Ref: CTO 2016 050 [G] **Zoo: Various tests and treatments**

CTO direction to biosecurity inspectors for the clearance of zoo antelope

Pursuant to section 27(1)(d)(iii) of the Biosecurity Act 1993 I, Vicki Melville, Manager Animal Imports, Ministry for Primary Industries (under delegated authority), give the following directions for zoo antelopes to be given clearance in accordance with the following measures, different from those in the applicable import health standard for zoo antelope from South Africa (zooantic.saf):

1. Clause 3.1.3 of the veterinary certificate requires testing for *Anaplasma marginale* using the ELISA test.
   This CTO direction allows testing by PCR. PCR testing is considered equivalent to ELISA testing.
   Previous risk advice has noted that ELISA tests may pick up antibodies against most Anaplasma species, PCR can be used to specifically test for *Anaplasma marginale*.

2. Clause 3.2 requires the antelopes to be tested for bovine tuberculosis on two occasions with an interval of 13 to 33 days between the tests using the following protocol:
   Test 1: The hair in an area of 100mm X 100mm at the mid cervical site was shaved clean and injected intradermally with 0.1 ml of 1mg/ml (50,000IU/ml) PPD Bovine tuberculin. Blood samples were collected for the Bovigam and BTB serological tests. 72 hours later, each mid cervical injection site was observed for any evidence of a swelling reaction.
   Test 2: 13 to 33 days after Test 1, blood samples were taken for repeat Bovigam and BTB serological tests:

   This CTO direction allows for the antelopes to be subjected to a single gamma interferon test instead of the Bovigam and BTB serological tests 13-39 days after the intradermal test with negative results for *Mycobacterium bovis*. This testing regime is considered equivalent.

3. Clause 3.4 of the veterinary certificate requires that faecal samples were collected per rectum on two occasions during PEI at an interval of 10-14 days and cultured for Salmonella spp using enrichment broths and selective media.
   This CTO direction allows that faecal samples were collected at an interval of up to 19 days. The addition of days between faecal collections is not considered to significantly change the risk or health status of the animal.

4. Clause 3.5.3 requires that ten days after entering PEI each animal was anaesthetised, meticulously inspected and found to be free of evidence of ticks and other ectoparasites.
   This CTO direction allows that each animal was inspected three times during PEI, with an additional ectoparasite inspection prior to shipment. This is considered equivalent to clause 3.5.3.

5. Clause 3.6 requires that 7-10 days prior to entering PEI and within 48 hours of entering PEI each animal must be treated with an endoparasiticide. The efficacy of the endoparasiticide must be checked during PEI by a faecal floatation test and give a zero parasite egg count. The faecal floatation test must be carried out 7 to 14 days after treatment and be based on that of TG Egwang and JOD Slocombe (1982). "Evaluation of the Cornwell-Wisconsin centrifugal flotation technique for recovering trichostrongylid eggs from bovine feces". Can. J. comp. Med. 46:133-137 (1982). (Treatments must be repeated on animals that give a positive parasite egg count until they give a zero parasite egg count.
   This CTO direction allows that the McMasters technique was used to check the efficacy of the endoparasiticide.

This direction takes effect from the date of signing and continues in effect until amended or revoked.

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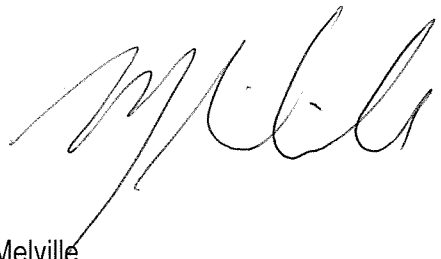
Signed at Wellington this 2nd day of August 2016



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