



QUARANTINE REQUIREMENTS FOR THE IMPORTATION OF ELEPHANTS FROM THAILAND

18 August 2004

These requirements apply to the importation of Asian elephants (*Elaphas maximus*) from captive herds in Thailand.

Conditions of Administration

1. An Import Permit is required and must be applied for **prior** to importation. Permit [applications](#) must be sent with payment of \$A260 to Live Animal Imports – Australian Quarantine and Inspection Service (AQIS) Canberra, for assessment.

Live Animal Imports

AQIS

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2. A Quarantine Entry must be lodged for each consignment. The inspecting AQIS officer must be advised of the entry number prior to inspection.

3. It is the importer's responsibility to identify and to ensure compliance with all requirements of any other regulatory and advisory bodies prior to and after importation. It is the importer's responsibility to arrange for any additional testing for genetic and endemic infectious diseases, or for movement of animals or genetic material into certain animal health zones within Australia.

4. The animal(s) must be accompanied by a copy of the Australian Government Department of the Environment and Heritage (DEH) permit and appropriate Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) documentation from the exporting country. Details are available from the Director, Sustainable Wildlife Industries, phone +61 2 6274 1111 or email wildlifetrade@deh.gov.au or the DEH website: <http://www.deh.gov.au/biodiversity/trade-use>

5. The elephants must be treated with an insect repellent prior to loading for transport to the port of export. The vehicles for transport of the elephants to the port of export, and the compartments of the aircraft in which they will travel to Cocos (Keeling) Islands and subsequently to Australia, must be cleaned and disinfected with an approved disinfectant, eg Virkon 1%, prior to loading of the animals. The containers in which they are exported must comply with Container Requirements of the International Air Transport Association (IATA) Live Animal Regulations and arrangements for air transport must be in accordance with the Regulations. Containers must be new or cleaned and disinfected with an approved disinfectant prior to loading the elephants. Containers constructed of timber must be permanently immunised against insect infestation or fumigated prior to loading as required by AQIS.

6. During transport to the port of export, shipment, and transport from the port of importation to the post-arrival quarantine facility, the animal(s) must have no contact with animals not of the same

consignment. The use of hay or straw as bedding during transport by air is not permitted; treated wood shavings, sterilised peat and soft board may be used.

7. The importer, as listed on the Import Permit, or nominated agent, must be accessible to AQIS officers and accept responsibility for ensuring that all import conditions are met including the AQIS inspection.

8. Consignments must be addressed and sent to AQIS at the port of arrival.

9. The importer or agent must make an appointment for AQIS inspection of animal(s) and documentation. The importer or agent may be required to be present at this inspection. The consignment will be held by AQIS until completion of inspection. Fees are payable to AQIS for all services.

10. Consignments that do not meet the AQIS import conditions will remain in quarantine control, be re-exported or destroyed without recompense.

Pre-export quarantine requirements

1. The elephants must be held in pre-export quarantine (PEQ) in approved premises in Thailand for at least 90 days immediately prior to export.

2. An Official Veterinarian* must approve the premises prior to the commencement of PEQ and must supervise the PEQ.

Note*: An *Official Veterinarian* is a veterinarian authorised by the *Veterinary Administration* of the country to perform animal health and/or public health inspections of *commodities* and, when appropriate, perform certification in conformity with the provisions of Section 1.2. of the *OIE Terrestrial Animal Health Code* (the Code).

3. The premises must be surrounded by two fences at least 50 metres apart. The inner fence must be constructed to contain the elephants. The outer boundary fence must be stock-proof. The area between the two fences must be kept free from hoofstock (animals of the Orders Artiodactyla and Perissodactyla) for the duration of PEQ.

4. The premises shall have facilities for the secure holding of the elephants, and for veterinary examination and the collection of samples. Entry to the elephant holding facility must be controlled and must be through a change room where people handling the animals must shower or wash and change into clothing and footwear dedicated to use within the premises. Any protective clothing taken into the premises for use by people handling the elephants must be clean.

5. The PEQ period shall not be deemed to start before the time of entry of the last elephant.

6. During the PEQ no elephants or livestock other than elephants of the export consignment are permitted on the premises.

