Containment Facilities must meet in addition to the Zoo Containment Standard. Species not listed in this HSNO Approval are not able to be imported unless they are already present in New Zealand.

This application sought the reassessment of zoo animals approved for importation into containment under s 45 of the HSNO Act. This included zoo animals that were deemed approved through the transitional provisions (s 255) of the HSNO Act, and those zoo animals that have been assessed and approved for importation under s 45 of the HSNO Act since that Act came into force.

Zoo Animal Transitional Facilities Standard

A Transitional Facility Standard which describes the quarantine requirements for zoo animals immediately after entry into New Zealand, in conjunction with the species-specific import health standard. Animals may need to undergo testing and/or veterinary inspection before they can move into a Zoo Containment Facility.

Import Health Standards

Import Health Standards specify the species specific requirements that must be met before an animal can be imported into a Transitional Facility New Zealand. It will also specify any post arrival testing or inspection requirements which must be completed before the animal(s) can be released or directed to a Containment Facility.

To find the relevant import and quarantine requirements for each species, follow the hyperlink and type the scientific name of the animal into the search bar. Questions about interpreting import health standard requirements for zoo animals can be directed to animal.imports@mpi.govt.nz.

If no import health standard is available for a species, it is not permitted to be imported into New Zealand. To request that MPI writes an import health standard for a species, contact animal.imports@mpi.govt.nz.

Appendix 2: Useful references for zoo animal exhibit / containment area design

Under development.

Appendix 3: Appropriate qualifications for animal care staff in a New Zealand zoo containment facility

New Zealand Certificate in Animal Management (Captive Wild Animals)

UNITEC Certificate in Animal Management (Captive Wild Animals)

Technical and Further Education (TAFE) Certificate III in Captive Animals

Taronga Training Institute Certificate III in Captive Animals

Level 4 NVQ in Animal Care and Management (Zoos and Wildlife Parks)

City and Guilds Certificate in Animal Management

Veterinary nurse qualifications such as:

- New Zealand Certificate in Animal Technology (Veterinary Nursing Assistant)
- New Zealand Diploma in Veterinary Nursing

Bachelor of Applied Science