

**DFA 14 – CONSIDERATION OF THE RISK FROM MECHANICALLY
RECOVERED MEAT (MRM) IN 1989-1990
UPDATE 20 JANUARY 2000**

<i>Para</i>	<i>Amendment</i>
1A	<p>[Insert new para 1A:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 1A: S Meldrum 6 (184E) para K2]:</p> <p>‘2. ... as regards specific responsibility for considering the safety and fitness for human consumption of MRM, I would comment that ultimate responsibility for the safety of meat and meat products lay with the Department of Health and executive responsibility for the inspection of meat lay with Local Authorities. This was taken over by Government Departments in April 1995 when the Meat Hygiene Service was launched. So far as MRM is concerned since knowledge of the production systems lay with MAFF it was not unreasonable for the Department of Health to rely upon MAFF for technical advice, as it did in many other situations, and for MAFF to offer advice to the Department of Health. But responsibility for taking a decision on the safety of MRM lay with the Secretary of State for Health and the CMO. However if I, as CVO, identified a problem with the production or safety of MRM then I had an obligation to inform the Department of Health and the CMO about my concerns. In some situations it was appropriate for MAFF and the Department of Health to ask SEAC for a view on the safety of a product and this did happen in the case of MRM on more than one occasion.’</p>
2	<p>[Insert text after “Mr D Taylor” as follows:] “(Veterinary Head of the Red Meat Hygiene Section at Tolworth)”</p> <p>[Insert text after “Mr K Taylor” as follows:] “(Veterinary Head of Notifiable Disease Section at Tolworth)”</p>
5A	<p>[Insert new para 5A:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 8A: S Meldrum 6 (184E) para K4]:</p> <p>‘4. It is not clear whether I received a copy of the 1st February, 1990 (YB90/2.1/2.1-2.11) letter from the IEHO to Mrs Goodson in Animal Health Division and, although I have seen the letter when preparing this supplementary statement, I do not recall seeing it at the time it was received by the Animal Health Division. On the face of the document it does not appear to have been copied to me and a copy of the letter has not been found on my files for the relevant period. ...’</p>
15A	<p>[Insert new para 15A:] In a statement to the Inquiry Mrs Attridge said of the meeting of 9 April 1990 [insert new footnote 15A: S Attridge 5 (78D) para 22]:</p> <p>22. ‘... I was not present at that meeting although I received a copy of the minutes prepared by Meat Hygiene Division. I understood that the meeting dealt with the points that had been raised. This seems to be confirmed by the letter of 18 April 1990[YB90/04.18/4.1] which refers to the meeting as involving an “informative and worthwhile discussion”. Although I do not recall whether I saw that letter at the time, the letter does raise the issue of MRM. However, at that time I was not aware of any new information requiring a revisiting of the original advice and decision regarding MRM.’</p>
20A	<p>[Insert new para 20A:] On 17 May 1990 SEAC had their second meeting [Insert new footnote 20A: YB90/5.17/1.1-1.4].</p>
20B	<p>[Insert new para 20B:] During the oral evidence of Mr Robert Lowson the following exchange took place concerning the minutes of the second SEAC meeting on 17 May 1990 [YB90/5.17/1.1] [insert new footnote 20B:T127 pp69-70]:</p> <p>‘MR LOWSON: These minutes were actually drafted by Dr Pickles with my agreement.</p>

	<p>MR MATOVU: Thank you. The fourth paragraph: "The committee recommended additional attention should be directed at abattoir methods in order to minimise cross-contamination of meat with banned offal." Then it deals with the committee's concerns about the lack of ruminant feed ban in the Republic of Ireland. So that was one occasion when the committee was expressing – would you say that they were expressing some measure of concern about cross-contamination of meat with banned offal?</p> <p>MR LOWSON: Yes.</p> <p>MR MATOVU: Just out of interest, do you recall whether you passed these minutes on to other of your colleagues or to Ministers in MAFF?