

QUARANTINE REQUIREMENTS FOR THE IMPORTATION OF OVINE SEMEN FROM CANADA, THE UNITED STATES OF AMERICA AND MEMBER STATES OF THE EUROPEAN UNION

1 GENERAL

- 1.1 These conditions apply to frozen semen collected from sheep which, immediately prior to the pre-collection period¹, were living in Canada, the United States of America (USA) or a Member State of the European Union (EU).
- 1.2 Each consignment of semen must be accompanied by a copy of a valid *Permit to Import Quarantine Material into Australia* obtained, prior to the export of the semen, from the Australian Quarantine and Inspection Service (AQIS) office in the State of Australia to which the importation is to be made.
- 1.3 Each consignment must be accompanied by an Animal Health Certificate which conforms to, or includes equivalent information to, Office International des Epizooties (OIE) International Animal Health Code (*Code*) Model Certificate No 3. The Certificate must be in English and signed by the accredited artificial insemination (AI) centre supervising veterinarian² and an *Official Veterinarian*³. The Certificate must be stamped on each page with an Official stamp.

The Animal Health Certificate must include an attached table showing details of the donor, semen identification, semen collection dates, dates of sampling for tests, type of tests used, the dates of the pre-collection and collection periods and details of the autopsy performed on the male donor.

The semen must be collected and processed in an *AI centre* which meets the *Code* requirements for accreditation presented in section B of Appendix 4.2.2.2. (Attachment 1). This must be certified under **V. Sanitary information** in the Animal Health Certificate.

- 1.4 Semen collections and all servicing of storage containers prior to export must be performed under the supervision of either the centre veterinarian or the *Official Veterinarian*. Blood and fleece samples must be collected for diagnostic tests or DNA testing by the centre veterinarian, the *Official Veterinarian* or a registered veterinarian appointed by the centre veterinarian and acting under written instruction. The program may be subject to direct audit by AQIS at any time during the collection period.
- 1.5 The final identification and placement of the semen straws into new, unused liquid nitrogen in a new, or properly disinfected, container prior to export of the semen to Australia must be performed under the supervision of an *Official Veterinarian*.

¹ The pre-collection period is the 30 day period immediately prior to the first collection of semen.

² The supervising centre veterinarian directly supervises an accredited AI centre. The accredited AI centre supervising veterinarian must be approved by the Animal and Plant Health Inspection Service (APHIS) in the USA, the Canadian Food Inspection Agency (CFIA) in Canada, or the *Veterinary Administration* in the appropriate EU Member State and issued with a recognised artificial breeding organisation identification number.

³ An *Official Veterinarian* is a veterinarian authorised by APHIS, CFIA or the *Veterinary Administration* of the exporting Member State of the EU to perform animal health and/or public health inspections of commodities and, when appropriate, perform certification in conformity with the provisions of Chapter 1.3.2. of the Office International des Epizooties (OIE) International Animal Health Code (*Code*).

1.6 The semen must be shipped to the Australian importer care of AQIS.

1.7 AQIS may vary or review the conditions at any time.

2 ANIMAL HEALTH CERTIFICATION

Each consignment must be accompanied by an Animal Health Certificate which conforms to, or includes equivalent information to that in, Code Model certificate No 3.

The Animal Health Certificate must attest, under **V. Sanitary Information**, that:-

- 2.1 Immediately prior to the pre-collection period each donor was living in Canada, the United States of America or a Member State of the European Union in a country or zone recognised by the OIE as being free from foot and mouth disease.
- 2.2 The exporting country meets the *Code* Article definitions for country freedom from sheep and goat pox (capripoxvirus).
- 2.3 The semen came from donors, 5 years of age or older prior to export of the semen, and
 - . which had lived only in a country or zone where:
 - scrapie has been compulsorily notifiable during the previous 6 years;
 - an effective and continuous national surveillance system is practiced;
 - brains from clinically suspect animals which are slaughtered or die are examined in a laboratory in accordance with the diagnostic techniques set out in the OIE Manual of Standards for Diagnostic Tests and Vaccines or the USDA Voluntary Scrapie Flock Certification Program Standards, Appendix 1;
 - the feeding of ruminant derived meat-and-bone meal to sheep and goats is banned;
 - scrapie-affected sheep and goats are slaughtered and their carcasses disposed of in a manner that would reliably preclude the spread of scrapie infective agent (such as complete incineration), and
 - procedures are followed which allow tracing of each scrapie affected animal back to its flock of birth.
 - . which are of a homozygous PrP genotype known to be susceptible to scrapie, in relation to the particular breed of sheep (approved by AQIS), as verified in the attached certificate/s from a laboratory/laboratories officially approved by the *Veterinary Administration* to do PrP genotype testing.

