Attachment 12-3: Quarantine Requirements for the Importation of Caprine and Ovine Embryos from the United States

1. The quarantine requirements regulate the importation of embryos *in vivo* of sheep and goats of the subfamily of Caprinae (hereinafter referred to as the "embryos"). The embryos *in vivo* mentioned in the preceding paragraph refer to embryos that are fertilized and developed in live animals.
2. Testing referred to in these requirements must be conducted by laboratories owned, designated or approved by the government of the exporting country using methods listed in these requirements; or prescribed, recommended or considered suitable by the OIE's Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (hereinafter OIE Manual) for confirmation of population or individual animals being free from infection with pathogens of corresponding diseases. For diseases with no such testing methods prescribed, recommended or considered suitable in the OIE Manual, methods that have been published in international scientific journals may also be used.
3. Embryos are allowed to be imported only from zones of the United States recognized by a central competent authority of the importing country as being free from foot and mouth disease (FMD) and peste des petits ruminants (PPR).
4. The following requirements shall be complied with by the United States:

4.1 In accordance with the OIE Terrestrial Animal Health Code (hereinafter the OIE Code), the United States has been free from contagious caprine pleuropneumonia (CCP).

4.2 No Rift valley fever has been confirmed in the United States within 4 years prior to the collection of embryos.

4.3 FMD, vesicular stomatitis, scrapie, PPR, sheep pox, goat pox, Maedi-Visna, enzootic abortion of ewes, ovine epididymitis, brucellosis, tuberculosis (*Mycobacterium bovis, M. caprae* and *M. tuberculosis*), CCP, contagious agalactia, and Nairobi sheep disease are notifiable diseases in the United States.

4.4 Caprine arthritis/encephalitis, bluetongue, paratuberculosis, Q fever, salmonellosis (*S. abortusovis*), and leptospirosis are reportable to the OIE semiannually or annually:

4.5 The following measures for scrapie are implemented in the United States:

4.5.1 The ban of feeding ruminants with meat-and-bone meal and greaves derived from ruminants is effectively implemented.

4.5.2 Infected sheep and goats are euthanized.

5. For the donor male and female embryo-producing animals (hereinafter referred to as the "donor animals"), the following requirements shall be complied with:

5.1 No cases of vesicular stomatitis have been confirmed in the state of the establishments that raised the donor animals within 1 year prior to the collection of semen/embryos.

5.2 Donor animals shall be raised for 1 year prior to collection or since birth in the abovementioned establishments recognized by the United States Department of Agriculture (USDA) and in compliance with the following requirements:

5.2.1 Veterinarians accredited by the USDA are responsible for the disease diagnosis and notification of the establishments;

5.2.2 No cases of PPR, sheep pox, goat pox, and Maedi-visna have been confirmed on the establishments in the past 3 years;

5.2.3 No cases of bluetongue and enzootic abortion of ewes have been confirmed on the establishments in the past 2 years;

5.2.4 No cases of caprine arthritis/encephalitis, ovine epididymitis, brucellosis, tuberculosis (*Mycobacterium bovis, M. caprae* and *M. tuberculosis*), paratuberculosis, CCP and Q fever have been confirmed on the establishments in the previous year;

5.2.5 No cases of contagious agalactia and leptospirosis have been confirmed on the establishments in the past 6 months.

5.3 Within 7 years prior to the collection of goat embryos, donor animals originated from the establishments, which comply with the provisions of scrapie-free establishments stated in the OIE Code, or from flocks recognized as complete monitored status by the USDA Voluntary Scrapie Flock Certification Program.

5.4 Donor animals shall not be vaccinated against FMD, bluetongue, PPR and CCP.

6. Within 30 to 60 days prior to collection of semen or embryos, donor animals are inspected and found to be healthy without clinical signs of diseases by veterinarians accredited by the USDA, and the following tests and treatments shall be completed; meanwhile, the donor animals have to avoid getting exposure to rams and ewes which do not produce the same batch of embryo export to Taiwan.

The following tests/treatments shall be conducted and must have negative results:

6.1 For tuberculosis: Intradermal tuberculin test. In the states recognized as being free from tuberculosis, donor animals may be tested within 6 months prior to collection of semen and embryos;

6.2 For paratuberculosis: Complement fixation test, enzyme-linked immunosorbent assays (ELISA), fecal culture test or Delayed-type hypersensitivity (DTH) skin test;

6.3 For bluetongue: Complement fixation test, agar gel immunodiffusion assay (AGID), ELISA, RT-polymerase chain reaction (RT-PCR) or virus isolation;

6.4 For brucellosis (*Brucella abortus, B. melitensis* and *B. suis*): Complement fixation test, ELISA, buffered Brucella antigen test, fluorescence polarization assay or

serum tube agglutination test (SAT) with a result of 50 IU/ml or below;

6.5 For ovine epididymitis: Complement fixation test or ELISA;

6.6 For enzootic abortion of ewes: Complement fixation test; and

6.7 For Maedi-visna: AGID or ELISA;

Treatments for leptospirosis: Donor animals shall be injected with long-acting oxytetracycline (20 mg/kg or above) or other equivalent medicine once.

7. The embryos shall be collected in the establishments or embryos collection centers approved by the USDA and the following requirements shall be complied with:

7.1 The collection, processing, storage and transportation of embryos are supervised by veterinarians accredited by the USDA according to methods recommended by the International Embryo Transfer Society (IETS) and the requirements of animal embryo sanitation stated in the OIE Code.

7.2 Embryos are kept in the containers properly with liquid nitrogen. The following information shall be indelibly marked on the tanks: identification numbers of donor animals, breeds, collection date, names and address of embryos collection centers and container numbers.

7.3 The collection, processing, storage and transportation of embryos have to not get exposure to embryos that do not comply with the requirements.

8. Each consignment shall be accompanied by an original veterinary certificate issued by the veterinarians of the animal quarantine authority of the United States, and the certificate shall state the following information in English or Chinese:

8.1 Origin of the animal:

8.1.1 Total quantity and identification numbers of embryos;

8.1.2 Date of collection of embryos;

8.1.3 Breeds, scientific names and identification numbers of donor animals;

8.1.4 The exporting country;

8.1.5 Name and address of the establishments where donor animals are raised;

8.1.6 Name and address of the embryo collection center;

8.1.7 Name and address of the embryo storage facility; and

8.1.8 Name and address of the exporter.

8.2 Destination:

8.2.1 Country of destination; and

8.2.2 Name and address of the importer.

8.3 Result of quarantine:

8.3.1 Statement attesting that the embryos fulfill the requirements stipulated in Article 3 to 7;

8.3.2 Date of sampling, methods and dates of test and results. The name of the journals, the publication date, and title of the associated articles when using methods

published in international scientific journals.

8.4 Date of issuance, name and official stamp of the issuing authority, name and signature of the issuing officer.