

26/7/2010

The Senate Rural and Regional Affairs and Transport References Committee  
PO Box 100  
Parliament House  
Canberra ACT 2600

Dear Senators,

Unfortunately please be advised that serious problems still exist within the Federal Department of Agriculture, Fisheries and Forestry (DAFF) in animal bio-security and quarantine arrangements for animals and their traded products.

Unfortunately these problems are related to DAFF's

- (1) Lack of accountability to the public including the Veterinary Profession.
- (2) DAFF's history of executive and professional incompetence and negligence which has not been fully addressed by the Beale Review.
- (3) DAFF's lack of transparency and integrity in misleadingly responding at some examinations by Governmental and legally constituted Inquiries.

Unfortunately the Australian Veterinary Profession does not act as whistleblower for the Federal Government ,the primary and rural industries or the general public as

- (1) DAFF is by far the largest full- time employer of veterinarians.
- (2) For thousands of veterinarians in private practice ,DAFF is a for life, part-time employer when accredited by DAFF as their agent.

However after the 2008 Callinan Inquiry and the later Beale Review, it is pleasing to report that DAFF has recruited the Australian Veterinary Association's(AVA) co-operation via convocation with members who have previously been Governmental quarantine officers.

**(A) The 2008 Callinan Inquiry into the escape of the EIA virus from the Eastern Creek Quarantine Station (ECQS).**

Concerns about animal bio-security began when misleading information was supplied by DAFF to veterinary surgeons in the Australian Veterinary Journal (AVJ) prior to the 2000 Olympic Games in Sydney.

- (1) Initial incorrect information was questioned in the AVJ but DAFF's correction was misleading to the profession.
- (2) This second misleading statement by DAFF related to the hygiene at the ECQS in 1999-2000.
- (3) As a result of this misleading statement about the state of hygiene at the ECQS, a letter was published in the AVJ exposing the true state of lack of bio-security, basic care and hygiene at the ECQS at that time. (ATTACHMENT1).

DAFF has never corrected any of the misleading information supplied to the Veterinary Profession in the AVJ about the disgraceful bio-security at ECQS before the Olympic Games in 2000.

The Executive Director of Bio-Security Animals( BA), Mr. John Cahill (a non-veterinarian) advised the then Minister that there had been a correction.

This was untrue as there has never been any correction of the misleading information supplied to the Veterinary Profession in the AVJ.

- (1) Later at the time of the Callinan EIA virus Inquiry, Mr Cahill indicated in writing that there had never been any DAFF correction for the Veterinary Profession in the AVJ or elsewhere.
- (2) *Mr, Cahill stated that a reply to correct DAFF's misinformation had not been considered necessary at that time.*

Please be aware the 2008 Callinan Inquiry into the escape of the Equine Influenza A virus from the ECQS had no terms of reference to blame ,either BA for any failing in their quarantine policy decisions or the Australian Quarantine Inspection Service (AQIS) for implementation of policy either from Canberra ,at Mascot Airport or at the ECQS itself.

Mr J Cahill made an unsuccessful attempt to mislead the Callinan Inquiry about BA policies in place. He was required to correct his evidence after being asked to withdraw from the Inquiry to consider his prior false evidence.

Please find attached a letter of the 22<sup>nd</sup> January 2010 sent to the Minister of Agriculture, the Hon. Tony Burke, where for the first time ever, the questioning about the presence and nature of ancillary measures ,described by BA as a “number of measures” for EIA bio-security for Australian horses against this viral introduction, is queried.

Please note that these “number of measures” have never be described by BA at the Inquiry or even been examined by this Inquiry .

Advice has been received that these measures did not exist at all Their non-existence is the fundamental reasons why the EIA virus was able to be introduced into the ECQS in the first place.

The escape of the EIA virus from the ECQS, however , is well documented at the Inquiry because of the negligence of AQIS staff at Canberra, Mascot Airport and the ECQS facility itself.

**BA's negligence and failings of it's policy have never been exposed.**

These measures stated to have been put in place by BA are mentioned only in Sections 6.30 and 6.31 of the “Outline of Submissions” as presented by Mr.T.Meagher SC.Council assisting Commissioner Callinan at his Inquiry **(ATTACHMENT 2).**

Please refer to the writer's letter of the 22<sup>nd</sup> January 2010 to the Minister, the Hon Tony Burke **(ATTACHMENT3).**

The Minister did not respond but the reply was included in a letter of the 23<sup>rd</sup> February 2010 from the Chief Veterinary Surgeon of Australia,, Dr. Andy Carroll with reference to diverse veterinary matters. (ATTACHMENT 4).

- (1) In his letter of reply on behalf of the Minister , Dr. Carroll does not deal with the “number of measures” that BA is supposed to have initiated but which in fact did not exist.
- (2) Dr. Carroll stated that there is no need for any further response from him by suggesting that he has already answered all question asked.
- (3) This is incorrect as there has been no information supplied at all about the nature of the “number of measures” which he implicitly infers, by his failure to mention them at all, must exist.
- (4) This is an example of the ongoing culture of concealment by DAFF when staff members are actually involved themselves in these Scandals .In those scandals prior to their present official position in DAFF, the usual response at Governmental Inquiries is they were not involved at all at that time.

#### **(B)The Brazilian Beef Scandal 2004-2005**

Unfortunately veterinary colleagues, even those from within DAFF ,became concerned by evidence given by DAFF executives at the Senate Committee Hearing on the 15<sup>th</sup> February 2005, when this Committee was examining the Brazilian Beef Scandal.

Evidence given by the then Principal Scientist of Bio-Security Animals. Dr. David Banks (deceased) was false and misleading with specific intent to deceive this Senate Hearing.

Part of the evidence given by the then Chief Veterinary Surgeon of Australia, Dr. Gardiner Murray, appearing both in this capacity and as the Executive Director of Product Integrity and Plant Health, was incorrect.

Emails are available which cast a similar light to the Deputy Secretary of DAFF, Mr. Bernard Wonder (non-veterinarian) but his evidence was corrected at a later Hearing. He has subsequently promoted to the Productivity Commission.

In 2010, Dr Gardiner Murray was appointed to the Australian BSE Food Safety Committee.

#### **(C) The 2007 export of tick fever infected dairy cattle to New Caledonia under a policy directive originating from BA.**

- (1) DAFF negligence at the ECQS has cost the Australian economy a figure quoted as \$1 billion .
- (2) The ongoing costs of DAFF’s negligence in the Exported Dairy Cattle Scandal to New Caledonia are ongoing and involve many tens of millions of dollars.
- (3) DAFF has successfully suppressed this scandal from public scrutiny.