[Note: Breeds and genotypes permitted without consultation with AQIS:

 - . *Suffolk – QQ at Codon 171, and*
 - . *Cheviot, Texel, Charollais – VRQ/VRQ (at Codons 136/154/171).*

Requests for the importation of embryos from other breeds will be considered by AQIS after receiving details of breed specific PrP genotype and scrapie susceptibility through the Veterinary Administration of the exporting country.]
 - . which originated from flocks:

EITHER

certified as Complete Monitored status in the USDA Voluntary Scrapie Flock Certification Program

OR

 - in which no case of scrapie has been confirmed or suspected during the 5 years immediately prior to collection;
 - in which all animals are identified and can be traced back to their flock of birth;

- for which records of parentage, and movements of animals in and out of the flock, are maintained for a minimum period of 5 years;
- into which, during the previous 5 years, introductions were only permitted from flocks with equivalent scrapie status, and
- in which no animals have commingled with flocks of lower scrapie status during the previous 5 years

OR

for which confirmed information is available which would provide equivalent security to the above.*

*[Note: Applications for this option must be made to AQIS through the Veterinary Administration of the exporting country.]

2.4 Each donor was isolated from all ruminants, except other donors of equivalent health status, during the pre-collection and the collection periods. Prior to entry into quarantine each donor was individually identified by microchip⁴ implanted midline between the shoulder blades.

2.5 Donors were

- not vaccinated against any diseases during the pre-collection period nor during collection, and
- clinically inspected at least each week during the pre-collection period and on each day blood samples were collected and, at each inspection, were found to be free from signs of contagious and infectious diseases (by the accredited AI centre veterinarian, *Official Veterinarian* or a registered veterinarian appointed by the centre veterinarian and acting under written instruction).

2.6 All animal health testing, [to meet these conditions](#), was performed at laboratories, and using tests, approved by the *Veterinary Administration* of the exporting country.

2.7 Bluetongue (BT)

Each donor was

EITHER

kept in a BT virus free, or seasonally free, country or zone for at least the 60 days before commencement of, and during, collection of the semen

OR

subjected to a serological test to detect antibody to the BT virus group, such as the BT competition enzyme-linked immunosorbent assay (ELISA) or the BT agar gel immunodiffusion (AGID) test, between 28 and 60 days after collection, with negative results

OR

subjected to a BT virus isolation test or polymerase chain reaction (PCR) test on a blood sample taken on the day of collection, with negative results.

2.8 Johne's disease (JD) (paratuberculosis)

Each donor:

EITHER

gave a negative result to an absorbed ELISA or AGID for JD between 90 days before the first collection of semen and export

⁴ The microchip, or electronic implant is any radio frequency identification device approved for use by the exporting country *Veterinary Administration* which is tamper resistant and readable by equipment available to the *Veterinary Administration*.

OR

has been kept in a flock in which no clinical sign of paratuberculosis was officially reported during the 5 years immediately prior to collection.

2.9 *Brucella ovis* infection

Each donor:

EITHER

has lived only in countries in which *B ovis* infection has not been reported

OR

has lived only in flocks recognised as accredited free by the *Veterinary Administration*

OR

gave a negative result to a complement fixation test (CFT) or an absorbed enzyme-linked immunosorbent assay (ELISA) for *B ovis* between 90 days before the first collection of semen and export.

2.10 *Brucella melitensis* infection

Each donor:

EITHER

has lived only in a country or zone which meets *Code* requirements for country freedom (Article 3.3.2.1.)

OR

immediately prior to the pre-collection period, was part of a flock officially free from *B melitensis* infection (Article 3.3.2.2.)

and

gave a negative result to a CFT and a Rose Bengal plate agglutination test for *B melitensis* infection on the same blood sample taken during the pre-collection period or at autopsy.

2.11 Contagious agalactia (CA)

Each donor has lived on premises in which contagious agalactia had not been diagnosed during the 6 months immediately prior to the pre-collection period.

2.12 Maedi visna (MV)

Each donor :

EITHER

immediately prior to semen collection, was part of an accredited MV free flock recognised by the *Veterinary Administration*

OR

immediately prior to semen collection, was part of a flock in which MV had not been diagnosed during the previous 3 years and during this 3 year period no commingling⁵ with goats occurred and no animals were introduced from flocks with a lesser disease status

AND

gave a negative result to

either

an approved ELISA, for MV antibodies on two blood samples collected 30 days apart during the pre-collection period, at the time of collection or at autopsy

⁵ Animals grouped together having physical contact. This does not include incidental contact between animals off the flock's premises, such as occurs at shows and sales.

or
an approved virus isolation technique using white blood cells (mononuclear cells) or semen collected during semen collection after the pre-collection period or autopsy
or
an approved nucleic acid recognition test, eg. a polymerase chain reaction (PCR) test on white blood cells (mononuclear cells) or semen collected during semen collection, after the pre-collection period or at autopsy.

2.13 Enzootic abortion of ewes

Each donor has lived on premises in which enzootic abortion of ewes (EAE) had not been diagnosed during the 2 years immediately prior to the pre-collection period

AND

gave a negative result to a CFT test for EAE during the pre-collection period.

2.14 Jaagsiekte

Each donor:

EITHER

has only lived in flocks which include animals older than 5 years, and in which, as far as can be determined, after due enquiry and examination of official records, all animals remained free from jaagsiekte, based on the absence of clinical signs, for at least 5 years immediately prior to collection of semen. During this period no animals were introduced from flocks with a lesser jaagsiekte status

AND

gave a negative result to a pathological examination or immune or nucleic acid test for jaagsiekte virus/viral components in lung and associated lymphoid tissues in accordance with procedures approved by the *Veterinary Administration* for the detection of jaagsiekte.