</p> <p>MR LOWSON: I am sure I did. It was my habit to pass the minutes to colleagues whom I felt would be interested, not to Ministers, at the stage when they were in draft, so as soon as they were written after meetings, I would circulate them to interested colleagues. Incidentally, I noted that Mrs Attridge touched on this point in her evidence and I have found several examples of cases when it is quite clear she received the minutes in draft and was aware of what had happened at these meetings. I think probably what Mrs Attridge said she did not get was what we did not produce, which was a kind of Hansard of the discussion, the record of what was agreed. It was normally my habit to circulate it in draft to a number of colleagues, one of whom was Mrs Attridge.</p> <p>MR MATOVU: Thank you. And would you have done that as a routine or simply on the basis of whether there was anything in the discussion that might interest and affect them?</p> <p>MR LOWSON: I came to do that as a routine. This was the second meeting of the committee and I do not remember whether I did it in this case or how I did it in this case, and I would need to check the documents and find out about that.'</p>
22A	<p>[Insert new para 22A:] In a statement to the Inquiry Sir Derek Andrews said [Insert new footnote 22A: S Andrews Sir D 2 (281A) para 180]:</p> <p>'180. ...My understanding at the time was that the removal of the specified offals, including the spinal cord, was technically achievable given proper procedures and care in the slaughtering and dressing operation. ...'</p>
22B	<p>[Insert new para 22B:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 22B: S Meldrum 6 (184E) para K6(d)]:</p> <p>(d) '... The veterinary advice mentioned above would not have been obtained from me but from my colleagues in the Veterinary Meat Hygiene Section. I would not normally intervene unless I was unhappy with the veterinary advice that had been offered. In this case I had no reason to intervene because I would have been content with the thrust of the advice, which followed my own thinking at the time.'</p>
23	<p>[Replace footnote 23 as follows: YB90/5.23/11.1-11.5]</p>
23A	<p>[Insert new para 23A:] In a statement to the Inquiry Mrs Attridge said of Mr Meldrum's explanation that zero risk was an impossibility [insert new footnote 23A: S Attridge 5 (73D) para 24]:</p> <p>'24....I would not have taken this to reflect problems specific to MRM but to the difficulty of "guaranteeing" 100% removal in general. ...'</p>
23B	<p>[Insert new para 23B:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 23B: S Meldrum 6 (184E) para K6]:</p> <p>'6. The note of the meeting held on 21st May, 1990 by the Parliamentary Secretary (Mr Maclean) with representatives of the meat industry and retailers records the following: "On MRM, they could not guarantee a 100 per cent. removal of all the specified offal, but Mr Meldrum explained that zero risk was an impossibility" (YB90/5.23/11.1-11.5). This was neither new information nor me expressing doubts or even concerns. I always took the view that total removal of all the spinal cord from every adult carcass on every occasion was not feasible. As mentioned in paragraph 1 above, it had been recognised during the first discussions on MRM at the meeting on 27th September, 1989 that "some nervous tissue would</p>

	<p>be contained in MRM" (YB89/9.27/6.1-6.7). In the section above on "Mechanically recovered meat (November 1989)" I explained that it was not possible to achieve zero risk without taking all bovine products out of the food chain, but for MAFF to act in such a way would not have been proportionate to the scientific evidence then available.'</p>
27	<p>[Amend quotation by insertion of transcript amendments as follows:]</p> <p>'... we did not believe it was a threat at all I think is the honest answer at that stage. But to deal with the perceived concern we started work on the [insert new footnote 27A: Mr MacLean has suggested that the word "the" should be deleted: see S MacLean 4 (147B)] sucking devices to try to suck the spinal cord out of the column without sagittally [sic] cutting the carcass. We spent a lot of time in our own workshops because we have [insert new footnote 27B: Mr MacLean has suggested that the word "a" be inserted after "because we have": see S MacLean 4 (147B)] cutting plant and cutting rooms in our own offices where we can obviously [insert new footnote 27C: Mr MacLean has suggested that the word "obviously" be deleted: see S MacLean 4 (147B)] do that sort of work. And we [insert new footnote 27D: Mr MacLean has suggested that "And we" should read "We": see S MacLean 4 (147B)] spent about a year and a half trying to achieve that [insert new footnote 27E: Mr