**(D) The 2009 Federal Government's new BSE policy to relax import restrictions on beef.**

Please find enclosed a letter of the 5<sup>th</sup> February 2010 to the Prime Minister the Hon. Kevin Rudd ( ATTACHMENT 5).

Outlined are concerns about this policy and questions about the validity of the Scientific Review by Professor Matthews.

This Scientific Review is the scientific basis on which the Government relied to introduce this new policy.

Even the statistical analytical methodology is unexplained and until this is reviewed, this must be questioned even by an amateur mathematician.

*The Scientific Review is seriously flawed in it's veterinary epidemiology. These errors are not in just typographical mistakes or omissions .Rather they clearly indicate Professor Matthews ignorance about this important area in the science of Transmissible Spongiform Encephalopathies (TSEs). New strains of TSEs are now evolving in nature and crossing species barriers. Fundamental scientific research is expanding monthly, to define how little we know about the epidemiology of prion diseases in nature.*

**It is noted that not one of the scientific bodies ,including the Eminent Scientific Group, who all stated that they had examined this Scientific Review, asked to examine it's statistical methodology or, more seriously, were aware of the gross errors of veterinary epidemiology.**

The lack of critical appraisal of the Scientific Review by these important Australian medical and veterinary bodies, who act to protect the public's health, is disturbing.

The fact that the development of this new policy will depend on FSANZ staff on behalf of the Australian BSE Food Safety Committee, with input from DAFF, BA and AQIS is disturbing. The overseeing role of the Chief Executive Officer of FSANZ is even more disturbing. Someone of value, such as Professor James Bishop Chief Medical Officer of Australia the Department of Health and Ageing is needed, not an executive schooled in trade.

Having seen the disastrous results of having Mr .John Cahill (a non- veterinarian ) as Chief Executive Officer of BA ,one must question the present arrangements of FSANZ staffs' responsibilities being given to non-professional officers who have neither human or veterinary medical skills.

*(8) Historically when DAFF staff were acting within one Government Department, BA and AQIS were totally un able to coordinate their respective quarantine responsibilities and this directly caused the Scandals described in this letter before 2009.It has been disaster after disaster.*

Now two separated Government Departments are to co-ordinate together in a most complicated chains of intermingled responsibilities (as described in the June 2010 Final Report of the RRATR Committee) to prevent the introduction of animal diseases which are frighteningly unknown, covert and difficult to diagnose.

TSEs like BSE are totally unlike the clinically obvious animal viral diseases such as Foot and Mouth Disease or even the EIA virus. This planned quarantine modelling with FSANZ and DAFF is a model for future disaster.

Without in-country inspections by skilled Australian veterinarians to form part of each import procedure from countries with from birth to point of retail sale identification, from only within that country, as per our N.L.I.S., no imports should be considered whatever the history of BSE is of that country.

Recent scientific evidence has revealed mis-folded ( i.e rogue) prions in tissues ,including muscle tissues of clinically normal cattle at veterinary inspection..

When the Government's IRA has been completed within 20 months ,it is hoped that progress has been made in live animal TSE including BSE diagnostic tests and they may be available for individual live animal testing ,prior to the export of their meat to Australia

**Conclusion:-**

Above all the technical and professional concerns about DAFF's misleading of Governmental Inquires before 2009, it is the Government's own trade agendas which have resulted in exigencies on staffs' professional veterinary integrity in animal quarantine.

This is acknowledged by all the veterinary profession.

In 2009, the Federal Government tried to coerce the Australian primary industries and public, into accepting a change of BSE policy for imported beef.

With a clumsy coercive public relations exercise, beginning with the Minister's own letter to the rural communities in all States in November 2009, the Government discarded regard for serious and unknown human and animal health risks.

The Government purported that trade sanctions were pending and that disaster would occur for Australian consumers if the old BSE policy was not amended.

Until some reason prevailed, the Government was going to allow a policy of high risk to human and animal health .

In Australia ,ruminant derived Meat and Bone Meals (MBMs) and Specific Risk Materials (SRMs) for BSE enter and still enter to this day the human food chain.

They enter indirectly via the feeding of these ruminant MBMs and SRMs to pigs via prepared pig foods labelled as not to be fed to ruminants .Disappointingly, **Dr. Andy Carroll has not responded to any of the technical veterinary questions asked of him in the letter of 13<sup>th</sup> February 2010 (ATTACHMENT 6)**

*There are human and animal health risks, as TSE prions have been shown to transmit to other animal species when passaged through pigs in transmission experiments.*

**That DAFF's policy arm, Bio-Security Animals Australia and the Chief Veterinary Officer have dismissed this research without bothering to reply to the letter of the 13<sup>th</sup> February 2010, is noted.**

**One hopes that BA is aware of the research and was aware of it, when it advised DAFF and hence the Australian Government, to approve the new BSE policy without reservation.**

**If Bio-Security Animals Australia was aware of this fundamental research, why did it not stop the feeding of ruminant MBMs and SRMs for BSE to pigs immediately in Australia ?**

**Full public and primary industry access to the completed and finished IRA will be necessary as the Government's trade agendas may influence professional veterinary objectivity.**

Yours Sincerely



Robert Steel B.V.Sc. M.R.C.V.S.  
Registered Veterinary Surgeon N.S.W.

## Correspondence

## Temporary importation of Babesia and Ehrlichia seropositive horses into Australia

RJS STEEL

12 Ebley Street,  
Bondi Junction,  
New South Wales 2022

In reference to a letter by Steel<sup>1</sup> concerning the temporary importation of babesia and ehrlichia seropositive horses into Australia and the reply by Dr Martin,<sup>2</sup> on behalf of the Australian Quarantine and Inspection Service (AQIS), and a subsequent correction,<sup>3</sup> additional information is supplied.

It is misleading to state in the correction that hares have been sighted at the Eastern Creek Quarantine Station (ECQS) when long-term infestation has been occurring. Long-term infestation with hares has been referred to by Doggett,<sup>4</sup> in the 1998 tick survey commissioned by AQIS at ECQS, as being numerous on the site with access to the area around the quarantine pens. Doggett states that these animals alone could act as a blood source for ticks brought into the country by quarantined animals.

Dr Martin states in the reply<sup>2</sup> that infestation with *Rhipicephalus sanguineus* has occurred on dogs, which are tested for *Ehrlichia canis* and treated with acaricide 21 days prior to importation into Australia, whilst in quarantine at ECQS. Ticks were, in fact, introduced into Australia on dogs that had previously been treated with a contact acaricide in the country of origin (New Guinea), where *E canis* is endemic. These introduced ticks spread to other dogs quarantined at ECQS. The introduction of these vector ticks suggests that AQIS will need to review the acaricide protocol for dogs and require postarrival serological testing if hygiene at ECQS is not improved.

