

Health Certificate No. :  
(Valid only if the USDA Veterinary  
Seal appears over the certificate no.)

**HEALTH CERTIFICATE  
FOR EXPORTATION OF BOVINE EMBRYOS  
FROM UNITED STATES OF AMERICA TO  
THE PEOPLE’S REPUBLIC OF CHINA**

**I. IDENTIFICATION**

- A. Species and Commodity**            **BOVINE EMBRYOS**
- B. Exporting Country**                **UNITED STATES OF AMERICA**
- C. Country of Destination**        **PEOPLE’S REPUBLIC OF CHINA**
- D. Issuing Authority**                **UNITED STATES DEPARTMENT OF AGRICULTURE**
- E. Embryo Identification**         **See Attachment 1**

**F. CONSIGNMENT DESCRIPTION**

- 1. **Total Number of Embryos:**
- 2. **Container’s Official USDA Seal Number(s):**

**G. ORIGIN OF THE EMBRYOS**

- 1. **Name of Exporter / Center:**
  - Line 1
  - Line 2
  - Line 3
- 2. **Address:**
  - Line 1
  - Line 2
  - Line 3
  - Line 4
  - Line 5

**H. DESTINATION OF THE EMBRYOS**

- 1. **Means of Transport:**
- 2. **Name of Consignee:**
  - Line 1
  - Line 2
  - Line 3
- 2. **Address:**
  - Line 1
  - Line 2
  - Line 3
  - Line 4
  - Line 5

## II. HEALTH DATA

### A. Certification Statements

The undersigned USDA-accredited veterinarian hereby certifies the following:

1. The United States of America is officially recognized as free from foot-and-mouth disease, rinderpest, contagious bovine pleuropneumonia and lumpy skin disease.

With respect to bovine spongiform encephalopathy (BSE):

- a. Embryo Collection Centers (ECC) are located in the areas which are within the U.S. national surveillance program which operates in accordance with OIE guidelines as related to prevention, control and eradication of BSE.
  - b. There have been no suspected or confirmed cases of BSE in the Embryo Collection Center.
  - c. Donor animals were born after implementation of the August 1997 feed ban and have not been fed any materials prohibited under the ban.
  - d. Donor animals can be imported into the United States from countries with equivalent or lower BSE risk levels and an equivalent feed ban. Imported donor animals were born after the feed ban was implemented in the country-of-origin. The birth farm of the imported donor animal have had no suspected or confirmed cases of BSE for the previous six (6) years.
  - e. Donor animals are not the progeny or birth cohorts of animals suspected or confirmed to be BSE positive.
2. Each Embryo Collection Center is located on the farm where:
    - a. there has been no clinical evidence of bluetongue in any ruminant; and
    - b. for the past 12 months, no bluetongue virus has been isolated from any ruminant. The donor cow of the export embryos have been the resident of the Embryo Collection Center/farm for the past 12 months.
  3. The donor cows are from Embryo Collection Centers/farms recognized by USDA as free of tuberculosis and brucellosis.
  4. The donor cows are from farms where, in the past 2 years, there has been no clinical signs of bovine virus diarrhea, chlamydiosis, campylobacteriosis, trichomoniasis, paratuberculosis and IBR.
  5. Within the 21-60 days after collection of embryos for export, the donor cows were subjected to tests for the following diseases with negative results:<sup>1</sup>
    - 5.1 Tuberculosis: Intradermal caudal fold test using bovine PPD tuberculin with no reaction.
    - 5.2 Epizootic Hemorrhagic Disease/Bluetongue: AGID test
    - 5.3 Campylobacteriosis: Culture of vaginal mucus. (Only required for cows that have a history of natural breeding.)
    - 5.4 Trichomoniasis: Culture of vaginal mucus. (Only required for cows that have a history of natural breeding.)