MacLean has suggested that the word "that" be replaced with "removal of the spinal cord": see S MacLean 4 (147B)] in a way that could meet the line speeds [insert new footnote 27F: Mr MacLean,has suggested that "of the abattoir" be inserted after "line speeds": see S Maclean 4 (147 B)] obviously [insert new footnote 27G: Mr MacLean has suggested that "obviously" be deleted: see S MacLean 4 (147B). It is not [insert new footnote 27H: Mr MacLean has suggested that "just" be inserted after "It is not": see S MacLean 4 (147B)] a matter of getting it out, it has to meet the commercial needs of the industry. We did not succeed at that stage [insert new footnote 27I: Mr MacLean has suggested that "stage" be replaced with "time": see S MacLean 4 (147B)]. Therefore we stopped that work [insert new footnote 27J: Mr MacLean has suggested that "not" be inserted after "stopped that work": see S MacLean 4 (147B)] because I would not say [insert new footnote 27K: Mr MacLean has suggested that "I would not say" be deleted: see S MacLean 4 (147B)] the problem had gone away but [insert new footnote 27L: Mr MacLean has suggested that "because" be inserted after "had gone away but": see S MacLean 4: (147B)] the supermarkets had retreated from their area of concern as more knowledge had been disseminated in the industry that [insert new footnote 27M: Mr MacLean has suggested that "that" be deleted: see S MacLean 4 (147B)] the concern associated with the sawing of carcasses had receded throughout the industry, and it [insert new footnote 27N: Mr MacLean has suggested that "industry, and it" should read "industry. It": see S Maclean 4 (147B)] remained so until probably 1994/1995 when it actually returned again. So having not been [insert new footnote 27O: Mr MacLean has suggested that "when is actually returned again. So having not been" should read "when the challenge returned again": see S MacLean 4 (147B)] able to succeed [insert new footnote 27P: Mr MacLean has suggested that "able to succeed" should read "Despite our failure": see S MacLean 4 (147B)] with that sucking device we actually – well [insert new footnote 27Q: Mr MacLean has suggested that "actually-well" be deleted: see S MacLean 4 (147B)], kept the equipment and so on and so forth but retreated from the research.'</p>
29A	<p>[Insert new para 29A:] During the oral evidence of Mr Baker the following exchange took place concerning Mr Baker's reactions upon receiving a copy of this minute [insert new footnote 29A:T107 pp95-97]:</p> <p>'MR MATOVU: ... May I ask, Mr Baker, did you share this concern that is expressed there by the CVO?</p> <p>MR BAKER: No, I mean on the advice that I had taken previously, I would not have shared that concern, and I am not actually quite sure where the CVO actually took that from.</p> <p>MR MATOVU: Did you discuss this concern with Mr Meldrum, given that you did not share it?</p> <p>MR BAKER: Not that I recall at the time.</p> <p>MR MATOVU: Do you think it would have been within your responsibility and role to do so?</p> <p>MR BAKER: I do not think I would have done at the time, again because most of the work</p>

	<p>on BSE was being done in the BSE section, and I presume that there must have been some discussion there. I am not at this distance in time sure why Mr Meldrum suddenly went that way. He must have been receiving the same advice that I had been receiving, or David Taylor had been receiving.</p> <p>MR MATOVU: Again I am asking you whether you should have explored this further with Mr Meldrum or others, given that it was your team that had experience of meat product manufacturing processes, and you should have been in a position to advise on the efficacy of the SBO regulations in relation to MRM on the basis of what you understood to be the real risks from that process.</p> <p>MR BAKER: I think at the time I would not have thought that I should have necessarily discussed it with him. I am not sure actually at the time whether I received that on the day or whether I would have received it subsequently.</p> <p>MR MATOVU: Does that matter?</p> <p>MR BAKER: It does if the matter has passed, and it is a matter of history. I think I have indicated previously that I was away quite a lot, and I suspect that about that time I was abroad, and I might not therefore have seen it at the time, I might have seen it when I got back. But I still do not believe that I should necessarily have discussed it with Mr Meldrum. We had discussed it, or David Taylor had discussed it with Kevin Taylor previously, and we had come to some view, and the fact that the CVO was expressing a different view was an expression of his particular feelings at the time.