It is correct to state that ECQS has rodents and native marsupials, feral cats and wild ducks and haematophagous insects, such as mosquitoes and horse flies. They represent, with earthworms and fresh water snails, known or possible reservoirs for ehrlichial diseases for mammals including humans, horses, cats and dogs.<sup>5</sup> Dr Martin indicates that *Stomoxys calcitrans* (stable fly) has been shown experimentally not to transmit *E risticii* but fails to mention in the reply that some species of tabanids (horse flies) have been shown to be capable of its transmission. It would seem important to know whether those species of horse flies that occur at the Sydney International Equestrian Centre (SIEC) and the ECQS are capable of transmitting *E risticii*, because horse flies are ubiquitous in stabling areas in Australia and are nuisance biting flies for humans.

In the past there have been no requirements for horses to be tested for ehrlichial diseases prior to permanent or temporary importation into Australia. Since 1995, horses permanently imported into Australia from the USA, the EU, Singapore and

Hong Kong have been required to be treated with an acaricide during a 21 day pre-export quarantine period (horses from New Zealand are exempt). Annually, 2000 horses arrive from New Zealand and 500 horses are imported mainly from the USA and the EU. AQIS does not consider New Zealand has vectors for ehrlichial diseases of horses. *Ehrlichia equi* has a world-wide distribution whereas *E risticii* occurs in many states of the USA and in some provinces of Canada, with isolated reports from EU countries and Turkey. Dr Martin stated in her reply<sup>2</sup> that AQIS does not consider serological testing for *E risticii* to be warranted for the temporary importation of horses into Australia for the Olympic Games, describing the limitations of the indirect immunofluorescence antibody (IFA) test. She does not refer to polymerase chain reaction (PCR) testing for ehrlichial DNA detection in cases in which the IFA test results are ambivalent or when chronic infection is occurring. Cross-reactivity differentiation between ehrlichial antigens requires western immunoblot testing, which is unavailable in Australia. The unavailability of both these tests for ehrlichial diseases in animals in Australia should be noted, despite the emerging importance of these pathogens. PCR is the gold standard for detection of active infection. Furthermore, there have been no reports of examination of Australian ticks for ehrlichial DNA.

AQIS has indicated that it is unaware whether any *Ixodes* spp occurring in Australia is capable of transmitting *E equi*. *Ixodes scapularis* is the traditionally putative vector overseas but experimental evidence suggests that *I pacificus* may also be capable of transmitting this disease in the USA.<sup>5,6</sup>

Ticks involved in the spread of ehrlichial disease in small wildlife mammals are, as yet, undefined and are not necessarily those which infect domestic animals or humans.<sup>5,7</sup> It must be noted that, in the past, it has been impossible to ensure that vector ticks for *E canis* were prevented from entering Australia via ECQS. The possible infestation of natural wildlife at SIEC and ECQS with ehrlichial parasites of horses, *E risticii* and *E equi*, without necessarily finding known vectors (that is, hard-backed ticks), is noted.

The fact that there is no requirement for any serological testing of horses entering Australia must be questioned on the basis of past security lapses in dogs and contemporary and emerging information on the life cycles of ehrlichiae that infect animals and humans.

## References

1. Steel RJS. Babesia and ehrlichia seropositive horses temporarily imported into Australia. *Aust Vet J* 1999;77:726.
2. Martin RG. Reply. *Aust Vet J* 1999;77:727.
3. Correction. *Aust Vet J* 2000;78:98.
4. Doggett SL, Geary MJ, Russell RC. Tick survey of the Sydney International Equestrian Centre and Eastern Creek Quarantine Station. Department of Medical Entomology, The University of Sydney and Institute of Clinical Pathology and Medical Research, Westmead Hospital, 1998.
5. Wallis JJ, Greig B, Neitzel DF, Dumler JS. Natural infection of small mammal species in Minnesota with the agent of human granulocytic ehrlichiosis. *J Clin Microbiol* 1997;35:853-855.
6. Vredevoel LK, Richter PJ, Madigan JE, Kimsey RB. Association of *Ixodes pacificus* (Acari: Ixodidae) with the spatial and temporal distribution of equine granulocytic ehrlichiosis in California. *J Med Entomol* 1999;36:551-561.
7. Kordick SK, Brietschwerdt EB, Hegarty BC et al. Coinfection with multiple tick borne pathogens in a Walker Hound kennel in North Carolina. *J Clin Microbiol* 1999;37:2631-2668.

conditions; and thirdly, it would provide a reference point recording current policy which could then be the subject of regular review.<sup>119</sup>

**The relationship between AQIS and Biosecurity Australia in relation to the formulation of policy for importation of horses**

- 6.24 The work of Biosecurity Australia was described by its Chief Executive, John Cahill as having five key elements. They include undertaking import risk analyses, providing biosecurity policy advice and recommendations as a result of such analyses and providing day to day advice to AQIS on biosecurity issues including on the implementation of policy and the consideration of more specific applications for import permits.<sup>120</sup> However, there is not currently in place any protocol or procedure which regulates the way in which AQIS may have contact with Biosecurity Australia for the purpose of seeking advice or which regulates whether and in what circumstances Biosecurity Australia can initiate the giving of advice to AQIS without any request for it to do so.<sup>121</sup> The current position would appear to be that if Biosecurity Australia becomes aware of import conditions that require reconsideration or which may be inadequate it will initiate the giving of further advice either to AQIS or to the Director of Animal and Plant Quarantine.<sup>122</sup>
- 6.25 The fact that there was a need to establish mechanisms to underpin regular and systematic reviews of quarantine policies and procedures as between Biosecurity Australia and AQIS was recognised in late 2005 when a project was commenced to track electronically requests for advice from AQIS to Biosecurity Australia and the responses to those requests. In addition, regular meetings were initiated between senior executives of AQIS and Biosecurity Australia as well as others in areas of DAFF involved in biosecurity issues. However, the evidence indicates that those meetings only involved senior executives and addressed matters at a very general level.<sup>123</sup> Dr Nunn agreed that the current position is that quarantine policy is reviewed whenever there is a change in the science or a change in the disease situation overseas or some other changes occurs that merits a review of policy.<sup>124</sup> Dr Martin summarised the position in the same way. She agreed that there was no procedure or requirement as between AQIS and Biosecurity Australia that required the latter to take a proactive position in relation to the imposition of conditions as distinct from reacting to requests for information or to new emerging information about a disease or risk which comes to Biosecurity Australia's attention.<sup>125</sup>

<sup>119</sup> T3307 – T3308.

<sup>120</sup> WIT.BIOS.001.0001, para 6.

<sup>121</sup> T3993.

<sup>122</sup> T3993.

<sup>123</sup> T3996 – T3997.

<sup>124</sup> T3305.

<sup>125</sup> T2917.



