

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 95

**Division/Agency:** Exports Division

**Topic:** Export Meat Inspection

**Proof Hansard page:** Written

**Senator BULLOCK asked:**

In relation to the “Panel of providers for the provision of Meat Safety Inspectors to conduct inspection services at export registered abattoirs” which is the subject of AusTender RFT 2015-22058:

1. How will this panel operate?
2. Who will be the employer of the meat inspectors?
3. What industrial instrument will be relied upon for their pay and conditions?
4. What benefit does the provider get from this arrangement?
5. What training and qualifications are meats inspectors under the tender expected to hold?
6. Are these training and qualification expectations the same as those required by meat inspectors directly employed by the government?
7. What ongoing training and support will meat inspectors under the tender receive to develop and maintain their skills?
8. Is ongoing training and support a requirement in the tender documents?
9. How will you assess the suitability of a third party provider?

**Answer:**

1. The tender process will establish a panel of suppliers for the provision of meat safety inspectors to the department. Where a need arises for irregular or intermittent services at an export registered meat establishment, the department may obtain these services from a supplier on the panel.

**Question:** 95 (continued)

2. The supplier will be responsible for obtaining suitably skilled staff, for provision to the department under a Deed of Standing Offer and Purchase Order.
3. Payment arrangements for individual meat inspectors is a matter for the supplier.
4. The department cannot comment as this is a commercial matter for the supplier.
5. Meat inspectors provided to the department by a supplier will be required to hold a current Certificate IV in Meat Processing (Meat Safety).
6. Yes.
7. Meat inspectors provided by a supplier to the department will participate in the department's capability assessment program and attend other training as required from time to time. They will also participate in regular performance reviews conducted by the department, and will have access to all instructional material relating to their role.
8. Yes.
9. Tenderers will be assessed in accordance with the Request for Tender (Part 3. Evaluation Process). This includes evaluation of compliance with mandatory conditions set out in the tender, as well as a value for money assessment. A value for money assessment includes consideration of the ability for the tenderer to meet the Statement of Requirements described in the Request for Tender; organisational capability; previous performance and referees reports; price; and corporate information (including financial viability).

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 96

**Division/Agency:** Exports Division

**Topic:** Export Meat Inspection

**Proof Hansard page:** Written

**Senator BULLOCK asked:**

Have there been concerns or objections expressed by our major trading partners, including the United States and the European Union to the use of third party meat inspectors? Please provide any relevant documentation, including letters or notes of meetings.

**Answer:**

All major trading partners, including the United States and the European Union, accept the use of third party meat inspectors as part of the Australian Export Meat Inspection System (AEMIS).

Australia exports meat and meat products produced under AEMIS to over 120 markets annually. To date, the Department of Agriculture is not aware of any consignments that have been rejected due to concerns related to the use of third party meat inspectors.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 97

**Division/Agency:** Exports Division

**Topic:** Export Meat Inspection

**Proof Hansard page:** Written

**Senator BULLOCK asked:**

What information is available about the views of Australian meat exporters about the relative merits of government meat inspectors compared to third party meat inspectors?

**Answer:**

Industry is supportive of ongoing meat inspection reform and are being consulted regularly on this initiative.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 98

**Division/Agency:** Exports Division

**Topic:** Export Meat Inspection

**Proof Hansard page:** Written

**Senator BULLOCK asked:**

How many incidents of Australian Export Meat Inspection Service certified meat being rejected at entry have occurred since 2012, broken down by country?

**Answer:**

From 2013 to 2015, the Department of Agriculture was notified by importing countries of a total of 91 rejections of meat and meat products, representing 0.02 per cent of approximately 450 000 meat and meat product consignments certified for export.

The rejections occurred due to a number of considerations, including microbiological levels not complying with importing country requirements (e.g. refrigeration failure during transport); non-compliance with importing country residue standards; and visual contamination (e.g. hair). The rejection data does not include documentation errors, commercial disputes, or carton damage during transit.

<b>Country</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
US	9	5	7
Russia	30	25	-
Singapore	-	1	-
Japan	1	-	-
UK	-	1	-
Republic of Korea	4	5	1
China	-	1	-
Mexico	1	-	-
<b>Total</b>	<b>45</b>	<b>38</b>	<b>8</b>

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 99

**Division/Agency:** Exports Division

**Topic:** High Mortality Voyages

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

**High Mortality Voyage 25**

1. After over 12 months of constant inquiries to the department, it was recently discovered that High Mortality Voyage 25 ( Port Kembla to Madagascar, December 2007) was not accompanied by a stockman, which is a condition of law (the Australian Standards for the Export of Livestock – ASEL). This information was not available in the public domain or in the high mortality investigation report for the voyage.

When the Department was questioned why a prosecution had not occurred, it stated that this was because a stockman would not have influenced the outcome of a high mortality voyage.

ASEL v2.3 is a prescriptive standard, required to be followed, regardless of outcome:

- a. When and by what process has DAFF or the Australian government made a decision that ASEL v2.3 was not a prescriptive standard?
- b. May I please have a clear example of what animal welfare 'outcome' would be sufficiently dire for DAFF to take action against an exporter?
- c. Why was a major infringement [no stockman] omitted from the Investigation Report for this voyage?

**High Mortality Voyage 39**

2. Documents from High Mortality Voyage 39, recently released under FOI, have indicated that the on board veterinarian (AAV) advised AQIS/DAFF Biosecurity that the shipment was a high risk shipment with unsuitable animals. ASEL v 2.3 requires a specific heat stress risk assessment when cattle, sourced from below the 26th Parallel, are being exported from a southern winter to a Middle Eastern summer:
  - a. Given that even the AQIS accredited shipboard veterinarian, an employee of the exporter, believed the consignment to be high risk, why did DAFF allow this voyage allowed to proceed?

**Question: 99 (continued)**

- b. May I have copies of any relevant DAFF advice that informed the allowing of this voyage to proceed?
3. Regarding High Mortality Voyage 39, the AQIS veterinarian as a matter of priority changed the space allocation between Portland and Fremantle and urgently contacted LSS to request that they reduce the number loaded at Fremantle because of insufficient space for these inappropriate cattle:
  - a. Given the high risk was obvious to an experienced live export veterinarian, why was it not obvious to DAFF? May I have a copy of the decision flow chart or risk assessment documents that informed DAFF's decision in this regard.
  - b. Does the department agree the Heat Stress Risk Assessment model is inadequate?

**Total Livestock Genetics voyage, 20 Feb 2014, Portland to Tianjin (China)**

4. On 20 February 2014, Total Livestock Genetics (TLG) exported 2400 cattle by sea from Portland to Tianjin (China) on a 19 day journey. There were 49 mortalities on the voyage, a mortality rate of 2.04 per cent. This exceeds the 1.0 per cent reportable mortality level for cattle on voyages of ten days or greater as prescribed by the Australian Standards for the Export of Livestock (ASEL).

Of the 2400 cattle by sea from Portland to Tianjin (China) of these 2205 were pregnant heifers:

- a. Why are there no records of what stage those pregnancies were at?
  - b. How many of the deceased 49 animals were pregnant?
  - c. If any, why has the mortality total not been increased to reflect the additional loss of the fetuses?
  - d. Why was it considered appropriate from an animal welfare standpoint of sending pregnant heifers on a sea journey that lasts around 19 days.
5. On Day 1 of the voyage the report states the ship encountered rough weather and high seas. Review of the Master's report by AMSA confirms that the vessel altered course twice due to moderate rolling and further experienced heavy rolling on 20 February 2014. All mortalities (except for one) were reported as a result of euthanasia due to injuries sustained during rough weather and high seas on the first day of the voyage, ie "mortalities in this consignment were a result of rough weather and high seas resulting in injuries to the cattle". The report actions also state "the exporter has advised that for any future consignments they will take a proactive approach working with the Captain to avoiding any severe weather conditions by delaying departure or adjusting the route":
  - a. How is it possible for the ship's captain and the exporter to not be aware that bad weather was expected day one into an already lengthy and arduous journey?
  - b. Why does the conclusion imply no fault?
  - c. Why is it not standard practice for the exporter to already be in constant communication with the ship's captain around weather conditions?

**Question:** 99 (continued)

- d. How can DA conclude that these mortalities were outside the exporter's control?
6. Eighteen animals that were treated and responding to treatment were rejected on arrival in Tianjin and euthanized at that time:
    - a. Why were these eighteen not euthanised earlier rather than left unfit, possibly 19 days further along in their pregnancy (if pregnant) and possibly in discomfort or pain?
  7. There were five mortalities in the registered premises; one was euthanised due to a spinal injury during transport.
    - a. What would be the likely cause of this type of injury?
    - b. How long did the animal have this injury before euthanasia occurred?

**Inadequate heat stress assessment model**

8. Given that most high mortality voyages still have heat stress as a major or contributing cause, suggesting the heat stress risk assessment model is inadequate.:
  - a. When was the heat stress risk assessment model last reviewed for adequacy?
  - b. When is it due to be next reviewed?

**Answer:**

1.
  - a. This has not occurred.
  - b. When determining whether to proceed with prosecution the department considers a number of factors:
    - Is it in the public interest
    - The nature of the offence
    - Mitigating or aggravating factors
    - The availability and efficacy of alternatives to prosecution
    - The prevalence of the type of offending and need for specific or general deterrence
    - The cost of expenditure of resources to conduct the investigation and prosecution versus likely outcome
    - Is there a reasonable prospect of conviction

These factors were considered in this case and the department decided not to proceed with a prosecution.



**Question:** 99 (continued)

- c. Although the exporter did not arrange for a LiveCorp accredited stockman to accompany this consignment an AAV did accompany the consignment. An AAV is better qualified to diagnose and treat livestock requiring veterinary attention than a stockman.

Given the findings of the investigation, and the presence of a veterinarian on board, the presence of a stockman would not have altered the outcome of this voyage.

It wasn't mentioned in the report because it was not a factor in the outcomes of this consignment.

2.