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- 5.5 Leptospirosis: Microtiter-agglutination test for serovars L. pomona, L. canicola, L. grippityphosa, L. hardjo, and L. icterohaemorrhagiae at 1:400 dilution with negative results.
6. On the day of embryo collection, blood samples were taken from the donor cows and the serum examined, with negative results, for presence of BVD virus by two passages (each at least 7 days) on tissue culture with cultures checked by immunofluorescence.<sup>1</sup>
  7. No clinical signs of infectious or contagious disease were observed in the donor cow from 30 days before to 30 days after collection of the embryos for export.
  8. The semen used to inseminate the donor cows met the import requirements of the PRC.<sup>2,3</sup>
  9. The collection and processing of the embryos for export was done under the supervision of a USDA-accredited veterinarian and in accordance with the guidelines of the International Embryo Transfer Society (IETS).
  10. Within 24 hours prior to collection of the embryos for export, the donor cows and all other cattle, sheep, and goats on the premises were found to be healthy and free of signs of infectious or contagious disease upon clinical examination by a USDA-accredited veterinarian.
  11. All the embryos for export were transferred through five washes in phosphate buffered saline (PBS) containing bovine serum albumin (BSA); then through two washes in a solution containing trypsin at a concentration of 0.25%, pH 7.6-7.8, for a total trypsin exposure time of 60-90 seconds; and finally through five washes of PBS containing serum instead of BSA. Each of the washes was a 100-fold dilution of the previous one and a fresh sterile pipette was used for each transfer.
  12. Only embryos from the same donor were washed and treated together. After the last wash, each embryo was examined microscopically to ensure that its zona pellucida was intact and free from any adherent material.
  13. The embryos for export were packaged and sealed in standard cryovessels. The cryovessels were permanently marked and coded under the supervision of a USDA-accredited veterinarian.
  14. The embryos for export were frozen and kept under the supervision of a USDA-accredited veterinarian until prescribed tests and examinations were completed.

<sup>1</sup>See Attachment 2 for test dates.

<sup>2</sup>Semen from a bull not born in a State acceptable for bluetongue (please refer to the PRC's protocol for importation of bovine semen from the United States for the list of acceptable States) can have been used to produce the embryos for export if: a) the bull was evaluated for bluetongue by virus isolation (VI) test (on whole blood) and ELISA, with negative results, prior to movement to an AI center in a State acceptable for bluetongue; b) the bull was evaluated again by VI test and ELISA 45 days after moving to the AI center, with negative results; and c) all other bluetongue requirements in the PRC's semen protocol were met.

<sup>3</sup>Semen collected at an AI center where all bulls had not been tested for IBR and found seronegative can have been used to produce the embryos for export if: a) all seropositive bulls at the AI center had been tested (blood) for IBR virus infection by virus isolation, with negative results, and b) the donor bull was seronegative at 1:2 on the regular, semiannual test of all bulls and was seronegative at 1:2 when tested between 21 and 60 days after semen collection.

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Type or Print - Name and Address  
of issuing USDA-accredited Veterinarian

Type or Print - Name of Endorsing  
Federal Veterinarian

Name:

Name:

Address:  
Line 1  
Line 2  
Line 3  
Line 4  
Line 5

\_\_\_\_\_  
Signature of Accredited Veterinarian

\_\_\_\_\_  
Signature of Endorsing Area Veterinarian  
In Charge (Valid only if USDA Veterinary  
Seal Appears Over Signature)

Date Issued:

Date Endorsed:

Attachment 1

<b>NAME AND NUMBER OF EMBRYO DONOR</b>	<b>BREED OF EMBRYO DONOR</b>	<b>NAME AND NUMBER OF SEMEN DONOR</b>	<b>BREED OF SEMEN DONOR</b>	<b>EMBRYO COLLECTION DATE</b>	<b>NUMBER OF EMBRYOS</b>

Attachment 2

<b>EMBRYO DONOR ID</b>	<b>EMBRYO COLL. DATE</b>	<b>TB TEST DATE</b>	<b>EHD/BT TEST DATE</b>	<b>CAMPY TEST DATE</b>	<b>TRICH TEST DATE</b>	<b>LEPTO TEST DATE</b>	<b>BVD TEST DATE</b>