- 6.26 As between AQIS and Biosecurity Australia there is also uncertainty as to the role which Biosecurity Australia has in relation to operational or procedural matters.<sup>126</sup> The absence of clarity as to Biosecurity Australia's role in relation to operational and procedural matters is illustrated by reference to the import conditions current as at August 2007 and the subsequently amended measures introduced in September 2007. Those conditions deal with what is to happen in PEQ and PAQ however, they do not do so exhaustively in the sense that Biosecurity Australia has never in any structured way undertaken an investigation or inquiry to understand the sequence of activities and events from the point in time when the horses enter PEQ in the country of export until the time when they are released into the general Australian horse population at the end of PAQ, so as to identify the various risks which arise and to formulate biosecurity measures designed to address them.<sup>127</sup>
- 6.27 The current position in relation to PEQ premises is that they are approved by the Veterinary Administration of the country of export. AQIS does not maintain a list of those premises.<sup>128</sup> Although some of those premises have been visited in the context of the outbreak of foot and mouth disease in 2001<sup>129</sup> there is not in place any procedure which requires premises to be inspected and approved by Biosecurity Australia or AQIS and subsequently reviewed and audited from time to time.<sup>130</sup>

#### Deficiencies in the policies and import conditions as currently formulated

##### *Vaccination*

- 6.28 Many of the vaccines which are currently available still contain H7N7 virus strain and less than optimal representatives of the H3N8 viruses. As at February 2008 there were no commercially available vaccines which contained strains of the variant American sub-lineage virus (also referred to as the Florida sub-lineage) which includes the Wisconsin/1/03 and South Africa/4/03 strains of the virus and which sub-lineage now includes the Sydney/07, Iberaki/07 and Pennsylvania/07 strains.<sup>131</sup>
- 6.29 In his evidence to the Inquiry, Dr Newton of the Animal Health Trust (AHT) stated that Merial, the manufacturer of ProteqFlu is currently completing the licensing process for a vaccine which includes the Ohio/03 strain of the H3N8 virus which is a strain in the Florida sub-lineage. His recommendation and that of the OIE experts surveillance panel is that vaccines should be used which contain a strain from Clade 1 of the variant American or Florida sub-lineage virus.<sup>132</sup> Dr Gilkerson gave evidence that enquiries he has made indicate that the Merial ProteqFlu containing the Ohio/03 strain should be commercially available by the middle of 2008.

<sup>126</sup> T2929, T2939.

<sup>127</sup> T2930, T2939 – T2940.

<sup>128</sup> T2616.

<sup>129</sup> T2600 – T2601, T2627.

<sup>130</sup> T2627.

<sup>131</sup> T4187.

<sup>132</sup> T4187 – T4188.

- 6.30 With one exception in 1995 (which required that the inactivated vaccine incorporate the Suffolk/89 antigen)<sup>133</sup> neither Biosecurity Australia nor any of its predecessors has specified that the vaccine contain any particular strain or representative strain.<sup>134</sup> During that same period Biosecurity Australia has been aware that some vaccines may not provide adequate protection or are less effective than others. For example, in 2005 in response to comments from Mr Barry Smyth who was then President of the Australian Horse Industry Council Inc that currently available vaccines did not contain "epidemiologically relevant strains", Biosecurity Australia noted that it was "aware that many currently available vaccines, including Duvaxyn IE Plus, may not provide adequate protection".<sup>135</sup> Notwithstanding that this was apparently the view within Biosecurity Australia, it did not recommend or require by any import conditions or otherwise that vaccines containing out of date strains not be used<sup>136</sup> or that vaccines which were regarded as less efficacious than others which were available not be used.<sup>137</sup>
- 6.31 Two reasons were proffered by Dr Martin as to why neither of these courses were taken. The first was that if the currently available vaccines did contain the most up to date strains Biosecurity Australia may have looked at specifying a particular vaccine or vaccines.<sup>138</sup> The second was that vaccination was only one of a number of measures taken to minimise the risk of horses with equine influenza being introduced into the general Australian horse population.<sup>139</sup>

#### FAQ

- 6.32 The primary course of a vaccination comprises at least two doses. Once a primary course has been administered a horse may receive annual vaccinations or boosters to that primary course. The conditions current as at August 2007 permitted either vaccination once as a booster to a certified primary course or twice at an interval of four to six weeks. They did not specify that the vaccinations have to be in accordance with manufacturers recommendations which would, presumably, require that the same vaccine be used either as the booster to the certified primary course or where there are to be two vaccinations at an interval of four to six weeks.<sup>140</sup> Whilst it is generally accepted that sequential vaccinations with different vaccines is "sub-optimal" some investigations conducted by the Animal Health Trust have suggested that the mixing of vaccines does not appear to have a significant affect on levels of immunity.<sup>141</sup> However, the benefits of using the same vaccines depend upon the product chosen and whether it contains more recently circulating strains. If it does the use of that product as a booster, as distinct from requiring it to be

<sup>133</sup> DAFF.0001.564.0017.

<sup>134</sup> T2903.

<sup>135</sup> DAFF.0001.091.0347.

<sup>136</sup> T2903.

<sup>137</sup> T2904 – T2910.

<sup>138</sup> T2902.

<sup>139</sup> T2904.

<sup>140</sup> T4221 – T4222.

<sup>141</sup> T4185 – T4186.

used as a primary course may lead to sub-optimal immune responses against the recent viruses.<sup>142</sup>

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<sup>142</sup> T4186.

The Hon. Tony Burke M.P.  
Federal Minister for Agriculture, Fisheries and Forestry  
Parliament House  
Canberra  
Dear Minister,

In relation to your letter to the rural community in "The Land", page 25, November 5, 2009, advice has been received that this letter was NOT written by you at all but by a staff member of DAFF.

The letter is grossly misleading to the rural community.

Please advise why this letter was allowed to be published without being checked for contained false and misleading information.

We, in the rural world depend on the integrity and professional competence of DAFF staff.

This letter is also a disgrace for most of DAFF staff members.

These members must accept this letter with the resignation that was necessary for them, following the Brazilian Beef Scandal of 2005, and the EIA escape in 2007.

Misleading information has been noted since 2000 when false and misleading incorrect information provided by Bio-Security Australia, about the Eastern Creek Quarantine Station's (ECQS) hygiene and level of care there, was exposed in the Australian Veterinary Journal in 2000 and which DAFF did NOT even consider necessary to reply to, at that time, or later.

Some colleagues consider this indefensible in the light of the escape of the EIA virus from this DAFF quarantine facility.

These colleagues are referred to the Callinan Inquiry, --- The Equine Influenza Inquiry, Outline of Submissions, Counsel Assisting, SUBS.INQ 001.00036—Sections 6.30

and 6.31 where it is stated that Bio-Security Australia took the view that it did not A-- "recommend or require by any import conditions or otherwise that vaccines containing out of date strains not be used," "or"

B-- "that vaccines which were regarded as less efficacious than others which were available not be used".