- a. The department assessed this application against the requirements of the *Export Control (Animals) Order 2004* based on information provided by the exporter in their Notice of Intention to Export and Consignment Risk Management Plan. As the application was consistent with the requirements including a Heat Stress Risk Assessment, it was approved.
- b. The details contained within these documents also include third party and commercially sensitive information. Therefore the department recommends you seek access to these documents through Freedom of Information (FOI). The FOI process provides all parties with an opportunity to comment prior to documents being released.

3.

- a. The department allowed the consignment to proceed as the application to export livestock complied with the importing country requirements, export legislation and ASEL.

After departure from Portland the shipboard AAV and one of the accredited stockmen redrafted some lines of cattle to take into account differences in size and weight. This is part of the regulatory system at work.

The heat risk assessment document contains commercially sensitive information and access to this information would require third party consultation. The documents may be requested through a Freedom of Information request – please see [http://www.agriculture.gov.au/about/accessing-information/foi/foi\\_form](http://www.agriculture.gov.au/about/accessing-information/foi/foi_form)

- b. No

4.

- a. The records of pregnancy complied with ASEL at the point of export where animals tested for pregnancy were found to be less than 190 days pregnant. All cattle in this consignment were pregnancy tested within 30 days of export by a veterinarian accredited under the National Cattle Pregnancy Diagnosis Scheme.
- b. It is unknown how many of the 49 cattle which died were pregnant.
- c. Calculation of the shipboard mortality rate is defined in ASEL as the percentage determined by dividing the number of deaths of that species occurring while on the vessel (including during loading and unloading) by the total number of that species loaded and multiplying the resulting figure by 100.

**Question:** 99 (continued)

d. Export of breeder cattle by sea confirmed as less than 190 days pregnant by a veterinarian accredited under the National Cattle Pregnancy Diagnosis Scheme is in compliance with ASEL.

5.

a. AMSA reported that

- the Master accesses the Meteo Consult weather reporting system before commencing the voyage.
- the vessel altered course twice due to moderate rolling
- the Master followed a procedure for “Navigation in Heavy Weather” and took appropriate action.

b. The investigation found the mortalities were due to rough weather and heavy seas which was outside of the control of the exporter.

c. The Master of the vessel has control over navigation and safety of the crew and cargo. The level of communication is a commercial arrangement between the exporter and the Master.

d. The department accepts that the exporter is unable to influence weather events.

6.

a. The AAV reports that the animals were responding well to treatment at the time of discharge. Rejection of particular livestock on arrival in Tianjin is a decision for the importer and importing country authorities.

7.

a. Unknown.

b. Unknown.

8.

a. The Livestock Export Heat Stress Risk Assessment Model was last reviewed in 2011.

b. The Livestock Export Heat Stress Risk Assessment Model is an industry developed model. Information on future reviews can be obtained from MLA or Livecorp.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 100

**Division/Agency:** Exports Division

**Topic:** Camels & responding to complaints

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. In January and April 2015 Port Adelaide Monitors ( in South Australia) reported unfit animals that were about to be shipped from Adelaide to WA and on to their final destination overseas. Port Adelaide Monitors (PAM) provided the Department of Agriculture with photos of these animals boarding the ships, however PAM has not yet received a reply from the Department:
  - a. Why has the Department not replied to the concerns of Port Adelaide Monitors?
  - b. Are there any inspections by non-industry paid veterinarians who can treat or euthanise unfit animals?
    - i. If not, what is the Department doing to implement such inspections or ensure euthanasia is carried out when needed?
  - c. How does the Department otherwise ensure that no unfit animals are exported, given these concerns went unanswered?
2. In October 2014 it was reported that workers for Livestock Shipping Services used electric prods on camels. Under the Australian Standards for the Export of Livestock (Version 2.3) from 2011 the use of electric prodders on camels are strictly prohibited:
  - a. Please provide details of actions, and any reports, taken in response to this complaint.
  - b. What has been the penalty imposed on Livestock Shipping Services in response to this complaint?
  - c. How does the Department ensure that the Standards for the Export of Livestock are strictly followed for camels, given what would seem to be accepted practice by LSS?
  - d. Does the Department plan to hire more inspectors in order to conduct more ad-hoc on-site inspections, given what appears to be systemic practise? If not, why not?
  - e. What is the Department doing to address breaches of the ASEL in species other than sheep and cattle, which seem to largely fly under the public radar?

**Question:** 100 (continued)

**Answer:**

1.

- a. The department has replied to all correspondence from Port Adelaide Monitors (PAM).
- b. There are inspections at loading by departmental veterinary officers who can direct euthanasia of livestock if required.

State government animal welfare inspectors may also be present at loading.

- c. There are inspections at loading by departmental veterinary officers. In accordance with Australian Standards for the Export of Livestock (ASEL) an exporter must arrange for the livestock to be inspected for health and welfare and fitness to travel, immediately before they are loaded onto the vessel. ASEL also requires an inspection of the livestock at a registered premise if they are being exported by sea.

2.

- a. This report has been referred to the department's investigation unit and is not yet completed.
- b. Consideration of penalties will be undertaken once the investigation is complete.
- c. Outlined in 1 (c) above.
- d. The department does not believe it necessary to increase inspection activities by their veterinary officers. There were 58 breeder camels exported in 2014 across three consignments. One consignment of 18 camels was exported by Livestock Shipping Services (LSS) by sea from Adelaide on 24 October 2014. The handling of these camels during loading is under investigation following the report from PAM. To date there have been no camels exported in 2015.
- e. The department addresses all breaches of ASEL in the same manner, regardless of species.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 101

**Division/Agency:** Exports Division

**Topic:** Responding to community complaints

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. The Port Adelaide Monitors (PAM) community group has contacted the department and RSPCA WA three times this year with concerns that some animals loaded in Port Adelaide - bound for Fremantle then overseas - showed physical symptoms that potentially made them 'unfit to load' under both state legislation and the ASEL (Australian Standards for the Export of Livestock). On each occasion, PAM forwarded to the department images of the animals, requesting the animals be inspected on the ship once it reached Fremantle (2 day trip from SA). An independent vet had verified the group's concerns.

For example, images and a highly detailed vet report regarding animals considered 'unfit for export' loaded on to the Awassi Express shipment (Departed SA 29.1.2015, Arrived WA 1.2.2015) were provided to the Department. The department advised the PAM group that those animals were subsequently inspected in WA, but that the inspection identified no animals as unfit for export:

- a. What specific actions were taken regarding the cattle in images provided with serious eye problems, especially the animal appearing blind in one eye?
  - b. May I have a copy of the inspection report regarding those animals inspected in WA please?
  - c. Industry-contracted vets have a conflict of interest in providing transparent advice, is the department currently considering the continuing concerns expressed about this issue?
  - d. What steps does the department take to ensure independent vets such as the RSPCA WA vet are available to inspect live animal exports onboard ships in WA ports?
2. I continue to receive concerns about the length of time it takes for the department to respond to complaints or reports from community groups monitoring animal welfare in live exports:
    - a. What is the policy and procedure regarding the maximum time allowed in which to respond to community reporting or complaints? Can the public expect their concerns to be acknowledged and addressed expediently?

**Question:** 101 (continued)

- b. Please provide a local departmental contact in Port Adelaide to whom the Port Adelaide Monitors Community Group should forward complaints to ensure expedient action.

**Answer:**

1.

- a. The images received by the department were reviewed by two departmental veterinary officers.

The departmental veterinary officers in Adelaide and Perth were contacted about their findings during their inspections.

An onboard inspection was undertaken by a departmental veterinary officer accompanied by the Western Australia Department of Agriculture General Compliance Investigator in Fremantle. This inspection noted that four white-faced cattle were found with single eye corneal opacities covering about 30 per cent of the cornea. The assessment of the departmental veterinary officer was that this was scar tissue from a previous pink eye infection. None of these cattle showed tearing, blepharospasm (squinting) or ocular discharge. There was no evidence of an active pink-eye infection and none of the cattle were blind in the affected eyes. The General Compliance Investigator also concluded there were no animal welfare issues.

- b. More detail about the inspection is given in the departmental veterinary officer's file notes (See Appendix A).
- c. No. Conflict of interest issues were reviewed in the Independent Review of Australian Livestock Export Trade 2011 (Farmer Review). The review sought views on, and considered alternatives to, the current system including replacing Australian Government Accredited Veterinarians (AAVs) with department employed veterinarians. The review did not conclude that such a change is necessary.
- d. None. It is the regulatory responsibility of departmental veterinary officers to inspect all live animal exports on board ships in WA and at other ports.

2.

- a. As a general rule, if you correspond with the department, we will respond to your request within ten business days of receipt. If we cannot fully answer your query in that time we will contact you to advise when a detailed response can be provided.
- b. The local contact in Adelaide is:

Phone 08 8201 6000 and ask for the Animal Program or email [animalexpoisa@agriculture.gov.au](mailto:animalexpoisa@agriculture.gov.au)

Veterinary Officer File Notes: Animal Inspection Report

1 Feb 2015-02-02

While inspecting the loading of the Awasssi, walking the ship, and inspecting the condition of the cattle loaded in Adelaide, I was called by PVO Dr Haydn Roeger and told that a complaint had been lodged with RSPCA Adelaide on the cattle that were loaded in Adelaide for SEAL's. I was informed to meet Western Australia Department of Agriculture General Compliance Investigator Ken Ostle at 14:00 for a visual inspection. No problems noted on cattle from the Adelaide load. Very healthy, well conditioned cattle. Some of the best I've seen.

Returned to the wharf at 13:45 and General Compliance Investigator Ken Ostle was on site. After meeting the owner of ship and given permission to walk through, we inspected the cattle loaded in Adelaide with the ship's First Officer.

Complaints to investigate were rampant pink-eye and pneumonia. No signs of pneumonia in any of the cattle. All were breathing easy. No nasal or ocular discharge noted. No laboured breathing. Four white-faced cattle were found with single eye corneal opacities covering about 30% of the cornea. My assessment is that this is scar tissue that resulted from a previous pink eye infection. None of these cattle showed pain, tearing, blepharospasm, or ocular discharge. There was no evidence of an active pink-eye infection. None of these cattle were blind in the affected eyes.