7. All equipment used in the feeding, handling and treatment of the elephants in PEQ must be new or cleaned and disinfected before the commencement of PEQ and must not be used outside the premises during PEQ.

8. During PEQ, the animals must be fed entirely on feed sourced from pastures, crops, plantations or bush that had not been grazed or browsed by elephants or livestock for the preceding 3 months, and/or on feed that had been steam heated in a closed chamber to a minimum temperature of 80°C for at least 10 minutes or subject to other processing that ensures freedom from foot and mouth

disease (FMD) virus. Vehicles bringing feed to the feed store must be disinfected prior to loading of the feed. Feed must be transferred from the feed store to the elephant enclosure by a route and in a manner that ensures there is no exposure to FMD virus. The vehicle transporting the feed must not enter the enclosure.

9. Personnel attending animals on the premises must have no contact with other elephants or livestock for the duration of PEQ.

10. During PEQ, the elephants must be tested for FMD, tuberculosis (*Mycobacterium tuberculosis* complex), surra (*Trypanosoma evansi*) and *Fasciola* eggs, and treated for internal and external parasites as detailed in the **Veterinary Certification**. Actions to be taken in the event of any tests giving positive or equivocal reactions are detailed in Attachment 1.

11. Any health problems affecting elephants or livestock on the premises during PEQ must be promptly reported to the supervising Official Veterinarian. AQIS must be notified if the incident is of quarantine concern.

12. A detailed health record must be kept for each animal on the premises during the PEQ period and it must be available to the supervising Official Veterinarian.

Format of the veterinary certificate

1. A veterinary certificate that conforms to the Office International des Epizooties (OIE) Terrestrial Animal Health Code (Code) [Model International Veterinary Certificates](#) must accompany each consignment and must:

- be written in English, and a language understood by the Official Veterinarian of the country of export;
- meet all requirements of the “veterinary certification” section of these conditions;
- provide the identification for each animal, including description, species, sex and age and microchip number and site of implantation;
- include the name and address of the exporter and the address of the pre-export quarantine facility;
- include the name and address of the consignee;
- include the nature and identification of the means of transport.

2. An Official Veterinarian must sign, date and stamp (with the stamp of the government veterinary administration) each page of the veterinary certificate and all documents eg laboratory reports which form part of the extended health certification. The Official Veterinarian’s name, title and contact details must also appear.

3. AQIS will accept copies of documents where each page bears the original signature, date and stamp of the Official Veterinarian.

Proposed Veterinary Certification for the importation of elephants from Thailand

Certification

1. Each animal has been born and has lived continuously in captivity in Thailand, and has been continuously resident in herds subject to a health-monitoring program.
2. During the two years immediately prior to commencement of PEQ, FMD, bovine tuberculosis (*Mycobacterium bovis*), elephant pox and endotheliotropic elephant herpesvirus infection have not been diagnosed in any elephant in Thailand.
3. During the twelve months immediately prior to commencement of PEQ, no case of surra and no case of haemorrhagic septicaemia has been diagnosed in elephants or livestock in any herd in which the elephants have been held in that time, and each elephant has been vaccinated against haemorrhagic septicaemia with an approved vaccine.
4. Each animal was held in PEQ, in premises approved by an Official Veterinarian, for at least 90 days prior to export. The premises and operation of the PEQ met the requirements specified in the Permit to Import.
5. Within two weeks after the commencement of PEQ, each elephant was subjected to sampling for tuberculosis testing, on three separate mornings within a one week period, by the collection of wash samples from the trunk prior to water being offered to the animal [as described in Appendix 3 to the 'Guidelines for the Control of Tuberculosis in Elephants 2003']#. The samples were transported either fresh and chilled, or frozen, to Siriraj Hospital, Bangkok, and tested for mycobacteria of the *Mycobacterium tuberculosis* complex (*M tuberculosis*, *M bovis*, *M africanum* and *M microti*) by:
 - a test for specific nucleic acid after amplification by polymerase chain reaction (PCR), and
 - by culture.

Every sample gave a negative result in each case.

