

SECOND SUPPLEMENTARY STATEMENT OF COLIN MACLEAN
(Formerly of the Meat and Livestock Commission)

1. This Second Supplementary Statement deals with a few minor points which arise out of the evidence I gave to this Inquiry on 27 July 1999 and which has been recorded in Transcript 108 [T108(T Vol 11 Tab 8)].

Mr Bradley's evidence [T42(T Vol 5 Tab 2)]

2. On 27 July 1999 a section of the evidence given by Mr Ray Bradley on a previous day was put to me. This evidence had not been provided to me or to the MLC in advance. I have however now had an opportunity to consider it properly.
3. It appears from the transcript of Mr Bradley's evidence that he was being asked about the infectivity of cattle tissues when Mr Walker asked "...can I ask in this time in June 1989 what each of your understanding was about the size of dose that would be needed in order to be infective?" Mr Bradley replied as follows, "I would not have had a clue, in a nut shell. But it would not necessarily be expected to be extraordinarily large. I mean I am not thinking of a hundred weight. I mean I am talking about small quantities, less than let us say 100 grams of brain material. But what amount would be to cause disease in the same species in regard to BSE was speculation, which I could not really comment upon...." [T42(T Vol 5 Tab 2) pp63-64]

4. Having considered this exchange in more detail, I am of the view that the question which Mr Bradley was answering was effectively, “What is the dose likely to be to infect a cow?” In other words, Mr Bradley was giving an opinion as to the infectivity *intra-species* and, importantly, not across a species barrier.
5. Applying this to the science set out in the Schedule attached to the MLC’s statement [WS487] then even on today’s knowledge the effect of the species barrier would be to reduce the effective exposure by a factor of 1,000. (For these purposes I do not believe that knowledge has evolved in any material way since 1995, the final date to which the Schedule refers). Therefore, if one takes Mr Bradley’s figure of 100 grams of brain to infect orally cow to cow, applying a multiplier of 1000 means that it would take 100 kilograms of brain material to jump the species barrier by the oral route. This was not my understanding but, even if it had been, it would not have raised additional concerns with the MLC.
6. It also appears to me that Mr Bradley’s answer (that it would take less than say 100 grams) was probably given with the benefit of hindsight; particularly if one considers that later in the same answer Mr Bradley expresses his surprise that it could take as little of 1 gram of brain to cause BSE by the oral route within the same species. This information did not become available until the “attack rate” experiment had been completed in 1995/96. This was a titration experiment designed to ascertain the infective dose. A range of dosages was used to ensure that the actual result was within both a lower and an upper limit within the study and the designing scientists would not have expected all the dose levels to trigger infection. The dose ranges chosen by the most informed scientists at that time ranged from 1 gram to three times one hundred grams. It is clear that the designing scientists must have also shared Mr Bradley’s surprise at the results because all the dose levels right down to 1 gram triggered infection.

7. For avoidance of doubt, I would add that my understanding was never that the size of the underlying species to species dose was so small as to remove the reassurance to consumers effected by the species barrier and the higher doses required to infect under the oral route. My understanding was based upon the advice of the scientists which is better described in the Schedule to the MLC's statement.

“Beef the Facts” Video [T108(T Vol 11 Tab 8) pp29-33]

8. Certain questions concerning this video were also put to me on 27 July 1999. I have referred again to this video and can confirm that the first statement put to me by Mr Matovu [T108(T Vol 11 Tab 8) p31, line 13], after the words “....at any risk” was **not** included in the final version of the video. The statement is, at the top of **YB90/05.22/28.1-28.4 at 28.4**, “You would need to eat half of your body weight in infected brain in just eight days. Imagine 8 kilos of brain a day. You would have to be force-fed. And with the offal ban, none of it should be infected anyway”.
9. I can however confirm that the following paragraph did appear on the final video. This paragraph read, “One person has suggested that in order to infect cattle the agent may have changed, mutated, and so it can change again to infect humans. There is now sound scientific evidence that this is simply not the case”. A full transcript of both Dr Kimberlin's and my own dialogue from the video can be found at **YB90/5.22/28.1-28.4** for comparative purposes.
10. I would also like to correct something which I said on 27 July 1999. At page 31 line 22 of the transcript [T108(T Vol 11 Tab 8)] I am recorded as saying that I would have removed a certain passage from the final version on the advice of Richard Kimberlin. In retrospect, I honestly cannot recall why this particular passage was removed.