General Compliance Investigator Ken Ostle concluded that there were no animal welfare issues. I'm in complete agreement.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 102

**Division/Agency:** Exports Division

**Topic:** Microbial testing on kangaroo meat

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. Is it correct that the EU and the UK, unlike the Russia, rely on the Australian microbial screening regime for kangaroo meat?
2. What is the current protocol for the microbial screening of kangaroo meats for exports? Please provide a copy of the actual protocol and guidelines for:
  - a. Salmonella
  - b. E.coli
  - c. Acetic Acid residue
3. Please provide actual numbers of kangaroo carcasses tested for Salmonella and for e.Coli for the each of the export markets (where it differs), for example, one in ten carcasses.
4. Is kangaroo meat for exports treated with Acetic Acid?
  - a. Is exported kangaroo meat tested for Acetic Acid?
  - b. Is exported kangaroo meat treated with Acetic Acid labelled as such?
  - c. May I have details of how often exported kangaroo meat is tested for Acetic Acid; acceptable levels of Acetic Acid in exported kangaroo meat?
  - d. Is it expected that kangaroo meat will not be treated with Acetic Acid on regular basis?
  - e. What is the purpose of using Acetic Acid?
  - f. What specific contaminants and pathogens is Acetic Acid used to treat?
5. How does the allowable use of Acetic Acid for exported kangaroo meat differ from allowable use of the same for domestic consumption?



**Question:** 102 (continued)

**Answer:**

1. The EU and the UK accept Australia's microbial monitoring program for kangaroo meat. Importing countries may also conduct their own microbial testing at port of entry.
2. Provided in Attachment A. Please note, there is no protocol for testing acetic acid residue.
3. All kangaroo carcasses for export are tested for Salmonella and E.coli as per the sampling frequency described in Attachment A.
4. Yes- in some cases where use is permitted by the importing country.
  - a. No.
  - b. No.
  - c. Exported kangaroo meat is not tested for acetic acid.
  - d. No. The use of acetic acid in Australia is permitted under the Australian Food Standards Code.
  - e. Acetic acid is used as a processing aid.
  - f. Research has demonstrated that treatment of meat with acetic acid during processing may decrease levels of bacteria such as E.coli O157:H7 and Salmonella.
5. The application and use of chemicals within Australia is regulated by state and territory governments. The allowable use of acetic acid on exported kangaroo meat will not differ from the allowable use on kangaroo meat for domestic consumption unless the importing country has alternative requirements.

<b>AQIS MEAT NOTICE</b>		<b>MICROBIOLOGICAL TESTING OF WILD GAME CARCASSES AND PRODUCTS</b>	
<b>NUMBER: 2010 / 02</b>			
NSFS Ref 43		Contact Officers:	
Date of Effect: 29.03.2010	Date of Expiry: Until further notice	Elizabeth Wilcock A/g Food Safety Manager Meat Operations Elizabeth.Wilcock@aqis.gov.au 02 6272 3102	Paul Vanderlinde Manager Microbiology Residues and Food Safety Paul.Vanderlinde@aqis.gov.au 07 3246 8712
Distribution Category		Last Notice on this issue	
<input checked="" type="checkbox"/> Central & Regional Office	<input checked="" type="checkbox"/> Managers, Export Meat Establishments	2008/07	
<input checked="" type="checkbox"/> OIC Inspection Staff Meat Establishments	<input checked="" type="checkbox"/> States		
<b>IMPLEMENTATION SCHEDULE</b> (to be completed by the On Plant Supervisor on the AQIS file copy)			
Date Received: _____ Date Discussed With Management: _____			
Initial Implementation Date: _____ Date Completed: _____			
Management Initials: _____ AQIS OPS Initials: _____			

## 1. PURPOSE

To advise establishments processing wild game carcasses of changes to the requirements for microbiological monitoring of carcase surfaces and kangaroo manufacturing meat.

## 2. SCOPE

This notice applies to all export registered establishments processing wild game and mandates testing for total viable count (TVC), coliforms, *Escherichia coli* (*E. coli*) and *Salmonella* on dressed carcasses. It also introduces TVC, coliform and *E. coli* testing of kangaroo carcasses received from the field and of meat derived from kangaroo carcasses.

It is acknowledged and supported that establishments conduct additional microbiological testing programs that are complementary to the mandatory program required in this notice. It is advised that establishment management check Volume 2 for any additional importing country requirements for microbiological testing over and above the generic requirements in this notice.

### Definitions

'bulk packed' is non-vacuum packed full carton lots

This notice replaces AQIS Meat Notice 2008/07.

## 3. BACKGROUND

AQIS Meat Notice 2008/07 required game meat establishments to participate in the microbiological monitoring of carcass surfaces for total viable count (TVC) [as an indicator of general process hygiene and sanitation], coliforms, generic *E. coli* (process control verification) and *Salmonella* (pathogen reduction verification).

Baseline microbiological data for game meat has been analysed and the *E. coli* and TVC performance criteria have been reviewed and updated. In addition there have been changes to the sampling frequency and reporting requirements. In accordance with importing country requirements, microbiological monitoring of carcass surfaces now includes coliforms.

The microbiological monitoring of the bacterial levels in incoming kangaroo carcasses from the field will provide information on the standards of hygienic dressing and carcass refrigeration in the field.

The microbiological monitoring of kangaroo bulk packed manufacturing meat will provide additional supporting evidence of the food safety of this product.

## **4. PROCEDURE**

### **4.1 Sample Collection**

#### **Kangaroos**

1. Incoming kangaroo carcasses must be tested for *E. coli*, coliforms and TVC\*
2. Skinned carcasses of kangaroos must be tested for *E. coli*, coliforms, TVC and *Salmonella*\*
3. Bulk packed manufacturing meat derived from kangaroo carcasses must be tested for *E. coli*, coliforms and TVC \*

#### **All other game**

1. Skinned carcasses of all game animals must be tested for *E. coli*, coliforms, TVC and *Salmonella*\*

\* Analysis for TVC, coliforms, *E. coli* and *Salmonella* can be performed from the same sample.

For the purposes of determining production volume and therefore sampling frequency, a separate processing chain is defined in the following cases:

- 4.1.1 Each shift is considered a separate processing chain. An establishment is considered operating a shift when it operates a separate morning and evening shift, or where the operation involves 12-13 hour 3-day shifts. In the latter case a separate team is employed for each of the shifts.
- 4.1.2 Different classes of animals e.g. kangaroo & wild boar are processed on the same chain.
- 4.1.3 Multiple processing chain establishments, where the same class of animal is processed on two or more different chains.

### **4.2 Selection of Carcasses/Cartons**

Sampling shall be carried out on randomly selected carcasses and cartons. It is important that selection of carcasses and cartons is made on a statistically based random sampling program (e.g. commercially available random number tables or a computer spreadsheet application such as 'EXCEL'). Carcasses and cartons processed during different processing production periods must have an equal chance of being selected for sampling.

### **4.3 Sampling Method**

Sampling of the stipulated sites (below) shall be carried out using a swabbing method as detailed in AMN 2003/06 using a 5cm x 5cm sampling area on randomly selected carcasses. Tested carcasses or cartons are not required to be held pending availability of test results.

Individual pieces of **bulk packed manufacturing meat** are sampled by cutting a single 25cm<sup>2</sup> slice of surface tissue (maximum thickness ~ 5 mm) from product with a sterile instrument. Equipment must be sterilised between cartons. The sample is placed aseptically into a sample container or a plastic dilution bag at the establishment and transported to the laboratory.

#### 4.4 Sampling Area

4.4.1 **Kangaroo** (pre-dressing) – swab sample from one site (25cm<sup>2</sup>).

4.4.2 **Kangaroo** (dressed) – swab samples from three sites (25cm<sup>2</sup> x 3 = 75cm<sup>2</sup>).

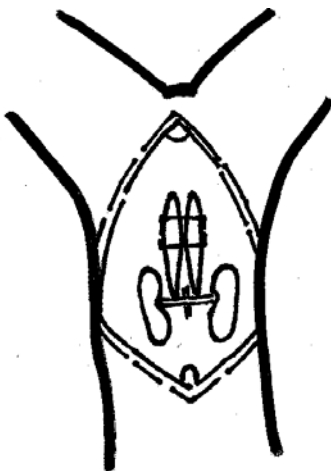
4.4.3 **Kangaroo bulk packed manufacturing meat** – excision sample from one site (25cm<sup>2</sup> by 5mm deep).

4.4.4 **Wild boar** (dressed) – swab samples from two sites (25cm<sup>2</sup> x 2 = 50cm<sup>2</sup>).

#### 4.5 Sampling Sites

##### 4.5.1 Kangaroo (Pre- dressing)

Sampling location for microbiological testing.



Internal  
tenderloin  
fillet

**Template size:** 5cm x 5cm

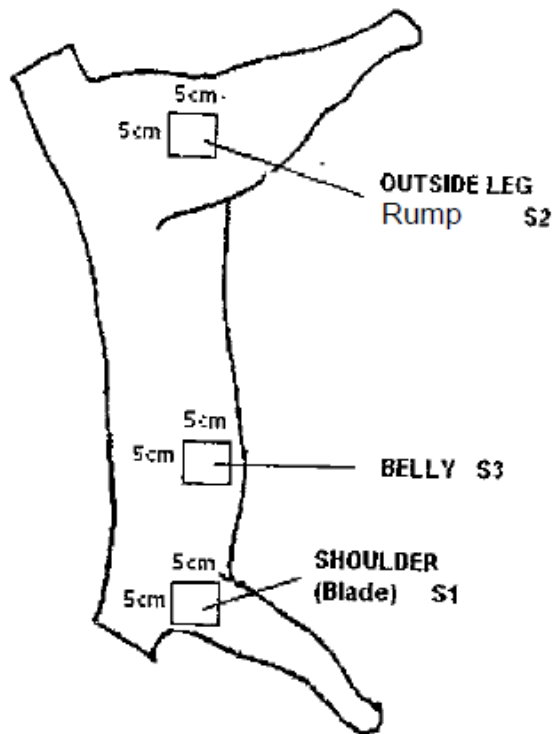
**Sampling area:** 25cm<sup>2</sup> per site

**Total area sampled:** 25cm<sup>2</sup>

4.5.1.1 **Fillet:** The lower edge of the template should be placed approximately 5 cm above the posterior edge of the kidneys.