</p> <p>MR MATOVU: Yes. You would agree that they were feelings which had to be taken seriously, given the source from which they came?</p> <p>MR BAKER: If the CVO was concerned about it, then yes, he would have come to us perhaps -- but I do not recall him doing so -- to say we ought to be doing something else. But I do not actually recall him doing so at the time.</p> <p>MR MATOVU: Again, why do you think you should not have gone to him, without waiting for him to come to you?</p> <p>MR BAKER: I cannot argue with that. I can only say to you that I had already, or David Taylor had already taken advice on this issue and this was another angle on the same issue.'</p>
29B	<p>[Insert new para 29B:] In a statement to the Inquiry Mrs Attridge said [insert new footnote 29B: S Attridge 5 (78D) para 26]:</p> <p>'26 ... As far as I was aware Mr Meldrum had until this date been satisfied with the decision in relation to the SBO ban. The concern apparently raised by his minute was that "small fragments of nervous tissue would be sucked out" in the MRM process and that therefore "it is difficult to argue that the resultant material could not be significantly contaminated" [YB90/6.4/19.2]. I was not previously aware of concern at Tolworth on this issue. This was a separate issue to that of removal of the spinal cord which was already required under the SBO ban. ...'</p>
29C	<p>[Insert new para 29C:] During the oral evidence of Mr Kevin Taylor, the following exchange took place [Insert new footnote 29C: T122 p102-103]:</p> <p>'MR MATOVU: The question concerns the third from last sentence which says: "We in Tolworth are concerned at this practice [that is MRM] because in the extraction of the MRM small fragments of nervous tissue would be sucked out and therefore it is difficult to argue that the resultant material could not be significantly contaminated." [YB90/6.4/19.1] My question is, Mr Taylor, was this a concern that you had at this time, being one of those in Tolworth?</p> <p>MR TAYLOR: No, I have said so. This does not actually say central nervous tissue, this says nervous tissue.</p> <p>MR MATOVU: Yes.</p> <p>MR TAYLOR: I do not know, I was not party to this and I do not know whether the reference is to central nervous tissue or to nervous tissue, but I took the extremely simplistic view, I suppose, that having decided what the specified offal was, the rest was not specified and we regarded it as low enough risk to go into the human food chain, so I had no concern about that and I think I have made that repeatedly clear in the statements. Even from the personal point of view, as I have said often again and again, if I had personal concerns, I would have changed my family's eating habits and I did not.'</p>

29D	<p>[Insert new para 29D:] During the oral evidence of Mr Meldrum, the following exchange took place [Insert new footnote 29D: T123 p78-82]:</p> <p>‘MR WALKER: ... "We in Tolworth are concerned at this practice because in the extraction of the MRM small fragments of nervous tissue would be sucked out and therefore it is difficult to argue that the resultant material could not be significantly contaminated." Then you go on to deal with bovine heads. Can you help on the reference to nervous tissue there? Is that a reference to spinal cord or to things other than spinal cord?</p> <p>MR MELDRUM: No, it will be a reference to peripheral nervous tissue.</p> <p>MR WALKER: In 1989 peripheral nervous tissue had not been thought to be sufficiently infective to warrant action for the purposes of the SBO Order. Had something changed?</p> <p>MR MELDRUM: Yes it had changed. BSE was and still is a moving target. It does not stand still, unfortunately. Both perceptions and other facets come into play which alter one's perception. What was happening in 1990, quite clearly the number of cases of BSE was increasing, and increasing significantly. There was concern being expressed not only in the UK but also overseas, particularly in Germany; and that had occurred at the back end of 1989 in the context of the implementation of the SBO regulations. On top of that there had been a meeting of the Scientific Veterinary Committee in January 1990 at which the whole issue of BSE had been discussed. Papers had been submitted by Richard Kimberlin which you have seen, and the same risk assessment which he had worked through with us was discussed there. Quite clearly there were concerns being expressed about BSE. It follows that if you are concerned about BSE you are also concerned as to whether or not the line in the sand is the correct line at the correct place. That was part of the ongoing discussion that we had on BSE throughout the years I was working in my old Department.