Note#: The Guidelines, compiled by the National Tuberculosis Working Group for Zoo and Wildlife Species in the USA, are available at the Animal and Plant Health Inspection Service (APHIS) website: www.aphis.usda.gov/ac/ElephTBGuidelines2003.html or at www.elephantcare.org.

6. Not less than 28 days after the commencement of PEQ, blood samples were collected from each animal on the premises and tested at the FMD Regional Reference Laboratory, Pak Chong by liquid phase blocking enzyme linked immunosorbent assay (LP ELISA) for antibodies to FMD virus types O, A and Asia 1 with negative results in each case.
7. Not less than 28 days after the commencement of PEQ, an IgG antibody ELISA (Ab ELISA) and an IFAT for antibodies to *Trypanosoma evansi* were conducted at the National Institute of Animal Health (NIAH), Kasetklang, Chatuchak, Bangkok on a sample from each elephant, with negative results **AND** blood samples collected from each elephant on three occasions no less than two days apart were tested at NIAH for *Trypanosoma evansi* by blood smear examination, mouse inoculation test, and specific nucleic acid following PCR amplification, with negative results in all animals.
8. During PEQ faecal egg examinations were undertaken on three faecal samples collected on separate mornings within a one-week period from each elephant on the premises and **either**
 - *all samples were negative for *Fasciola* eggs; **or**
 - *each animal was treated with triclabendazole (7-9 mg/kg to a maximum dose of 7.2 g/animal) or oxcyclozanide (7.5 mg/kg to a maximum dose of 6.8 g/animal).

[* Delete which does not apply]

9. During PEQ, each animal was subjected to treatment with a broad-spectrum anthelmintic at the recommended dose rates utilising the active ingredient/s, effective against nematodes and cestodes, **and** treatment with an external parasiticide effective against ticks, containing the active ingredient/s, on two occasions 14 days apart.

The efficacy of the endoparasite treatment was checked 7 to 10 days after treatment using a faecal flotation concentration test as described by Egwang and Slocombe (1982)* and all animals were again treated if the tests showed them to still harbour internal parasites.

[*TG Egwang and JOD Slocombe. Evaluation of the Cornwell-Wisconsin centrifugal flotation technique for recovering trichostrongylid eggs from bovine feces. Can. J. Comp. Med. 46:133-137 (1982). A description of the technique is at Attachment 2]

10. Each animal has been identified with an ISO-compliant microchip, and the site of implantation and the identification number of each animal is recorded on the veterinary certificate.

11. During the 72 hours prior to export, each animal was RFID scanned, and examined by an Official Veterinarian and found to be free from signs of infectious or contagious disease including pox-like skin lesions, free of external parasites and fit to travel.

Post-Arrival Quarantine (PAQ) requirements – Cocos (Keeling) Islands

1. Quarantine means the holding of animals in a place and under conditions specified by AQIS pursuant to the *Quarantine Act 1908*.
2. Each animal must undergo a minimum of 90 days post-arrival quarantine (PAQ) in the Cocos Islands Animal Quarantine Station (CIAQS).
3. Imported animals undergoing PAQ may not be removed without approval from the Director of Animal and Plant Quarantine or a delegated officer, usually the regional Principal Veterinary Officer (Quarantine).
4. The PAQ period shall not be deemed to start before the time of entry of the last elephant.
5. During PAQ each animal is to be monitored daily for signs of illness and, if necessary, be subject to a clinical examination by a registered veterinarian. All animals dying are to be subject to a post-mortem examination to determine the cause of death. AQIS is to be advised within 48 hours of death or illness, unless due to injury, of an animal under quarantine.
6. During the first six weeks of PAQ, the elephants are to be re-examined for internal and external parasites and given effective treatment if required. At least 28 days after the commencement of PAQ samples must be collected and tested for FMD by LP ELISA, for surra by antibody ELISA, blood smear examination, rodent inoculation and an approved PCR-based test, and for other diseases at the discretion of AQIS, at the importer's expense.
7. Quarantine may be extended at the discretion of AQIS until any adverse events during the quarantine period are fully investigated and resolved.

Post-Arrival Quarantine (PAQ) requirements – Australian mainland

1. Quarantine means the holding of animals in a place and under conditions specified by AQIS pursuant to the *Quarantine Act 1908*.