#### 4.5.2 Kangaroo (dressed)

Sampling location for microbiological testing.



**Template size:** 5cm x 5cm

**Sampling area:** 25cm<sup>2</sup> per site

**Total area sampled:** 75cm<sup>2</sup>

**Sample order:** shoulder (S1) and rump (S2) and then belly (S3).

4.5.2.1 **Site 1 (S1) Shoulder (forequarter):** on the lateral surface of the carcass just in front (anterior) of the shoulder blade (the spine of the scapula).

4.5.2.2 **Site 2 (S2) Rump (hindquarter):** on the lateral surface of the carcass, half way between the stifle (knee) and the hip.

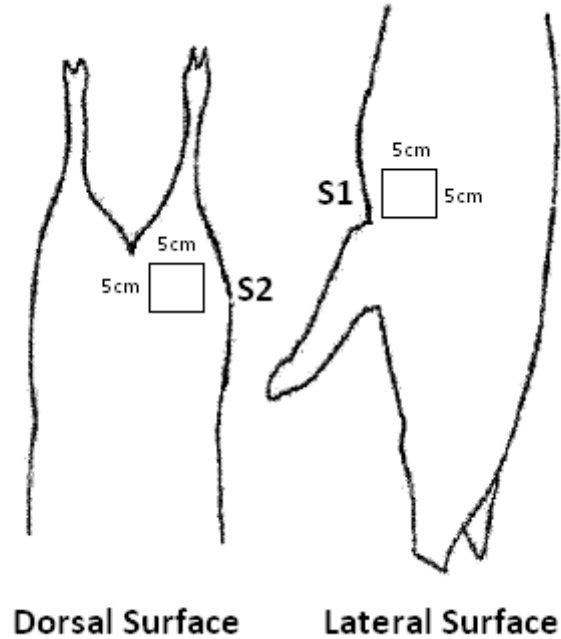
4.5.2.3 **Site 3 (S3) Belly:** Locate the last thoracic rib. The site is in alignment with the caudal edge of the last thoracic rib and bordering the mid-line cut.

#### 4.5.3 Kangaroo bulk packed manufacturing meat

Product samples will be collected randomly from meat within the carton.

#### 4.5.4 Wild Boar

Sampling location for microbiological testing.



**Template size:** 5cm x 5cm

**Sampling area:** 25cm<sup>2</sup> per site

**Total area sampled:** 50cm<sup>2</sup>

**Sampling order:** Belly (S1) and Hind Leg (S2)

4.5.2.1 **Site 1 (S1) Belly:** Locate the elbow of the carcass. Draw an imaginary straight line across (medially) to the midline cut. The edge of the site aligns with the midline cut and is bordered above by the imaginary line.

4.5.2.2 **Site 2 (S2) Hind Leg:** From the dorsal position locate the lateral surface of the base of the tail, measure up (caudal) 5 cm along the lateral edge of the exposed fat margin (the starting point). The top left hand corner of the site aligns with the starting point.

#### 4.6 Sampling Location/Time:

Incoming carcasses are to be sampled as soon as possible after arrival in either the receival area or the carcass holding chiller.

All **dressed carcasses** are to be sampled after completion of dressing at a point immediately prior to exiting the processing floor.

Product samples will be collected from completed **cartons** immediately prior to sealing.

#### 4.7 Sterilisation of templates and equipment

In order to ensure there is no cross-contamination between carcasses/cartons and templates, or equipment to carcasses/cartons, templates and equipment must be correctly 'sterilised' at the commencement of sampling and between carcasses. Used templates may be returned to the laboratory for cleaning and sanitising or immersed for 6-10 seconds in an 82°C steriliser immediately prior to sampling. Templates do not have to be sterilised between sample sites only between carcasses/cartons.

#### 4.8 Sampling Frequency

##### *E. coli*, coliforms and TVC:

<b>SPECIES/PRODUCT PROCESSED</b>	<b>SAMPLING FREQUENCY</b>	<b>SAMPLING AREA</b>
Kangaroo (pre-dressing)	1 sample every 300 carcasses with a minimum of 1 per truck	25 cm <sup>2</sup>
Dressed Kangaroo	1 sample every 600 carcasses	75 cm <sup>2</sup>
Kangaroo bulk packed manufacturing meat	1 sample every 500 cartons	25cm <sup>2</sup> by 5mm deep
Dressed Wild Boar	1 sample every 200 carcasses	50 cm <sup>2</sup>

For each production shift, each establishment must conduct at least one set of testing on one carcass and one carton.

##### *Salmonella*:

<b>SPECIES PROCESSED</b>	<b>SAMPLING FREQUENCY</b>	<b>SAMPLING AREA</b>
Dressed Kangaroo	1 sample every 3000 carcasses	75 cm <sup>2</sup>
Dressed Wild Boar	1 sample every 1000 carcasses	50 cm <sup>2</sup>

#### 4.9 Sample submission records

Sufficient information should be recorded and kept on-plant against the sample to allow identification and trace-back. Samples from pre-dressing and dressed game should be recorded with all the information on the harvester ticket. If possible, bulked packed product sample records should also contain as much harvester data as possible.

## 5. TESTING REQUIREMENTS

### 5.1 Test Methodology

AQIS approved methods are listed on the DAFF web site at:

[http://www.daff.gov.au/\\_data/assets/pdf\\_file/0020/217721/aqis\\_approved\\_methods\\_microbiological\\_testing\\_meat.pdf](http://www.daff.gov.au/_data/assets/pdf_file/0020/217721/aqis_approved_methods_microbiological_testing_meat.pdf)

Note: Laboratories approved for the determination of *E. coli* using Petrifilm are automatically approved for analysis of coliform bacteria using Petrifilm ie AOAC 991.14.

No variations from approved methods are permitted, unless they are specified by AQIS in a written amendment to this or other related Meat Notices or detailed in the AQIS approved methods list. The list of approved methods will be updated as required. Laboratories wishing to use non-approved methods must apply to AQIS in writing for approval. Methods will only be approved if they have been appropriately validated and are appropriate for the product and organism/matrix being considered.

Methods submitted to AQIS for approval may require review by overseas authorities before they can be listed as approved methods for use in microbiological testing of meat as part of an AQIS certification program.

### 5.2 Approved laboratories

All laboratories engaging in testing relevant to AQIS certification of meat and meat products must be approved by AQIS. AQIS approved laboratories are listed on the DAFF website at: [http://www.daff.gov.au/\\_data/assets/pdf\\_file/0009/1481535/approved-labs-list.pdf](http://www.daff.gov.au/_data/assets/pdf_file/0009/1481535/approved-labs-list.pdf) Laboratories testing chilled carcasses as part of the National Microbiological Monitoring program (formally ESAM samples) must have NATA accreditation for the methods used for the analysis of these samples.

Requirements for approval include laboratories' agreement to:

- 5.2.1 AQIS on-site visits (including AQIS accompanied visits by importing country auditors) and access to all records relating to AQIS testing;
- 5.2.2 Maintenance of NATA accreditation where required. Accreditation must include all AQIS approved methods used by the laboratory for testing as part of export certification;
- 5.2.3 Annual AQIS (or NATA) on-site assessments;
- 5.2.4 Participation in proficiency testing (PT) programs at a minimum frequency of 6 monthly for each organism). The results of the PT program will be used by AQIS (and where applicable NATA) to assess laboratory competence, highlight possible training needs and as part of ongoing approval decisions; and
- 5.2.5 Reporting of test results directly to AQIS at the same time that they are reported to the requesting establishment (or plant management for on-site laboratories).

## 6. TRANSPORT OF SAMPLES TO AN EXTERNAL APPROVED LABORATORY

Samples should arrive at the testing laboratory no later than on the day following sample collection. Where the sampling time precludes dispatch on the day of sampling (ie samples collected during an afternoon or night shift) samples may be sent to the laboratory on the day following collection providing any swab samples are received by the laboratory within 24 hours of sampling. Where it can be demonstrated that chilled transportation is not possible, excision samples can be frozen and stored for up to 7-days before dispatch to the laboratory. The laboratory must commence the analysis immediately upon the receipt of the sample. If this is not possible, analysis must commence no later than on the day following receipt of the sample (this



also applies to frozen samples). In all other cases the Microbiology Manager must be contacted for approval to process the sample. The procedures for the storage and transport of samples must be documented in the establishment's approved arrangement (AA).

### **6.1 Sample Temperature / Transportation**

- 6.1.1 *E. coli* / coliform / TVC and *Salmonella* samples must be transported between 0° and 7°C unless frozen as detailed above.
- 6.1.2 Samples must be refrigerated (or frozen) as soon as practical after collection (refrigeration or freezing must commence within one-hour of collection). NB: Swab samples cannot be frozen.
- 6.1.3 Bags containing samples must be sealed to ensure that there is no cross-contamination between samples during transport; this may require samples to be enclosed within a second bag.
- 6.1.4 Insert into the dispatch container all relevant documentation pertaining to the samples, including the date, time of collection and whether the samples are chilled or frozen. Clear instructions must be supplied to the contracting laboratory indicating that the samples are AQIS export samples and that approved methods must be used for their analysis.
- 6.1.5 Samples are to be transported in appropriate containers as directed by the laboratory. Containers must be able to maintain the sample temperature between 0 and 7°C. Frozen samples can be transported at 0-7°C but must not be re-frozen on arrival at the laboratory.

### **6.2 Instructions for the Laboratory**

The laboratory is to be instructed that on sample arrival, laboratory personnel immediately verify that testing can be initiated on the day following sample collection, or no later than on the day following sample receipt (this also applies to frozen samples). The laboratory must also record the temperature of the sample on arrival. Analysis can proceed for samples which exceed 7°C on arrival or for samples that cannot be analysed in the specified timeframe; however AQIS must be notified so that the validity of the results can be determined. A replacement sample may be required. The laboratory must notify the establishment of any failures and the establishment must put procedures in place to prevent further failures from occurring.