The relationship between the MLC and Government [T108(T Vol 11 Tab 8) p89]

11. In this section of the transcript both Mr Curry, who gave evidence with me and is the current Chairman of the MLC, and I deal with the mechanisms in place, both for challenging and questioning Government policy. I have discussed this section of the transcript with Mr Curry and we both feel that it may assist to add the following:-

In the first instance, MLC staff would challenge and question Government policy and performance by voicing its concerns directly with Government officials. This is illustrated for example, by my regular contacts with Mr Meldrum as part of the informal scientific network. If Mr Meldrum's response was not considered sufficient, I would then discuss the issue with senior administrators within MAFF. If MLC remained dissatisfied with the response, then it would, through its Chairman, make direct representations to Agriculture Ministers. It might, if appropriate, at that point brief industry bodies to lobby in support, particularly where Government expenditure is involved. MLC has from time to time been asked to submit a report to the relevant Select Committee and may be asked to appear before such a Committee. On occasion, Opposition parties may seek MLC views and opinions on policy issues which they may then use to lobby Government. In other words, MLC focuses its activities on ensuring that issues of importance to the industry are debated by those affecting the outcome with as full knowledge as possible. This is the case today as it was in the period 1989-1996.

Meat by-products [T108(T Vol 11 Tab 8) pp15-16]

12. In the light of the question from Mrs Bridgeman concerning the MLC's responsibility for by-products the MLC thinks that it may be helpful to clarify their role with respect to meat by-products and I have been asked to set this out on its behalf. The general duties of the MLC are set out in Section 1 of the Agricultural Act 1967. Part 1 of Schedule 1 to that Act sets out a number of particular functions

of the MLC. These duties and functions are explained in the statement provided by the MLC [WS487].

13. Over the years the Commissioners have considered that the MLC's primary responsibility relates to the beef, sheep, and pig farming industries, auctioneering, slaughtering, meat cutting, meat processing (including curing), retailing and catering, and the export of meat and meat products.
14. Secondary to these sectors are areas which affect industry efficiency or profitability to a greater or lesser extent. These include matters such as by-product disposal, rendering and fermentation of abattoir waste or water treatment. More recently these have extended further to include areas such as hide production, tanning processes, gelatine production and the use of by-products in the chemical industry. It is in these areas where the MLC's involvement has increased with the BSE crises. The MLC would add, however, that it has the competence, knowledge and experience to become more deeply involved in these areas. Where its own knowledge and experience is inadequate in a particular area then invariably the MLC will have or will obtain contacts in the relevant industry.

**The MLC's role in carcass classification and intervention activities
[T108(T Vol 11 Tab 8) pp 59-74]**

15. Again, this is an area I have been asked to clarify on behalf of the MLC. It is set out in some detail at paragraphs 21-24 and 35-34 of the MLC's statement [WS487]. However, for the avoidance of doubt, I have been asked to emphasise that, although the MLC had a presence in abattoirs through officers in its Fatstock Service (known as "graders") at the time when the SBO ban was in force:

- (1) it has never been any part of the MLC's function to remove SBOs, nor were MLC personnel present in the part of the abattoir where such removal occurred;
- (2) the MLC's Fatstock Service did not monitor compliance with SBO controls in abattoirs;
- (3) the MLC's Fatstock Service's records of MAFF/SOAEFD Fatstock inspections did not give cause for concern about SBO removal;
- (4) it has never been any part of the MLC's function to approve any carcass as fit for human consumption;
- (5) it has never been any part of the MLC's function to scrutinise any carcass for any (animal or human) health, veterinary or food safety purpose;
- (6) it has never been any part of the MLC's function to regulate, control or supervise abattoir practice (although it has advised on the lay-out and fit-out of abattoirs);
- (7) rather, the MLC's function concerned grading, classifying and certifying carcasses (predominantly by reference to weight and dressing) for (i) the Intervention Board and (ii) abattoirs themselves under private contract;
- (8) the MLC had a presence in some but by no means all abattoirs; and
- (9) the MLC's Fatstock Service was subject to audit and inspection by the MAFF/SOAEFD Fatstock Inspectorate.

MLC Press Release – 14 May 1990 [YB90/5.14/3.1-3.2]

16. Finally, I would specifically like to draw the Committee's attention to the final sentences of this Press Release which read; "Any one of these moves should have been enough to remove any fears. Taken together they add up to a virtually impregnable barrier to further transmission." It may be helpful for the Committee to read these sentences in the light of my explanation of the array of controls in place [T108(T Vol 11 Tab 8) p85, lines 3-22]. I would stress that the MLC was at pains to emphasise the cumulative effect of the array of controls to deal with BSE and to give protection against it.

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