**[Note: Testing must be carried out at a laboratory approved by the Veterinary Administration to carry out histopathological diagnosis and/or immune or nucleic acid detection testing.]*

2.15 Samples for DNA testing

Before the export of semen, blood and fleece samples were collected from the donor and labelled in accordance with section D Appendix 4.2.2.2. of the *Code*.

**[Note: Information on the collection and submission of samples for DNA testing is provided at Attachment 1.]*

2.16 Before the export of semen each male donor was autopsied under the supervision of an *Official Veterinarian* or a registered veterinary pathologist employed at a veterinary laboratory approved by the *Veterinary Administration* and acting under written instruction from the *Official Veterinarian*

AND

gave a negative result to tests for scrapie prion protein (PrPsc)* on specimens of brain, brain stem, spinal cord, palatine tonsils, spleen, mesenteric lymph nodes and distal ileum using immunohistochemical methods or techniques of equivalent sensitivity in accordance with procedures laid down by the *Veterinary Administration* for the detection of scrapie infective agent.

**[Note: This testing must be carried out at a laboratory approved by the Veterinary Administration to carry out testing for scrapie prion protein (PrPsc).]*

2.17 The ovine semen in this consignment was collected, handled and stored in accordance with the *Code* (Appendix 4.2.2.2.). Equipment which came in contact with the semen was either new or treated by a process recommended for the destruction of TSE infective agents in accordance with the recommendations of the *Veterinary Administration* *.

*[Note: Processes include autoclaving at 136 degrees C for 1 hour or soaking in a 2 percent available chlorine solution (equivalent to 20,000 ppm) for 1 hour. (from Appendix 2 USDA Voluntary Scrapie Flock Certification Program Standards)]

2.18 The semen in this consignment has been stored:

- . only with other semen, collected for export to Australia, or of equivalent health status;
- . in sealed containers or in unsealed containers kept in a secure area locked under the supervision of the centre veterinarian, and
- . since the end of the collection period until export in a secure place.

2.19 The semen straws were identified and placed into new, unused liquid nitrogen in a new or properly disinfected container under the supervision of an *Official Veterinarian*. The contents of the container were verified by the *Official Veterinarian* prior to sealing of the liquid nitrogen container and the number or mark on the seal recorded on the certificate prior to export.

3 IMPORTERS/AGENTS RESPONSIBILITIES

3.1 It is the responsibility of the importer to arrange for any other health certification or testing of donors (eg for inherited diseases or genetic defects or for movement of animals or genetic material into certain zones in Australia).

3.2 The importer must nominate a person who will be accessible to AQIS and who will accept responsibility for ensuring that all import requirements are met and for Customs clearance and Quarantine inspection and clearance in Australia.

4 POST ARRIVAL

4.1 The consignment will be held by AQIS until a Quarantine Officer has checked the certification, conducted an audit of the contents of the shipping container and received results on DNA testing of donor samples from an AQIS recognised laboratory.

4.2 In the event of a consignment arriving in Australia without the correct certification, with the seals on the transport containers broken or in any other way not having met these requirements, the consignment may be retained in quarantine, returned to the country of origin or destroyed without recompense.

4.3 Under the supervision of a Quarantine Officer a sample of semen from each donor must be removed from the liquid nitrogen container and prepared for submission to an AQIS recognised laboratory for DNA testing in accordance with the instructions at Attachment 1. A laboratory report confirming matching of the DNA profiles of the donor's tissue samples must be provided to the regional AQIS office before the semen will be released by AQIS. All testing will be at the importer's expense.

SARAH KAHN
Assistant Director
Animal Quarantine Policy Branch

Collection, preparation and submission of samples for DNA testing

The DNA profile of donor blood, fleece and semen will be matched at a laboratory recognised by AQIS for the purposes of conducting DNA testing.

Blood samples

Approximately 0.1 ml of blood should be collected from donors and carefully applied to the filter paper supplied by the laboratory. The blood is allowed to absorb into the filter paper, dry and is then sealed in the sample collector supplied. The collector should then be labelled with the donor's identification number and attached to the health certificate accompanying the consignment of semen.

Fleece samples

Collect enough fleece to cover approximately one quarter of the surface of the sample collector supplied by the laboratory. Stick the fleece onto the collector making sure that the amount of fleece does not prevent sealing. The collector card with fleece attached should be labelled with the donor's identification number and attached to the health certificate accompanying the consignment of semen.

Submission of samples on arrival

Under the supervision of an AQIS inspector a semen sample from each donor must be removed from the liquid nitrogen container and an aliquot carefully applied to the filter paper supplied by the laboratory. The semen is allowed to absorb into the filter paper and dry and is then sealed in the sample collector supplied. The collector card should then be labelled with the donor's identification number. The cards containing blood, semen and fleece from the one donor should be sent together to an AQIS recognised laboratory for DNA testing.