## **8. REPORTING OF RESULTS**

Laboratory results must be reported to the AQIS on plant supervisor (OPS) independently of the client and at the same time that they are reported to the client (meat establishment QA/management). Laboratories will be supplied with the AQIS OPS contact details by the establishment as part of the establishment's arrangements with the testing laboratory. For establishments carrying out in-house testing for the purpose of export certification, the laboratory staff responsible for calculating the test result must report results to the AQIS OPS independently of plant management and at the same time.

### **8.1 Reporting of *E. coli*, coliform, and TVC Results**

All test results with one or more positive colonies must be recorded by the company as a count per cm<sup>2</sup>. If no colonies are present on plates from the initial dilution, the count is reported as less than (<) the limit of detection. Laboratories must report the actual result as cfu/cm<sup>2</sup>. A sufficient number of dilutions must be performed to ensure quantitative results are reported for coliforms, *E. coli* and TVC.

For the purposes of AQIS staff reporting dressed carcass and bulk packed manufacturing meat results to the national microbiological database, results for coliforms, *E. coli* and TVC less than the limit of detection of the method are reported as zero.

## 8.2 Reporting of *Salmonella* Results

Results for samples tested for *Salmonella* must be reported as pass or fail (i.e. detected or not detected). If, on confirmation, a sample tests positive for *Salmonella*, an isolate must be forwarded to one of the following reference laboratories for serotyping. A copy of the serotype result must be sent to Food Exports Branch, Canberra, by e-mail ([MID.OpsCoord@aqis.gov.au](mailto:MID.OpsCoord@aqis.gov.au)) or fax (02 6272 5442) to be entered into the national microbiological database.

### *Salmonella* Reference Laboratories:

- a) Institute of Medical and Veterinary Science, Adelaide, South Australia
- b) Microbiological Diagnostic Unit, School of Microbiology, University of Melbourne
- c) *Salmonella* Diagnostic and Reference Laboratory, State Health Laboratory Services, Perth WA
- d) Queensland Health Scientific Services, Microbiology Public Health Laboratories, 39 Kessels Road, Coopers Plains QLD

## 9. INTERPRETATION OF TEST RESULTS

### 9.1. Interpretation of *E. coli* Results (Dressed Carcasses and Bulk Packed Manufacturing Meat)

Interpretation of *E. coli* results is based on a 'three-class sampling plan' similar to that used for other slaughter species. Traditionally, three-class sampling plans have been used for demonstrating statistical process control. The performance of such sampling plans is defined by parameters *m*, *M*, *n* and *c*, where:

'*m*' [little 'm'] is a defined value separating a good result from a marginally acceptable result (values above *m* but not greater than *M* are marginal).

'*M*': [big 'M'] is the maximum value for a marginal result (values greater than *M* are unacceptable).

'*n*' is the number of samples in a window.

'*c*' is the number of marginal samples allowed in '*n*' samples.

Based on these parameters a sample result can fall into one of three possible categories ie

- **Acceptable** – less than or equal to a defined limit (***m***) ( $\leq m$  cfu/cm<sup>2</sup>)
- **Marginal** – greater than ***m*** but not higher than ***M*** ( $>m$ , but  $\leq M$ ).
- **Unacceptable** – results greater than ***M*** ( $>M$  cfu/cm<sup>2</sup>).

### 9.2. Performance Standards for *E. coli* (Dressed Carcasses and Bulk Packed Manufacturing Meat)

### ***E. coli* Performance Standards based on 2007 national microbiological monitoring data**

<b>Species</b>	<b>n</b>	<b>c</b>	<b>m</b> (cfu/cm <sup>2</sup> )	<b>M</b> (cfu/cm <sup>2</sup> )
<b>Kangaroo</b>	15	7	50	500
<b>Wild boar</b>	15	4	50	500

Sampling is by a moving window so that on any day the previous 15 samples (including the current day's sample) are considered when assessing compliance with the performance standards. In order to allow for corrections in a process to be evaluated a window will be 'reset' after each failure and subsequent corrective/preventive actions. A window will fail if *E. coli* results > 'm' and ≤ 'M' exceed 'c' or a single result >M is recorded. Such results will trigger an *E. coli* 'ALERT'. Appendix 1 demonstrates a moving window.

When an *E. coli* sampling window fails, the establishment must immediately notify the AQIS OPS. An *E. coli* 'Alert' will require the establishment to initiate a review of the possible causative factors contributing to the 'Alert'. This may include external (e.g. collection / harvesting, transportation, storage) and/or internal factors (eg carcass dressing procedures, employee training). It should also include action undertaken to prevent the recurrence of the contributing factors. The review outcome should be documented and signed by the person(s) responsible for the action and be made available to AQIS for audit purposes.

Verification of corrective action can be achieved through further monitoring of microbiological results under this program. However, if recurrent deviations from expected performance results occur, the efficacy of the corrective actions taken must be queried and more effective changes implemented to prevent the recurrence.

### **9.3 Coliform bacteria (Dressed Carcasses and Bulk Packed Manufacturing Meat)**

AQIS has also established a target limit for coliform bacteria of <1000 cfu/cm<sup>2</sup>. A coliform count can be obtained, for example, from an *E. coli* Petrifilm plate by adding the number of blue colonies with gas to the number of red colonies with gas. This combined number can be used to obtain a coliform count per cm<sup>2</sup> as described above (section 8.1). If the coliform count is greater than or equal to 1000 cfu/cm<sup>2</sup> the establishment should consider disposition in light of importing country requirements.

A review process, as for an *E. coli* sampling window failure, should be followed if the coliform count is greater than or equal to 1000 cfu/cm<sup>2</sup>.

### **9.4 Interpretation of TVC Results (Dressed Carcasses and Bulk Packed Manufacturing Meat)**

Interpretation of TVC results is also based on a 'three-class sampling plan' similar to that described in section 9.1, against the performance standards specified below.

#### **TVC Performance Standards**

<b>Species</b>	<b>n</b>	<b>c</b>	<b>m</b> (cfu/cm <sup>2</sup> )	<b>M</b> (cfu/cm <sup>2</sup> )
<b>Kangaroo</b>	15	4	10000	100000
<b>Wild boar</b>	15	4	10000	100000

The TVC results are assessed on a moving window of 15 consecutive samples to allow for continuous process monitoring against the Quality Standards. In order to allow for corrections in a process to be evaluated the window will be ‘reset’ after each failure and subsequent corrective/preventive actions. A window will fail if more than ‘c’ results fall between ‘m’ and ‘M’; or a single result greater than ‘M’ is recorded. Such results will trigger a TVC ‘Alert’.

A TVC ‘Alert’ will require the establishment to initiate a review of the possible causative factors contributing to the ‘Alert’. This may include external factors (eg. environmental factors, stock condition) and/or internal factors (eg. carcass dressing procedures, employee training). It should also include action undertaken to prevent the recurrence of contributing factors. The review outcomes should be documented and signed by the person(s) responsible for the action and the AQIS OPS. Records of this must be provided to AQIS for audit purposes.

Verification of corrective/preventive actions can usually be achieved through further monitoring under this program. However, if recurrent deviations from expected performance results occur, the efficacy of the corrective actions taken must be queried and more effective changes implemented to prevent the recurrence.

## 9.5 Interpretation of *Salmonella* Results (Dressed Carcasses)

### *Salmonella* Performance Standards

Class of Product	No. of Samples in a Window	Maximum number of Positives Acceptable
Kangaroo	55	1
Wild boar	55	1

*Salmonella* detection does not by itself indicate a failure of the process, as contamination can be random in nature. Therefore one positive *Salmonella* detection is permitted in a ‘window’ of 55 samples. If a positive *Salmonella* detection occurs, normal sampling is to continue at the rate in section 4.8 and a sample window commences from the positive sample identification (ie. the positive is included in the sample window). In the event that a second positive *Salmonella* detection occurs within the same window of 55 samples, it will be deemed that the ‘window has failed’.

When the *Salmonella* performance standard has been breached (i.e. failure of window), the establishment must investigate to determine the cause of the non-compliance and implement effective corrective/preventive action. The effectiveness of the corrective/preventive action must be verified through enhanced levels of oversight and audit. In the event a processing deviation could not account for the findings, external factors (eg collection, storage and transportation) should be investigated.

Where *Salmonella* detections exceed the permitted number of positives, sampling is to stop irrespective of whether or not the number of samples required to complete the sample window are achieved and a new window of 55 samples must commence once corrective actions have been taken.

Where the AQIS OPS does not consider the corrective/preventive action taken in response to the 'failure of a window' to be satisfactory (i.e. where failures continue), a Corrective Action Request (CAR) will be issued.

### **9.6 Usage of pre-dressing results**

Pre-dressing sampling results are to be recorded on-plant and used by processors as an additional verification of field dressing hygiene and cold chain practices with unacceptable results used as a tool to improve harvester/field depot practices. Records of this must be provided to AQIS for audit purposes.

## **10. RESPONSIBILITIES**

### **10.1 Establishment Management**

- 10.1.1 Ensure carcase microbiological sampling and testing is carried out in accordance with the requirements of this notice and procedures are documented in the establishment's AA.
- 10.1.2 Ensure all testing is performed at an AQIS approved laboratory using AQIS approved methods.
- 10.1.3 Instruct testing laboratories to provide all test results independently and directly to the AQIS OPS at the same time as they are supplied to establishment management.
- 10.1.4 For testing of dressed carcasses or bulk packed manufacturing meat, where a coliform count equals or exceeds 1000 cfu/cm<sup>2</sup> or an *E. coli* or TVC alert occur and/or failure of a *Salmonella* window occur immediately inform the AQIS OPS, investigate the cause/s, implement appropriate corrective/preventive action and document the outcome.
- 10.1.5 Verify the effectiveness of corrective/preventive action through further monitoring under this program and enhanced levels of oversight.
- 10.1.6 Ensure positive *Salmonella* detections are serotyped and the results e-mail ([MID.OpsCoord@aqis.gov.au](mailto:MID.OpsCoord@aqis.gov.au)) or fax (02 6272 5442) to AQIS Central Office.
- 10.1.7 Ensure carcase microbiological results received that are unacceptable are used to improve harvester/field depot practices.