- 2.** Each animal must undergo 7 days PAQ at Taronga or Melbourne Zoo. Each animal must be inspected by a Quarantine Officer and found free from signs of infectious disease before release from quarantine.
- 3.** Imported animals undergoing PAQ may not be removed from the quarantine facility without approval from the Director of Animal and Plant Quarantine or a delegated officer, usually the regional Principal Veterinary Officer (Quarantine).
- 4.** The PAQ period shall not be deemed to start before the time of entry of the last elephant.
- 5.** During PAQ each animal is to be monitored daily for signs of illness and, if necessary, be subject to a clinical examination by a registered veterinarian. All animals dying are to be subject to a post-mortem examination to determine the cause of death. AQIS is to be advised within 48 hours of death or illness, unless due to injury, of an animal under quarantine.
- 6.** All elephant faeces produced during transport from the Cocos Islands to mainland Australia and for four days after arrival must be disposed of by deep burial or incineration, or another method approved by AQIS, to ensure the destruction of plant seeds.
- 7.** Quarantine may be extended at the discretion of AQIS until any adverse events during the quarantine period are fully investigated and resolved.

ATTACHMENT 1

ACTIONS TO BE TAKEN IF THERE ARE POSITIVE OR EQUIVOCAL RESULTS TO TESTS DURING PEQ

If any elephant tests positive to the liquid-phase blocking enzyme linked immuno-sorbent assay (LP ELISA) for FMD, that animal must be removed from the premises and the PEQ restarted or the shipment cancelled. If no elephants are positive but one or more give an equivocal or doubtful response to the LP ELISA, the reactor/s is/are to be tested by virus neutralisation tests (VNTs) [at the World Reference Laboratory at Pirbright, UK] for all serotypes known to occur in Thailand. If any animal is positive in VNT, the reactors must be removed and PEQ restarted or the shipment cancelled. If no animal is positive in the VNT, details of all testing and any known vaccination and possible exposure history should be forwarded to AQIS forthwith for a decision on eligibility for importation.

If any elephant is positive to the polymerase chain reaction (PCR) based test for tuberculosis, that elephant must be removed from the quarantine and all other elephants re-tested. If *Mycobacterium bovis* or *M tuberculosis* is cultured from any elephant, that elephant and any others from the same source herd must be removed and the PEQ restarted or the shipment cancelled.

If any elephant is positive to any blood smear, mouse inoculation test (MIT) or PCR-based test for *Trypanosoma evansi*, that elephant must be removed and PEQ restarted or the shipment cancelled. If any animal is positive to the ELISA or the indirect fluorescent antibody test (IFAT) for *T evansi* antibodies but negative to other tests, that animal must be removed, and all other elephants re-tested.

These requirements may be amended at any time at AQIS' discretion.

ATTACHMENT 2

WORM EGG TESTING PROCEDURE

This technique, which is based on that of Egwang and Slocombe (1982), is a very sensitive egg detection procedure, having the ability to detect the presence of worm eggs at theoretical concentrations of 1 egg per 3 grams of faeces. The capability to detect eggs at these low levels is often required for animals destined for export or import. Such animals are usually required to be proven worm-free. Animals negative for worm eggs using this examination procedure can be considered to be worm-free.

Weigh 3 grams faeces into egg count jar approximately half filled with water (30mL).

Beat well and then sieve the mixture through a sieve of 1mm mesh, mashing any unbroken faeces with a spoon.

Pour the filtrate (material passed through the sieve) into two 15mL labelled test tubes and centrifuge the filtrate at 1500-2000 rpm (300-450g) for 5 minutes.

Siphon off the supernatants, stir the sediments and combine those of both tubes into one using saturated salt solution (sugar solution may also be used) and then centrifuge this tube again at the same speed as above for 5 minutes.

Remove the tube from the centrifuge and top it up with saturated salt (or sugar) solution to form a positive meniscus and place cover slip over it.

After allowing to stand for 2-3 minutes, remove the cover slip and place it on a microscope slide and examine.

Record number of eggs/g (i.e. eggs counted divided by 3 = no. eggs/g). In some instances, a simple present or absent scoring system only may be required.