</p> <p>MR WALKER: I had wondered whether the reference to "significantly contaminated" at the end of that sentence was a reference to significantly contaminated with spinal cord and SBO?</p> <p>MR MELDRUM: I believe that I was talking about peripheral nervous tissue, because I mentioned just now that I had been in discussion with Keith Baker and others about the importance of spinal cord removal. I will be assuming at that time that there was a very high level of compliance with the spinal cord removal requirements.</p> <p>MR WALKER: Things other than spinal cord were something that SEAC gave consideration to; that was part of the paper that went to them later in the year. They concluded that provided the existing rules were followed and supervised, there is no ground for further action. That seems rather different from what you were expecting here, if you were thinking about material other than the spinal cord. Here you were saying that it is difficult to argue that the resultant material would not be significantly contaminated?</p> <p>MR MELDRUM: I am talking about contamination with nervous tissue. By that I would mean peripheral nervous tissue. This was a warning shot. It was trying to make Mrs Attridge aware of the issues that I believed would be discussed in Brussels, and where the sensitive points were. She was responsible for preparing me, briefing for meetings in Brussels. She had no involvement with the Scientific Veterinary Committee, but she would in briefings go forward to Ministers on council issues. We all know 6th June 1990, that was a month after we had the cat. There was massive concern in Brussels and particularly in Germany and France, but Italy as well, about BSE and the safety of beef. Therefore these issues were issues that would be discussed, I believed, in either of those three forums and Mrs Attridge should be aware of it. As with all documents one produces at the time they are not necessarily perfectly worded. One does not expect to be crawling over them and looking at the detail of the actual words ten years later. Maybe you could argue about the word "significantly". I am quite clear what I was saying. Increased awareness, increased concern, we must look at this very carefully.</p> <p>LORD PHILLIPS: Only a week or so before you prepared this you had been to a meeting with Mr David Maclean and members of the Consumers in Europe Group where Mr Godfrey had focused on that point specifically. Was his input of any relevance in your raising this matter?</p> <p>MR MELDRUM: Yes, it would have been. You have mentioned that as well. I am trying to think of what was happening at the time, why clearly I had this concern. That would be one more concern to add to that list.’</p>
29E	[Insert new para 29E:] During the oral evidence of Sir Derek Andrews, the following

	<p>exchange took place [Insert new footnote 29E: T124 pp71-72]:</p> <p>‘MR WALKER: ... First, can you recall, were you aware of concerns on the part of Mr Meldrum about nervous tissue which was not an SBO?</p> <p>SIR DEREK ANDREWS: I would not say concerns. It was a matter that was under discussion, certainly. How concerned he was I would not like to comment on. I think that is for him to say.</p> <p>MR WALKER: Then as to the spinal cord, were you aware of a concern that slaughterhouse practices were such that there would be contamination of parts of the carcass that were going to enter the human food chain?</p> <p>SIR DEREK ANDREWS: I was certainly aware that that was an issue that was discussed and carefully examined, but my own understanding was that technically it was perfectly possible to remove the spinal cord, provided it was done properly, and that it was not technically that difficult a thing to do. That was the basis upon which I think I was proceeding at the time.’</p>