### **10.2 AQIS On-Plant Supervisor**

- 10.2.1 Ensure the requirements of this notice are documented in the establishment's AA and procedures are being adhered to.
- 10.2.2 Audit the microbiological testing program as requested.
- 10.2.3 Verify sample collection, preparation and submission procedures through the National Establishment Verification System (NEVS).
- 10.2.4 Perform Check-the-Checker (CTC) on establishment personnel collecting *E. coli*, coliform and TVC samples at least once/week and on each occasion for *Salmonella* samples.
- 10.2.5 Ensure Independent Product and Process Examination (IPPE) and CTC findings are recorded in NEVS, discussed with Management and reported to the ATM.
- 10.2.6 Raise a CAR for any non-compliance in sampling technique/s and ensure effective corrective action is implemented. Where continued non-compliance occurs, an intensified level of monitoring/supervision must be instituted.
- 10.2.7 Ensure samples are submitted to AQIS approved laboratories and AQIS approved methods are being used. Inform Central Office by e-mail

- ([MID.OpsCoord@aqis.gov.au](mailto:MID.OpsCoord@aqis.gov.au)) or fax (02 6272 5442) of the names of contract laboratories used by the establishment and the tests performed.
- 10.2.8 For testing of dressed carcasses or bulk packed manufacturing meat, where a coliform count equals or exceeds 1000 cfu/cm<sup>2</sup> or an *E. coli* or TVC alert occur and/or failure of a *Salmonella* window occur, ensure an investigation into the cause is undertaken and verify that the corrective/preventive action implemented is effective and sustainable.
  - 10.2.9 Inform the ATM when a *Salmonella* sampling window fails.
  - 10.2.10 Ensure positive *Salmonella* detections are serotyped and the results e-mail ([MID.OpsCoord@aqis.gov.au](mailto:MID.OpsCoord@aqis.gov.au)) or fax (02 6272 5442) to AQIS Central Office.
  - 10.2.11 Enter results (except the pre-dressed kangaroo testing results) into the national microbiological database (previously ESAM) on a regular basis.
  - 10.2.12 Monitor establishment usage of pre-dressed kangaroo results to improve harvester/field depot practices.

### **10.3 Area Technical Manager**

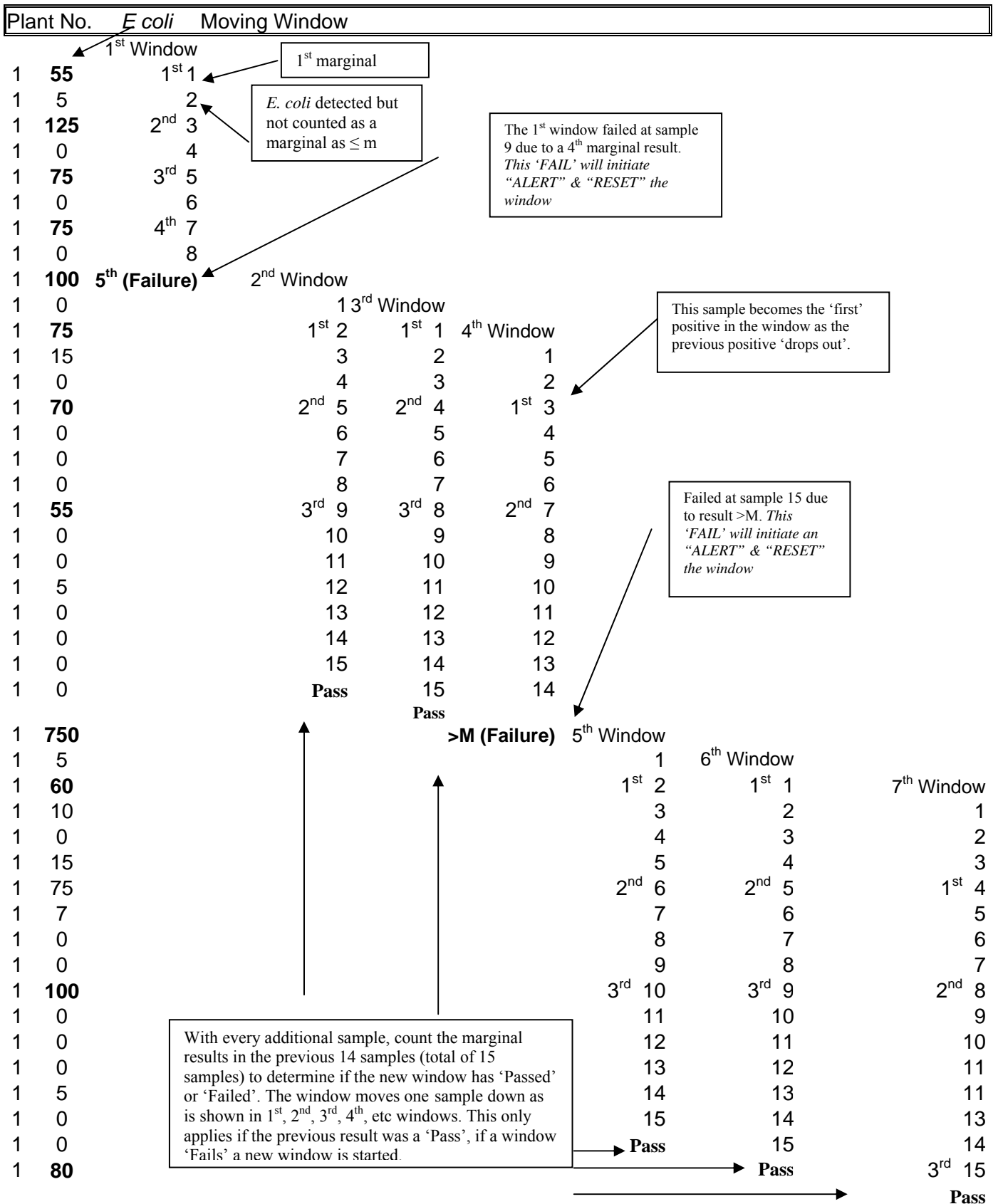
- 10.3.1 Verify OPS and establishment records and procedures for compliance with requirements.
- 10.3.2 Sight the microbiological results during the monthly audit.
- 10.3.3 Follow up any trends for coliforms, *E. coli* or TVC alerts or *Salmonella* detections at the next scheduled audit.
- 10.3.4 Critically assess the effectiveness of investigations and implemented corrective/preventive action including usage of pre-dressed kangaroo results.

## **11. REFERENCES**

1. Australian Standard for Hygienic Production of Game Meat for Human Consumption (AS 4464)

Carol Sheridan  
National Manager  
Export Meat

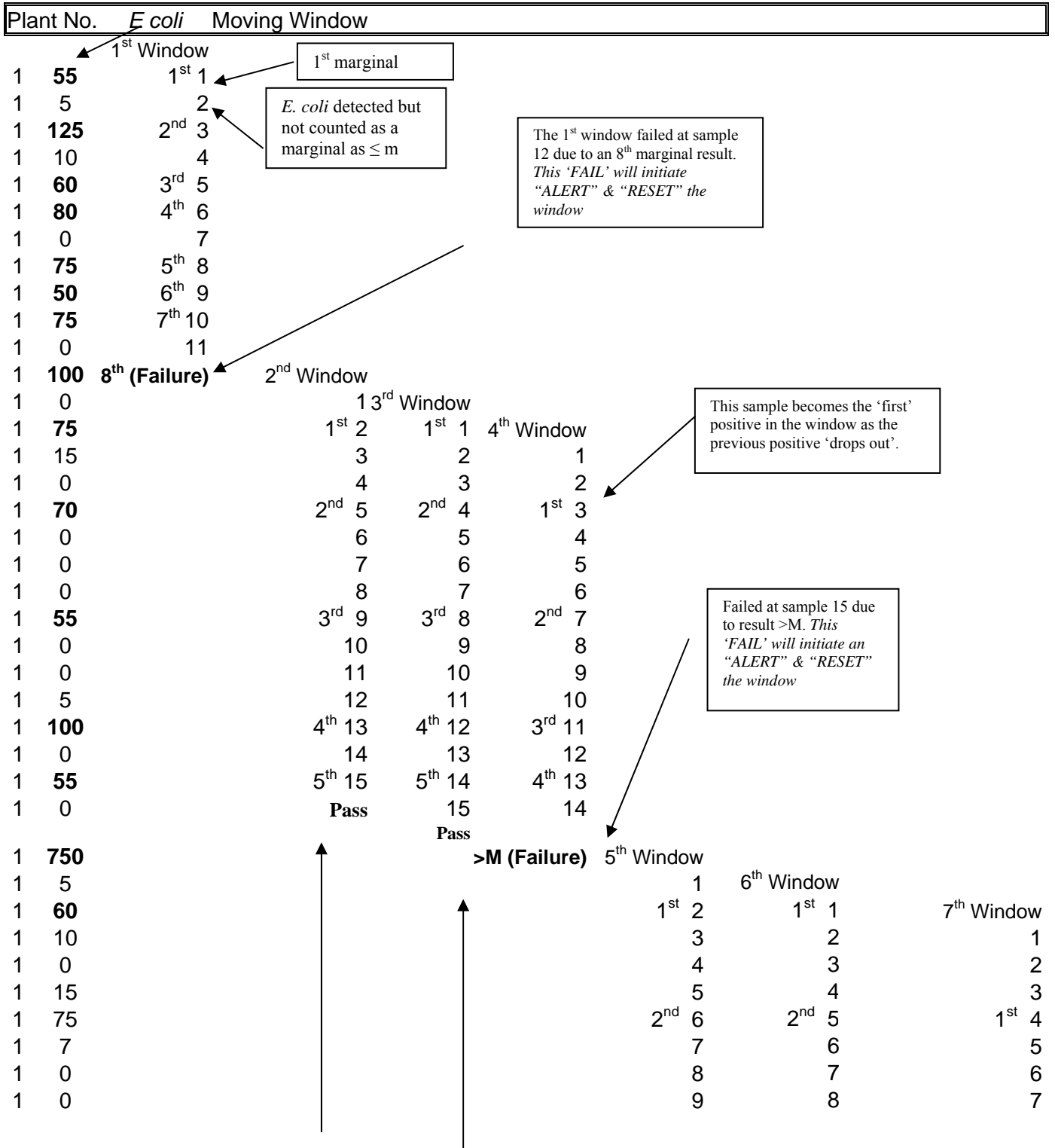
**Appendix 1: EXAMPLE of a moving window with RESET for wild boar where n=15, c=4, m=50, M=500**



Key Elements:

- “ALERT”(Failure) when more than 4 marginal results (between ‘m’ & ‘M’) or 1 result  $>M$
- Detections less than ‘m’ are reported but not included in marginal count.
- Window ‘Reset’ on failure.
- Windows moves forward with every additional sample.
- Where no ‘Failure’ a new window starts after 15 sample

**EXAMPLE of a moving window with RESET for kangaroo where  $n=15$ ,  $c=7$ ,  $m=50$ ,  $M=500$**





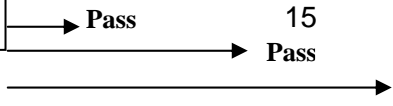
1 **100**  
 1 0  
 1 0  
 1 0  
 1 5  
 1 0  
 1 0  
 1 **80**

With every additional sample, count the marginal results in the previous 14 samples (total of 15 samples) to determine if the new window has 'Passed' or 'Failed'. The window moves one sample down as is shown in 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, etc windows. This only applies if the previous result was a 'Pass', if a window 'Fails' a new window is started.