Two reasons were proffered by Bio-Security Australia, as to why neither of these courses were taken.

The first was "if the currently available vaccines did contain the most up to date strains, Bio-Security Australia may have looked at specifying a particular vaccine or vaccines".

This statement is unusual in that does not state that Bio-Security Australia would have specified the use of the best vaccine available.

It begs the question "Was the vaccine in use at the time of the introduction of the EIA virus into Australia considered to be the best available by the world's leading experts or is this an attempt to conceal ?

The second reason given by Bio-Security Australia was that "vaccination was only one of a number of measures taken to minimise the risk of horses with equine influenza being introduced into the general Australian horse population."

Please explain what these number of measures were.

Please include in your explanation ,Mr. John Cahill ,the most senior Bio-Security Australia executive's actions and evidence , of the 21<sup>st</sup> February 2008,pages 4015 - 4017, and why he was asked to withdraw from the Inquiry room.

On his return to the Inquiry Hearing, he gave a completely different answer to the question asked of him previously before his expulsion.

Please advise why he changed his evidence.

He said this time, that "no pre-entry quarantine premises had ever been examined for the purpose of undertaking a risk analysis so as to draft conditions."

What were those "number of measures" referred to by Bio-security Australia in 6.31 in the Outline of Submissions at the Callinan Inquiry?

Were these measures associated with the assessment and health recordings of quarantined horses stabled at ECQS and/or with the assessment of hygiene and bio-security practised at the ECQS facility in November 2007?

Please examine the evidence of DAFF executives at the 3 Senate Sub-Committee Hearings in 2005.

For example, please examine the evidences of the late Chief Scientist Bio-Security Australia, Dr Banks (RRA&T on Page 48 and PAGES 62-64)and the Chief Veterinary Surgeon of Australia, Dr. G. Murray (RRA&T PAGE 73) and advise why incorrect and misleading information was supplied to the Hearing on the 15<sup>th</sup> February 2005?

Please answer the questions asked of you as they are important to the rural world which you represent.

Bob Steel B.V.SC. M.R.C.V.S

Honorary Veterinary Surgeon N.S.W.



Australian Government

Department of Agriculture, Fisheries and Forestry

Dear Dr Steel,

Thank you for your letters of 22 January 2010 to the Hon. Tony Burke MP, Minister for Agriculture, Fisheries and Forestry, 7 February 2010 to Dr Narelle Clegg, and 13 February 2010 to myself about bovine spongiform encephalopathy and other matters. Minister Burke and Dr Clegg have asked me to reply on their behalf.

Your views on the matters that you raise, which you have previously provided by letter to the Minister and various officers in the department, are well known and have been noted. I have nothing more to add to the responses to your earlier letters.

I would like to thank you for the deep interest you have shown in these matters.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'A. Carroll', written in a cursive style.

Dr Andy Carroll  
Chief Veterinary Officer (Australia)  
Delegate to the OIE (Australia)

23 February 2010

ATTACHMENT

5

The Prime Minister, The Hon. Kevin Rudd M.P.  
The Hon. Nicola Rixon M.P., The Minister for Health and Ageing  
The Hon. Simon Crean M.P., The Minister for Trade  
The Hon. Tony Burke M.P., The Minister for Agriculture  
The Hon. Mark Butler M.P., Parliamentary Secretary for Health  
Parliament House Canberra A.C.T. 2601

Dear Prime Minister and Ministers,

It is unfortunately necessary to express to you concerns about the new Government policy for Bovine Spongiform Encephalopathy (BSE) and very serious concerns about the scientific Review that supports this policy.

Please be aware that the Review, "Review of Scientific Evidence to Inform Australian Policy on Transmissible Encephalopathies (TSEs) 2009 Addendum" by Professor John Mathews, Consultant to the Department of Health and Ageing is the scientific basis for the new policy.

This Review needs to be reviewed by expert epidemiologists for its serious faults and incorrect scientific information and by a statistician, to examine the validity of its conclusions.

These serious errors in the Review are not typographical errors or careless omissions of scientific facts but about veterinary epidemiology and questioned statistics.

Please be advised that the Department of Health and Ageing, the Therapeutic Goods Administration, FSANZ, DAFF, the National Health and Medical Research Council, the Transmissible Spongiform Encephalopathy Advisory Committee and the Bovine Spongiform Advisory Committee and the Australian BSE Food Safety Assessment Committee have examined this Review to support the scientific information and the conclusions of this Review. This is not understood.

The FSANZ consents will lead to the issue of import permits by the Department of Agriculture, Fisheries and Forestry (DAFF) which will allow importation of Category C animal derived beef skeletal muscle tissue, as defined by the OIE, to include as well "beef products" which FSANZ or DAFF does not and has not defined, from among 22 "controlled risk" OIE Category 2 countries for BSE.

What are "beef products" and how could FSANZ consider the risk assessment of Animal Bio-security (BA) to include skeletal muscle tissues and "beef products", as OIE Category C tissues from OIE Category 2 countries, in the light of new scientific information disclosed by SPMCA testing of beef skeletal muscle tissues and other beef tissues, previously considered to never contain BSE prions in BSE infected cattle?

(A) **New tests for BSE---SPMCA and the imminent availability of live animal blood tests, analogous to the “AMORFIX” human blood tests.**

**THE SERIAL PROTEIN MISFOLDED CYCLIC AMPLIFICATION (SPMCA) TECHNOLOGY for BSE and for ALL TSEs, HAS REVOLUTIONISED THE DETECTION OF THESE ANIMAL DISEASES.**

SPMCA can amplify (increase) and identify TSEs in animal tissues and TSEs outside host animals in the environment in previously un-detectible and minute quantities.

This SPMCA technology has detected BSE prions in tissues such as beef skeletal muscle tissues and their conjoint fat ,lymphatic and neural tissues.

SPMCA has revealed previously unknown pathways in animal bodies, from ingestion of BSE material ( from such, as bone meal (MBM)or specific risk material (SRM) for BSE as defined by OIE), to it's conduit from the gastro-intestinal tract en route to the central nervous system, where it amplifies itself further, as proteinase resistant prion proteins following it's amplification in other tissues, which has been recently discovered .

**Professor Mathews is unaware of or does not appreciate the potential of this new science,as he does not mention it in his Review.**

When new detection technologies are commercially available, analogous to the highly specific and sensitive French test-- “**AMORFIX” HUMAN BLOOD TEST FOR TSEs,**” these tests will provide certainty and real safety for Australian animal and human health, on an individual animal basis, if each animal is blood tested before slaughter, provided that no cattle substitution occurs, under a new revised BSE policy.