30A	<p>[Insert new para 30A:] In a letter dated 8 June 1990, Dr G I Forbes, Director of the Environmental Health (Scotland) Unit wrote to the Assistant to the Agriculture Select Committee identifying his main concerns regarding BSE and human health. Point (6) of his list of concerns read as follows [Insert new footnote 30A: IBD 7 pp187-188]:</p> <p>‘With regard to mechanically recovered meat, the question remains can any guarantee be given that parts of the central nervous system of cattle do not enter this product? I would suggest that this is not possible and whether or not the practice of producing mechanically recovered meat can be considered safe is very much open to doubt.’</p>
32	<p>[Delete existing paragraph and insert as follows:] Mrs Attridge’s minute continued:</p> <p>‘2. MRM is a process which has been used not just for beef carcasses and other red meat but also for chickens for many years. It is an alternative way of getting meat from the areas near to the bone which is other wise stripped by knife. It would require some research to ascertain whether the MRM process differs in any major respect from alternative ways of getting meat from bones. When looked at [from] the hygiene point of view, [MRM] was considered to be a safe process and it does require to be specifically labelled if it is used in meat products.</p> <p>3. Against this background the tightening of existing controls would not appear appropriate the question would be whether or not MRM should be prohibited as a process for obtaining meat from beef carcasses. If we were to take such a step we would need to have a scientific base on which to take it and this would need research. Since the spinal cord and other specified offal are removed from the bones before they go through the MRM process on the face of it the risks would seem to be minimal. However, if the CVO agrees, it would be worthwhile to find out precisely what parts of the carcass do go for MRM, in particular whether the head is sent after the removal of the brain. It would not be legal to send it with the brain still in it’</p> <p>In manuscript at the end of the final paragraph, she added: “We could then give the Minister a better assessment of risk, if any.”</p>
34A	<p>[Insert new para 34A:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 33A: S Meldrum 6 (184E) para K11]:</p> <p>‘11. ...In her minute Mrs Attridge appeared to be taking quite a defensive approach in favour of the MRM process and whether any changes might be required to the "existing controls" on the process. I was concerned that Mrs Attridge's minute was too reassuring at a time when the Minister had already asked SEAC to review slaughterhouse practices (YB90/5.22/5.1-5.2). In addition, at that time, BSE related issues were highly sensitive both within the industry and amongst the public and there was heightened concern in the media on the risks from eating beef. MRM was of consumer and media interest, as were practices of bovine head splitting, the use of SBOs in feed for pigs and poultry and the</p>

	<p>first case of a naturally occurring SE in cats. In my minute to Mrs Attridge of 4th June, 1990 (YB90/6.4/19.1-19.3), I had previously recognised the "importance and sensitivity" of the issue of MRM and difficulties with the arguments involved relating to discussions on BSE in Europe. It is in this context that one should consider the comments in my minute of 12th June, 1990 (YB90/6.12/1.1) that "although we have accepted, so far, that the risk is minimal we do need to be guarded on any statement we make since this is an issue that will be considered by Tyrrell and may lead to a restriction on the derivation of MRM from some parts of the bovine carcass." My comments are a very clear indication of my concerns about the production of MRM and the need to ensure that the safety of MRM was carefully considered by the experts.'</p>