3<sup>rd</sup> 10  
 11  
 12  
 13  
 14  
 15

3<sup>rd</sup> 9  
 10  
 11  
 12  
 13  
 14  
 15

2<sup>nd</sup> 8  
 9  
 10  
 11  
 11  
 13  
 14  
 3<sup>rd</sup> 15  
**Pass**



**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 103

**Division/Agency:** Exports Division

**Topic:** Grants for kangaroo social license research

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. DAFF Quarantine and Export Services provided an “ad-hoc, one-off” grant of \$220,000 to the Kangaroo Industry Association of Australia, “to fund a residue related component of a Kangaroo Industry Social Licence Project”, (DAFF ID No. GMS-2404) with a commencement date of 1 July 2014 to run for 36 months
  - a. The grant location listed as Launceston Tasmania. I have previously asked questions about conflict of interest about Lenah Consulting’s principal John Kelly receiving some \$800,312 of funding for RIRDC market research projects – benefitting his wallaby export business, Lenah Game Meats. Was this \$220,000 grant provided to John Kelly? If not, who was the recipient of this grant?
  - b. Please provide details about this project including its specific aims, objectives and actions.
    - i. Is one of the project aims to manipulate messaging to markets and consumers to avoid critical examination of recognised contamination health risks of kangaroo meat?
    - ii. Which diseases and parasites known to be present in kangaroo meat will this project be seeking to influence messaging about, given this is part of a social license project?
  - c. Please provide details of the “Kangaroo Industry Social Licence Project”.
  - d. Social license research is about how to manipulate information to targeted decision-makers to accept your product or actions – it is antithesis to independent and scientifically robust research about the conservation of our native species the kangaroo. Given that the kangaroo industry is a commercial operation, benefitting from the mass slaughter of slow-breeding and slow-growing Australian wildlife, why are substantial Australian taxpayers dollars funding projects that seek to manipulate and remove critical examination of the industry by any decision-makers including consumers, Government or NGOs etc?
  - e. Is the RIRDC/KIAA or any of its funded researchers legally compelled to inform government ministers, researchers, media or the public that comment or research

**Question:** 103 (continued)

results provided by the RIRDC are in fact part of a marketing or strategic communications strategy? If not, why not?

**Answer:**

1.

- a. The one-off grant for \$220 000 (GST exclusive) has been provided to the Kangaroo Industry Association of Australia (KIAA). The KIAA is the designated representative organisation for the kangaroo industry. Mr John Kelly is the Executive Officer of the KIAA and therefore the appropriate and authorised signatory for the grant, but he is not the grant recipient.
- b. The grant has been funded from kangaroo industry levy reserves held within the National Residue Survey (NRS) Special Account under section 8 (Debits from Account) of the *National Residue Survey Administration Act 1992* (the NRS Admin Act). The grant will fund a project “Residue and Contaminant Management Frameworks for the Kangaroo Industry” (the NRS project). The NRS project aims to ensure the community is confident that kangaroo products are derived from a production system with rigorous controls over potential residues and contaminants. The NRS project objectives are to:

- monitor residues and contaminants in kangaroos
- create a residue and contaminant management framework within the kangaroo industry
- demonstrate and report the residue and contaminant status of kangaroo meat.

The NRS project outputs include regular reports to update progress against agreed milestones, annual project review meetings between the KIAA and the NRS, and a final report approved by the KIAA board.

The NRS project is consistent with the requirements under section 8 of the NRS Admin Act for industries participating in the NRS to access their reserve levy funds to undertake residue-related activities.

i. No.

ii. The NRS project will inform messaging about residues and contaminants in kangaroo meat.

- c. The “Kangaroo Industry Social Licence Project” is not a departmental project. The NRS project (“Residue and Contaminant Management Frameworks for the Kangaroo Industry”) is a sub-project of the “Kangaroo Industry Social Licence Project”.
- d. The NRS project is funded from industry levies in accordance with section 8 of the NRS Admin Act.
- e. No. This is because until last year’s change to the PIRD Act (RIRDC’s enabling legislation), RIRDC was not permitted to fund marketing-related activities. Even though the current PIRD Act does allow RIRDC to carry out marketing activities on behalf of an industry using only industry funds, none of RIRDC’s portfolio industries, including the kangaroo industry, have requested that RIRDC carry out marketing activities on their behalf.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 104

**Division/Agency:** Exports Division

**Topic:** Contamination of kangaroo meat

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. In February 2015 Estimates I asked for a list of which countries have raised concerns about the contamination of kangaroo meat since 2013, including the specific concerns raised by each country and the response to those concerns (Questions 59 and 63, Exports Division, Additional Estimates Feb 2015):
  - a. With regard to Q59: I was not provided the details requested. Please provide updated details including: Specific countries; specific contaminations including disease, bacteria and parasites; and details about the findings of each investigation.
  - b. With regard to Q63:
    - i. Please provide details about which “three different areas of the Department of Agriculture” provided officers to address the current Russian ban on imported kangaroo meat.
    - ii. Please advise specifically what their “actions” were to address the ban, and the outcomes of those actions.
    - iii. iii. Please provide the details of the type and levels of bacterial contamination of kangaroo meat raised by the European Union, including which EU agency, which kangaroo product (ie meat or unidentified protein), and which country was involved in this issue.

**Answer:**

1. a. Since 2013, four incidents have been raised by the European Union and Russia:

Country	Concern	Findings of investigation
European Union (Netherlands)	Salmonella spp. In frozen kangaroo meat	The investigations found effective process controls and acceptable control of operational sanitation and hygiene practices are in place at the establishment.  One corrective action request was made (need for adequate recording of company corrective action) and this was addressed by the review and

		amendment of the relevant Standard Operating Procedures and Work Instructions.
European Union (Netherlands)	Shigatoxin-producing E.coli in chilled kangaroo meat	The investigations found effective process controls and acceptable control of operational sanitation and hygiene practices are in place at the establishment.  One corrective action request was made (need for adequate recording of company corrective action) and this was addressed by the review and amendment of the relevant Standard Operating Procedures and Work Instructions.
Russia	Excess total viable plate count (aerobic and anaerobic microorganisms) in kangaroo meat	Following investigation by the department, corrective actions including: <ul style="list-style-type: none"> <li>• the implementation of improved Standard Operating Procedures;</li> <li>• the development of enhanced Work Instructions;</li> <li>• the retraining of operators;</li> <li>• increased daily product quality assurance checks; and</li> <li>• increased frequency of microbiological sampling of kangaroo meat.</li> </ul>
Russia	E. coli in frozen kangaroo meat	Following investigation by the department, corrective actions were introduced, including: <ul style="list-style-type: none"> <li>• retraining of trimming staff and increased monitoring;</li> <li>• retraining of cleaners and pre-operational hygiene inspector.</li> <li>• retraining of staff in legging of carcasses, causes of cross-contamination and personal hygiene.</li> </ul>

In addition, the EU has issued Rapid Alert System for Food and Feed (RASFF) advices for the following issues, but has not formally notified any concerns to the Department of Agriculture:

European Union (Netherlands)	Shigatoxin-producing E.coli in frozen kangaroo meat
European Union (Denmark)	Salmonella spp. in chilled kangaroo meat

**Question:** 104 (continued)

b.

- i. Areas of the Department of Agriculture that contributed to address the current Russian ban on imports of Kangaroo meat were: Exports Division – Export Standards Branch, Exports Division – Meat Exports Branch and Trade and Market Access Division.
- ii. Actions conducted by the three areas included conducting investigations, working with establishments to address any corrective action required, preparing investigation reports and letters to Russian authorities and facilitating delivery of letters/submissions, including through provision of translation services and meetings. These actions resulted in the presentation to Russia of evidence and assurances that the issues identified have been addressed.
- iii. Refer response to 1.a. above. These issues were raised by the competent authority of the country concerned and through the European Commission's Rapid Alert System for Food and Feed (RASFF) system.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 105

**Division/Agency:** Exports Division

**Topic:** Code of Practice: Humane Shooting of Kangaroos and Wallabies

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

The current federal Code of Practices for the Humane Shooting of Kangaroos and Wallabies stipulates that kangaroo joeys must be killed by a forceful blow to the head; or stunned and then decapitated; and at-foot joeys should be shot. A recent RIRDC report Improving the humaneness of commercial kangaroo harvesting found that: shooters rarely euthanize young-at-foot dependent joeys, leaving them to die in the field for up to 10 days, and that many shooters swing pouch joeys against their ute tray to kill them. However, in the study's experiments testing the effectiveness of bolt guns to kill joeys, not one of the 23 live joeys was killed outright; 13 out of 23 joeys were not rendered completely insensible, and all joeys had to be consequently euthanized by other means (p54).

Given that joeys are not killed immediately or at all via careful blunt head trauma in a controlled situation, is the Department concerned at the clear cruelty and trauma being suffered by joeys in the field?