**(B) BSE ,TSEs history and EU requirements and notifications by EU Member States.**

**PRIME MINISTER, WE ARE NOW THE ONLY COUNTRY IN THE WORLD WHICH IS REPORTEDLY FREE FROM PRION DISEASES, THE TRANSMISSIBLE SPONGIFORM ENCEPHALOPAHTY GROUP OF DISEASES.**

These diseases affect man, as in spontaneously occurring s CJD, and in so-called familial CJD or after infection with BSE as v CJD .

**HUNDREDS OF THOUSANDS OF ANIMALS ARE INFECTED WITH THESE TSEs, as in classical and atypical strains of Scrapie in sheep, as in CWD in wild and farmed Cervidae (deer family with antlers),as in feline and mink TSEs. 5,000-10,000 new cases of Scrapie are reported in Scotland annually.**



**THERE ARE HUNDREDS OF EMERGING VARIANT STRAINS OF TSEs THAT MOLECULAR BIOLOGISTS HAVE REVEALED IN THE LAST 4 YEARS, WORLD WIDE.**

**For example TSE of deer, CWD has spread ,since 1982, to 14 USA States and 2 provinces of Canada. There are numerous strains of this highly infectious TSE.**

**Experimental inter-species transmission experiments have disclosed infection is possible in other than the recognised host animals ie CWD to ruminants such as cattle,sheep and goats and Scrapie to cattle and goats.**

**Molecular biology reveals novel mutant strains that affect other animal species, as in BSE, in goats. It is in the transgenic mice that scientists have an exquisitely sensitive animal model, to explore the possible biological evolution that occurs which lead to a crossing over to another animal species, as happened with BSE in the 1980s in the U.K..**

**Australia has possibly spontaneous occurring cases of TSEs in its ruminant herds. Spontaneously occurring BSE variant strains with dissimilar clinical syndromes and dissimilar epidemiology to classical “mad cow disease” may occur. No extensive testing of ruminants for TSEs has occurred. The Government’s dangerous new BSE policy must be considered to anticipate undisclosed test results! This is considered to be the case after contact with a senior executive in FSANZ.**

**(C) The OIE’s role in the new Australian policy and the EU.**

Please confirm that you are aware that any notification of any animal disease by a country to the OIE, is purely a voluntary decision made by that country, to report the presence or extent of an animal disease, to the OIE.

**THE OIE HAS NO GROUND INSPECTION ROLE AND NEVER HAS HAD ANY GROUND INSPECTION ROLE IN ANIMAL DISEASES SURVEILLANCES.**

**A COUNTRY MAY OR MAY NOT DECIDE TO REPORT ANY ANIMAL DISEASE OUTBREAK OR INCIDENT IN ANY ANIMAL DISEASE OCCURRENCE TO THE OIE.**

Ministers please advise exactly how FSANZ will be able to use the OIE methodology by using the OIE’s completely voluntary disease disclosure culture, for BA to undertake a risk assessment, analysing information provided by an applicant country which **may or may not be true**, or any other relevant information, including any prior categorisation by the OIE.

Particularly refer to the history of OIE’s country’s zoning categorisation for Foot and Mouth Disease (F&M ) that led to the importation of beef from a supposedly F&M disease free zone in Brazil in 2004.

Ministers, please advise that you are aware of this OIE methodology for it's prior categorisation of F&M free zones for this disease in any country.

Ministers, please confirm that you support such OIE methodologies, such as the prior categorisation by the OIE of disease free zones within a country, by the OIE both, in 2004 and now in 2010.

Please advise that you are aware of the differences that exist for member countries of the European Union, to report to the EU Commission, the presences of animal diseases including BSE, that may exist, occur sporadically, or develop, in that EU member country, in any year.

Prime Minister please advise if you expect the OIE to act to address the fact that the EU, in 2009, revealed that some "rapid tests" used to examine the CNS of cattle after slaughter for BSE prions, to be unreliable.

The EU does legally approve rapid tests that are be used in the EU and continues to update this information.

The OIE does not approve such tests and considers results of testing and of animal disease incidents, as voluntary disclosures, only on a country's own reconnaissance.

**Please advise that you are aware that EU binding legal requirements exist for animal disease notification for EU member States.**

**Prime Minister, please advise if your Ministers recognise the significance of these differences and if they believe that these differences in reportage for EU and non-EU countries, are important or not?**

**It is believed that Australian Government and it's scientists should have looked to the EU itself and not to the voluntary animal disease disclosure culture of the OIE, for professional scientific and administrative guidance in the evaluation of risk assessments for the new BSE policy.**

**(C) Australia's unsafe animal feeding practices and the new BSE policy.**

**Minister Tony Burke please advise that you are aware that ruminant MBMs and SRMs for BSE, as defined by the OIE, do now enter the human food chain in labelled packaged pig foods, stating that they do contain these MBMs and SRMs and these being fed to pigs. The labels state that it is prohibited to feed these pig foods to ruminants.**

**HUMANS EATING AUSTRALIAN PORCINE TISSUES MAY THUS BE EXPOSED TO ROGUE PRIONS IN BSE AFFECTED CATTLE AFTER PASSAGE OF PrP bse THROUGH PIGS.**

**This feeding of MBMs and SRMs to pigs must be stopped before the new policy commences. It should have been stopped years ago.**

Minister Tony Burke ,please note that BSE prions ,when transmitted experimentally in transgenic mice expressing porcine PrPres, were infected by BSE prions ,but more amplification occurred –ie, they were more susceptible, after prior passage through sheep.

Please advise that you consider this experiment unimportant to human and animal health in the same way as was the discovery, by mice transmission experiments, with mice expressing PrP bse , **that revealed these prions to be the aetiological agent of v CJD.**

**(D) OIE ,CATEGORY C MATERIAL –THE NEED TO RE-CLASSIFY CATEGORY C BEEF SKELETAL MUSCLE TISSUE,TO BEING UNSAFE FOR BSE , AS RESULT OF THE SPMCA TECHNOLOGY.**

Please advise that you are aware that beef skeletal muscle tissues, with fatty tissues ,lymphatic tissues and neural tissues, contained within these beef skeletal muscle tissues, should no longer be classified as Category C tissues by the OIE, following the detection of TSEs, including BSE misfolded prions in these tissues by the **SPMCA TEST**, from clinically normal ruminant animals, including clinically normal cattle, which are covertly infected with BSE.

**Please advise that you are aware that the OIE will not deliberate on this issue immediately but will only consider it, under duress, at a much later time , because of it's enormous political significance in trading beef, world wide.**

**(E) Conclusion**

**Prime Minister, please act to cancel ,or at least put on hold, this new BSE policy, until live blood tests for BSE are commercially available for cattle.**

**If the Australian Government will wait until new live animal blood tests become commercially available, then FSANZ and BA will be able to be sure of the safety for animal and human health from a revised BSE Policy, for the importation of beef from Category 2 countries as defined by the OIE.**

**THIS REVISED POLICY FOR BSE WILL THEN SCIENTIFICALLY ADDRESSES THE RISKS INVOLVED.**

**The announced FSANZ criteria are primarily flawed by human fallability, as these criteria are based on the voluntary disclosure for animal diseases that exists in the OIE**

**They even ignore the unreliability of veterinary inspection for the detection of BSE disease in normal healthy looking cattle.**

**This has been documented in Europe where 7000 clinically normal cattle were undetected by veterinary inspection but on testing, were found to be BSE infected from 40 million rapid tested cattle.**

**Please note that the pig industry has been seriously damaged by the previous Government's decision to allow the importation of pork.  
Over 59% of all pork eaten this Christmas was imported!!!**

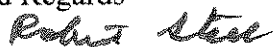
Prime Minister and Ministers, please advise why unsafe quarantine practices are in place in last week's announced FSANZ criterions for applicant countries for beef importations into Australia.

**How can Australian authorities possibly be sure that any beef imported into Australia, is free of BSE, without the individual highly specific and sensitive testing of each animal?**

**The argument that there is never any "no risk" in veterinary epidemiology, as in this new policy, is fatuous and false, when these tests are to be expected within 2 years. Bio-secure and safe, not at all !!!**

**Please advise how a cohort of BSE cattle may be identified overseas without a national identification scheme for cattle with a from birth to slaughter scheme that exists in Australia in our NLIS scheme.**

Kind Regards



Robert Steel B.V.Sc. M.R.C.V.S.  
Honorary Veterinary Surgeon N.S.W.

ATTACHMENT  
6

3

Dr. Andy Carroll,  
Chief Veterinary Officer, Australia  
Department of Agriculture, Fisheries and Forestry  
GPO Box 858 Canberra ,ACT 2601

Dear Dr. Carroll,

Thank you for your letter of the 3<sup>rd</sup> February 2010, on behalf of the Minister, the Hon. Tony Burke M.P., following on from my letter to him of the 29<sup>th</sup> December 2009.

Please advise that the Department is aware that ruminant derived Meat and Bone Meals ( MBMs) and Specific Risk Materials for BSE (SRMs) do now enter the human food chain in Australia via the feeding of these ruminant MBMs and SRMs( for BSE) to pigs, in and by their accordingly identified and labelled MBMs and SRMs containing pig foods.

Of course it is stated on the labelling of pig foods in Australia, that these pig foods contain ruminant MBMs and SRMs and that these pig foods must not be fed to cattle.

Please advise why your Department considers that there is no risk at all, under the new BSE Policy to Australian Agriculture or public health, in the future, from these continuing feeding practices of feeding ruminant MBMs and SRMs to pigs in Australia.

If you cannot advise on this, would you please contact the Department of Health and Ageing via FSANZ for their expert advice and refer this information directly to me from your Department?

Obviously it is important to obtain this advice from DAFF itself as you ,Dr.Carroll, are fully aware that skeletal muscles with their associated fatty tissues ,lymphatic and peripheral neuronal tissues in these beef meats, will be coming into Australia under the new Policy for BSE from countries with endemic BSE in their cattle. Please advise that you are aware that if there is any OIE advice given to these countries, to disclose the progress or results of rapid testing for BSE in their cattle herds or even the total number of BSE affected cattle detected either by active or passive surveillance,

Please confirm that you are fully aware that these muscle tissues, as described above, have been shown to contain misfolded prions, PrPsc ie PrPbse, if a beast is infected with BSE.

Such a beast may be almost certainly clinically normal at presentation to you ,the overseas veterinary inspector, may be completely unidentified by any trace back

scheme and may arrive for your veterinary inspection at an overseas abattoir with an official statement that it does not come from a cohort of BSE cattle in that country.

Is that safe for Australian Agriculture? Please answer this question.

Please address this question as a veterinary surgeon and leave FSANZ to answer the questions asked of it about human health and about its soon declared categorisations' criteria.

We will all find out on the 1<sup>st</sup> March what FSANZ criteria will be, for their categorisation of applicants for import licences .

Please advise that you are also fully aware that the future imported muscle tissues may enter the human food chain, indirectly by feeding residues of these imported skeletal muscle tissues to pigs.

Please provide me with your own advice on this as a veterinary surgeon.

The Federal Government can no longer state, as you have in your letter to me of the 3<sup>rd</sup> February 2010, that :-

“ There is no plausible way this non-contagious disease(BSE) could be transmitted to Australian cattle via safe imported beef”

Beef muscle tissues that you describe as “safe imported beef” are not safe if they come from an unidentified BSE infected animal containing PrP<sup>sc</sup> which can be shown to contain PrP<sup>sc</sup> by the emergent technology of serial protein misfolded cyclic amplification- SPMCA .

With the Government's new BSE policy, due to start on the 1<sup>st</sup> March 2010, we, as veterinarians are aware that BSE prions of cattle (PrP<sup>sc</sup>) did transmit to transgenic mice programmed with PrP pig, but these mice were more susceptible after passage of these PrP<sup>sc</sup> through sheep .

That indicates that there was amplification of the misfolded prions of BSE in these mice following prior passage transmission through sheep.

Please confirm that this scientific experiment is in no way related to, or important to, possible dangers to Australian Agriculture or to humans in the future .

As you know, mice transmission experiments resulted in BSE being found to be the aetiological agent of v CJD .

Please confirm that under the new policy for BSE ,there will be no added danger to pet animals such as cats and that this feeding practice should continue under the new policy for BSE for both pet animals and for poultry.

You and I, as veterinarians, are aware that natural infection of cattle with CWD or Scrapie has not, as yet, been identified.

Please advise that you are aware that intra-cerebral inoculation(I/C) of cattle with the CWD rogue prions or with the Scrapie rogue prions, have resulted in experimental infection and death from both of these diseases.

Please advise that you are aware that:-

In Scrapie I/C inoculations ,all cattle died more quickly than they do with BSE on second passage, at 14-18 months of age.

In CWD I/C inoculations ,all cattle were infected and developed clinical disease in 16.5 months of age on second passage. Again death was quicker than is usual in cattle with BSE.

This is the “ science on the crossover”—inter-species experimental transmission science

Please advise why you stated at the Senate Hearing on the 5<sup>th</sup> February 2010,Page 84, that:-

“ there was no science on the crossover of the wasting disease from deer.”

Please advise why you stated that there was no science.

Please note that the question asked of you did not refer to natural infection of cattle with CWD but to the “science of crossover”—the transmissibility of wasting disease of deer.