- a. Is the Department advising importing governments of these research results, if not why not?
- b. Is the Department still advising importing government that the shooting of kangaroos and killing of their joeys is humane, given the results of this research clearly demonstrates otherwise?
- c. Is commercial shooting still continuing, despite Australian governments having access to this report's findings? Why, given the clear evidence of cruelty being visited on joeys.
- d. May I have details on what is happening to amend the current Code of Practice across Australian states, including discussions, actions and timelines.

**Answer:**

The department notes this report investigated the use of a captive-bolt device as a potential method for stunning in-pouch kangaroo young. Captive bolt devices are not currently used to stun or euthanize kangaroo young.

**Question:** 105 (continued)

The report concluded that further research is required before use of a captive bolt device can be recommended as an acceptable method for stunning or euthanasia of kangaroo in-pouch young. The report also concluded that the currently used methods of euthanasia for kangaroo young, including manually applied blunt trauma to the head, can be effective and humane when they are applied correctly (pxiii). The report's recommended methods of euthanasia do not significantly differ from those included in the *National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes* (refer Table 4 of page 30).

- a. No. The department notes that this report is publically available.
- b. No. The department does not believe that this research demonstrates that the currently used methods of shooting kangaroos and euthanizing joeys are inhumane.
- c. Yes, commercial shooting is still continuing. The department does not believe that this research demonstrates that the currently used methods of shooting kangaroos and euthanizing joeys are inhumane. Ensuring compliance of harvesters with the *National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes* is the responsibility of state governments.
- d. The department is not aware of any work being done to amend the *National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Commercial Purposes*.



**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 106

**Division/Agency:** Exports Division

**Topic:** Live Exports

**Proof Hansard page:** Written

**Senator XENOPHON asked:**

1. In relation to the media reports from last week regarding the treatment of Australian exported animals in Vietnam, when did the department become aware of animal cruelty issues in this area?
2. Did the department receive complaints from groups such as Animals Australia or exporters, or did it become aware of issues through its own investigations?
  - when were these reports received?
3. Is an investigation currently underway? If so, when did this commence?
4. When were exporters made aware of the concerns about Vietnam, and what action have they taken since?
5. What options are open to the department and exporters to improve supply chain accountability?

**Answer:**

1. The department received an initial report from an exporter about concerns in the Vietnam market on 25 February 2015 and commenced investigations at that time.
2. Yes. The initial exporter report raising concerns about Vietnam was received on 25 February 2015. Exporter self reports were received on 3 March 2015, 6 March 2015 and 18 March 2015. Since estimates, two further reports from exporters were received on 28 May 2015 and 1 June 2015. A complaint from Animals Australia was received on 13 May 2015.
3. Yes. The investigations that are underway are available on the department's website at [www.agriculture.gov.au/export/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-regulatory-compliance](http://www.agriculture.gov.au/export/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-regulatory-compliance).

**Question:** 106 (continued)

4. Exporters were made aware of the concerns about Vietnam on 27 February 2015.

Exporters have:

- Conducted importer/exporter meetings in Vietnam to emphasise the importance of maintaining animals within approved facilities.
- Emphasised that the supply of animals requires ongoing compliance with ESCAS.
- Removed non compliant feedlot and abattoir facilities from their supply chains
- Introduced suspension/consequence agreements between exporters and importers.
- Increased their presence and visibility in the market.
- Developed a six point plan for improving livestock control in the Vietnam market.

5. The department and exporters have a range of options open to improve supply chain accountability, such as:

- Removal of non-compliant facilities and importers from approved supply chains.
- Raising the risk rating of facilities and increasing audit frequency of facilities around the Bai Do region.
- Increasing exporter presence and visibility in the market.
- Imposing additional reporting conditions on ESCAS supply chains.
- Restricting of the supply of livestock.
- Consignment by consignment approval of higher risk supply chains.
- Appointing an MLA representative permanently based in Vietnam.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 107

**Division/Agency:** Exports Division

**Topic:** Vietnam

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. Referring to comments made to The West Australian by South East Asian Livestock Services (SEALS) – one of the 6 export companies sending cattle to Vietnam – that “it was generally accepted that all exporters were having ‘problems’ in Vietnam, but that those problems should be ‘kept between exporters’”. See <https://au.news.yahoo.com/thewest/countryman/a/27521603/wellard-rival-s-spy-claim/>
  - a. Given it is a requirement of ESCAS for all breaches to be reported to the Department, has the Department spoken to SEALS about these comments?
  - b. Is the Department investigating the very serious allegations admitted in this article – that exporters are breaching regulations and not reporting them?
2. Referring to another comment from an export company relating to Vietnam, published in the Fairfax papers: “Everybody’s operating outside the system but pointing the finger at each other. There’s a lot of anecdotal evidence of leakage in the system and everyone’s doing it.” see <http://www.theland.com.au/news/agriculture/cattle/beef/no-live-ex-ban-on-cards-says-joyce/2732666.aspx>
  - a. How does the Department justify providing new export permits to Vietnam when the exporters themselves are admitting supply chains aren’t secure?
  - b. Given the industry is saying the rapid growth in exports to Vietnam has exacerbated this problem, why is there not scope within this regulatory system to slow the flow of animals until problems can be rectified?

**Answer:**

1.
  - a. Yes.
  - b. Yes

**Question:** 107 (continued)

2.

- a. The department has removed facilities from ESCAS supply chains that have demonstrated behaviour that is non-compliant with the principles of ESCAS. Trade is continuing to facilities that are meeting ESCAS requirements.
- b. The regulatory system allows for facilities to be removed when ESCAS requirements are not being met.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 108

**Division/Agency:** Exports Division

**Topic:** ESCAS breaches in Jordan

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

This relates to three ESCAS complaints from Jordan – the Department has finalised their investigations and recorded non-compliances against Livestock Shipping Services.

1. In relation to ESCAS complaints investigated by the Department from Jordan in June 2013, October 2013 and January 2014 – whereby thousands of Australian sheep were continually being sold and slaughtered outside approved supply chains - can you advise as to whether the exporter liable, Livestock Shipping Services, will be prosecuted?
2. What does it say about the effectiveness of ESCAS that while a potential prosecution against LSS is being determined, a further three ESCAS complaints also implicating LSS have been lodged, including one relating to further horrific slaughter of Australian sheep in Jordan during last year's Festival of Sacrifice?
  - a. Isn't the intent of ESCAS to identify and address problems so abuses against Australian animals are not repeated? In Jordan Australian sheep – in the thousands – were subjected to brutal treatment two years in a row during the Festival of Sacrifice. And I note repeated abuses against Australian cattle also occurred two years in a row in Gaza. Can you understand why it's difficult to have confidence that these regulations will protect animals?
  - b. Can you guarantee that during this year's Festival of Sacrifice Australians won't once again see the brutal treatment of Australian sheep and cattle?

**Answer:**

1.

Refer to the Rural and Regional Affairs and Transport Legislation Committee Estimates Hansard Monday 25 May 2015, page 135:

**Senator SIEWERT:** I want to ask about ESCAS breaches in Jordan and three ESCAS complaints. You have finalised your investigations. Is that correct?

**Question:** 108 (continued)

**Mr Terpstra:** That is pretty much the same answer as the answer I just provided. Investigations have been undertaken, and processes are in train. But judicial processes are not necessarily complete as yet.

2.

- a. No system can guarantee there will never be another animal welfare incident. The regulatory framework for livestock exports is designed to minimise risk and provides a mechanism that requires exporters to address problems in their Exporter Supply Chain Assurance System (ESCAS) facilities when they occur.

For the three incidents you referred to, actions taken by the department and by exporters are detailed in the reports published at [www.agriculture.gov.au/export/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-regulatory-compliance](http://www.agriculture.gov.au/export/live-animals/livestock/regulatory-framework/compliance-investigations/investigations-regulatory-compliance) (see report numbers 14, 20 and 26).

- b. As noted above, no system can guarantee there will never be another animal welfare incident. However, under ESCAS arrangements the livestock industry has provided animal handling and slaughter training to more than 8000 people working in supply chains in Asia and the Middle East, including managers and animal welfare officers, who help improve animal handling and husbandry techniques and increase the use of stunning equipment.

**Rural and Regional Affairs and Transport Legislation Committee**

ANSWERS TO QUESTIONS ON NOTICE

Budget Estimates May 2015

**Agriculture**

**Question:** 109

**Division/Agency:** Exports Division

**Topic:** Vets on ships

**Proof Hansard page:** Written

**Senator RHIANNON asked:**

1. How many veterinarians are accredited by the Department to go on live export ships?
2. How many live export voyages were there in 2014?
  - a. Of those voyages how many were required to have a vet on board?
  - b. How many of those accredited veterinarians went on more than:
    - c. 10 voyages during 2014?
    - d. 20 voyages during 2014?
3. Of those AQIS Accredited Veterinarians (AAVs), how many are not registered with their respective state veterinary boards?
  - a Why is it not a requirement for AAVs to be registered with their state veterinary boards?
4. The legislation (Export Control (Animals) Order 2005) requires that vets on board live export ships should monitor and report on animal welfare. The Australian Veterinary Association's position is that 'veterinarians accompanying shipments must be independent and not be employed by either the exporting company or the shipping company...':
  - a) With this in mind: Why are onboard veterinarians employed by exporters, rather than being independent?

**Answer:**

1. Sixty four veterinarians are accredited by the department to go on live export ships.
2. There were 347 live export voyages in 2014.
  - a. 81 of these voyages were required to have a vet on board
  - c. Of these accredited veterinarians, three went on more than ten voyages during 2014; and

**Question:** 109 (continued)

- d. No veterinarians went on more than 20 voyages during 2014.
3. All Australian Government Accredited Veterinarians (AAVs) are registered in one state or territory of Australia.
- a. It is a requirement under the Export Control (Animals) Order 2004 for all Australian Government Accredited Veterinarians to be registered in a state or territory of Australia.
4. The independent review of Australia's Live Export Trade conducted by Mr Bill Farmer and completed in 2011 sought views on and considered alternatives to the current system including replacing AAVs with department employed veterinarians. The review did not conclude that such a change is necessary.