Please advise why you describe BSE as a non-contagious disease as you have in your letter to me of the 3<sup>rd</sup> February 2010.

It is correct that infectivity is not the usual transmission pathway for BSE but BSE has all three ecological transmission pathways confirmed - spontaneous , heritable and infective.

For example infection of calves occurs by drinking milk from BSE cows with classical BSE and from cows with atypical L and D strains of BSE secreting PrP<sup>sc</sup> in their milk.

Please advise whether you believe this infectivity of BSE to be an unimportant and an isolated anomalous scientific finding for Australian Agriculture ,when referred to the new BSE policy, when it has commenced.

I apologise for the multiplicity of questions asked of you but the veterinary side of the new policy has not yet been addressed properly by the veterinary profession.

It is hoped that you will reply as soon as possible as these questions are vitally important issues for Australian Agriculture.

The FSANZ decisions on it's criterions will be available on the 1<sup>st</sup> March 2010 and are peripheral to the questions asked of you.

Yours Sincerely

Robert Steel B.V.Sc. M.R.C.V.S

The Senate Rural and Regional Affairs and Transport References Committee  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Dear Senators,

The Federal Department of Agriculture, Fisheries and Forestry's (DAFF's), IRA, to examine the animal health risks of importing beef and beef products from Category 2 countries into Australia, is referred to, following the earlier 26<sup>th</sup> July 2010 submission sent in last week .

**Full public and primary industry access to the fully reasoned, scientifically accurate,( with complete consideration of the latest research) IRA on the Government's revised policy on the importation of beef into Australia, will be essential ,as the Government's trade agendas may influence professional veterinary objectivity, as has happened in the past.**

Advice has been received that highly specific ,sensitive individual live animal BSE diagnostic tests will not be commercially available anywhere in the world in the next 2 years, despite the advances in Amorfix's technology.

Scientific evidence has revealed , mis-folded ( i.e rogue) prions in animal tissues of clinically normal animals which were infected with Transmissible Spongiform Encephalopathies (TSEs) including those of cattle infected with Bovine Spongiform Encephalopathy (BSE).

These findings include those of muscle tissues of clinically normal cattle infected with BSE, which had been inspected and found to be normal at professional and Governmental veterinary inspection.

*This should not influence the need for pre-export veterinary inspections by Australian Veterinary Surgeons, ( sent overseas to supervise the identification and health of cattle ), even though they will recognise that they are totally unable to detect any cases of pre-clinical BSE infection in these cattle.*

Detection of misfolded (rogue ) prions of animal TSE diseases has progressed since the introduction of the revolutionary technology of serial protein misfolding cyclic amplification s (PMCA).

Additional technologies which complement the sPMCA methods in the pre-clinical disease detection of prion diseases, such as in sheep (Scrapie) and in deer( Chronic Wasting Disease ( CWD) ) have been reviewed in the Journal of General Virology on the 1<sup>st</sup> July 2010.



These new technologies can detect exceedingly small amounts of rogue prions in body fluids such as blood and urine of TSE infected animals, including cattle with BSE.

Some s PMCA technology, with animal models such as with mouse adapted BSE or mouse adapted Scrapie, has overcome some difficulties in the assay of minute quantities of rogue prions found in live animals' plasma, by appropriate sonication regulation.

Researchers have indicated that these great advances will lead towards the establishment of a fast ,ultra-sensitive test for live animals in the future.

However the enigma of how a simple ( prion) protein, without nucleic acids ( a nucleus) can mutate to form multiple strains as in Scrapie, CWD and BSE, is unknown. Unstable strains of pathogenic prions with differing conformations have been found to co-exist within a single brain of deer with CWD.

New findings on the interspecies barriers to transmission with molecular modelling of prion diseases have been published.

The conversion of normal prion protein to the pathogenic forms has been studied from examining the structural changes in fungal prions. This has resulted in more understanding of the molecular basis of prion strains and their relation to barriers of interspecies transmissibility.

**BSE can be transmitted to at least 7 separate animal species apart from all primates including man.**

The “rapid tests” now in commercial use for BSE detection in cattle, have variable sensitivities and accuracy, are only used at post-mortem on CNS (brain) and are less sensitive than the s PMCA technology

Please find below:-

(a) reference to the article by Drs P. Saa, J.Castilla and C.Soto to be published in the Journal of Biological Chemistry:-

“The unprecedented amplification efficiency of PMCA leads to a **SEVERAL BILLION-FOLD** increase of sensitivity for PrPSC (misfolded rogue prions) detection, as compared to the standard tests used to screen prion infected cattle (BSE infected cattle) and at least 4000 times more sensitivity than animal bioassay .

Therefore PMCA offers great promise for the development of highly sensitive, specific and early diagnosis of TSEs and to further understand the molecular basis of prion propagation”.

(b) the article by S B Prusiner to be published in the same journal –the Journal of Biological Chemistry.

“ Discovery of mutations in the prion genes of humans established that prion diseases are both genetic and infectious.....”

“ Whether prion diversity as reflected by distinct strains producing different patterns of PrPSC (rogue prions) accumulation, is due to different conformers of PrPSC remains to be established.....”

(ie the conformational change of prion unfolding and then refolding is the central event but why does it happen??)

“These findings underscore the fundamental features of prion structure and propagation that differentiate prions from other transmissible pathogens.”

*Professor Prusiner’s review must indicate that prion diseases are unique in animal and human diseases that occur in nature.*

**The unknown features and dangers to man and animals still exist in these diseases and it is wrong to suggest that science has introduced safety from them as our Government suggested in 2009 and 2010.**

Due to initial good luck in the English refusal to export their Scottish and English sheep to the Australian colony in the 19<sup>TH</sup> century, and then to the good management of DAFF (when this embargo was lifted in the middle of the 20<sup>th</sup> century), Australia does not acknowledge any TSEs diseases in it’s animals.

New Zealand was also free of Scrapie, a highly infectious TSE of sheep, in it’s sheep flocks until co-called “ sporadic atypical Scrapie” was detected in 2009,

Genetic (so- called familial ) Creutzfeldt-Jacob Disease (CJD) exists in Australia but no cases of v CJD originating from consumption of our beef has occurred.

**Unfortunately it is unlikely that highly specific and sensitive individual live cattle diagnostic tests for BSE will be commercially available, when the Government’s IRA is due to be completed.**

This should be anticipated and would suggest the delay for any final decision until these tests are available.

Australia is the only country in the world free of all TSEs .

Every effort should be taken to preserve this freedom from a group of emerging diseases of animals which have potential dangers to man.

Yours Sincerely



Robert Steel B.V.Sc. M.R.C.V.S.  
Registered Veterinary Surgeon N.S.W.