35A	<p>[Insert new para 35A:] During the oral evidence of Mr Capstick the following exchange took place [Insert new footnote 34A: T119 pp53-54]:</p> <p>'MR MATOVU: ... So by June of 1990, were you aware that SEAC were expressing a view that the risk to humans from spinal cord was possibly as great as the risk to humans from brain material, and that precautions needed to be taken to avoid contamination with either of those tissues?</p> <p>MR CAPSTICK: Yes, they were both specified offal.</p> <p>MR MATOVU: Thank you.</p> <p>MR CAPSTICK: In briefing, I was definitely aware of that. I was also aware that there was less concern about peripheral nerves. Now, Chairman, I have no anatomical qualifications at all, but this was the advice that was circulating at the time, so it was clear that if the spinal cord was removed in a satisfactory manner, then we had, if you like, dealt with a significant problem, potential problem. The whole question of satisfactorily removing spinal cords is clearly a technical matter. As I have told my advisers, in my youth I actually personally was involved in attempting to saw down a carcass and I realised the difficulties, but I also realised that it is perfectly possible to remove the spinal cord. I do not see what the problem is. When I visited slaughterhouses, I did not see any problem. There were enough inspectors around, not just meat hygiene inspectors but also meat and livestock organisation inspectors, and the carcasses are wiped and so forth, washed and wiped, et cetera, put in chilled rooms. I could not see any significant difficulty here. So when I hear stories of enormous amounts of spinal cord, and so on, I do wonder to what extent these are one-off -- these are aberrations, these are oddities, arising from incompetence or whatever, or someone not doing his job in some slaughterhouse. I cannot believe that it was a routine problem. So when it comes to MRM, a small proportion of spinal cord presumably were going for MRM, of which a minute proportion might have been carrying the disease. After all, they were all fit animals being slaughtered, or apparently fit. We are getting down to the thousandth of thousandth of per cents. I could understand why MRM was not proscribed at that time.'</p>
37A	<p>[Insert new para 37A:] In a statement to the Inquiry Sir Derek Andrews said [Insert new footnote 36A: S Andrews Sir D 2 (281A) para 194]:</p> <p>'194. At the meeting with the Minister on 14th June, 1990 (which I did not attend), the CVO indicated that there was a need for further work on the possible problem of contamination of MRM with nervous material. The note of the meeting indicates that the Minister wanted the CVO to prepare urgently a detailed assessment of the possible hazard from MRM [YB90/6.14/2.1-2.3]. This shows that MAFF were taking the matter seriously.'</p>
37B	<p>[Insert new para 37B:] In a statement to the Inquiry Mr Meldrum said that his comment at this meeting concerning the need for further work on possible contamination with nervous material is an indication that he was taking the issue of MRM seriously [Insert new footnote 36b: S Meldrum 6 (184E) para K15].</p>
43	<p>[Delete text after the end of the first sentence and replace text as follows:] The minute read as follows [Insert new footnote 40A: YB90/6.18/2.1-2.2]:</p> <p>'1. Your minute of 11 June to Mr Harrison and copied to Dr Knowles refers.</p>

	<p>2. There are two types of machine used in the production of mechanically recovered meat (MRM). The first type uses pressure from a piston to extract the flesh from the bones and forces the resultant slurry through a fine-mesh sieve which removes some of the connective tissue (collagen). Beef and other red meat MRM is produced only by this kind of machine. The second type of machine is based on a diminishing auger screw which applies the pressure at the end of the screw and causes a lot of damage to the bones. The latter machine is used exclusively for poultry MRM production.</p> <p>3. Food Science has already commissioned research work at IFR-Bristol (completed Aug '89) which studied the compositional differences between MRM and hand deboned meat.</p> <p>4. Some differences in gross composition were noted but there was no consistent pattern with regard to the fat, water, protein, or ash contents.</p> <p>5. The only consistent differences in all types of MRM were the higher levels of calcium, iron, and total purines detected in the MRM samples. The levels of these components will vary depending on the operating parameters of the machine.</p> <p>6. Although it is not yet proven, it is probable that these increased levels of iron, calcium and purines are derived from bone fluids expelled under pressure. A full report of this work is available from Dr M Woolfe.</p> <p>7. The majority of beef MRM manufacturers adhere to the British Meat Manufacturers Association draft code of practice regarding which bones can be used for MRM production. This code requires the removal of the spinal cord and specifically excludes the use of the linger bones, ie bones with higher marrow content, and also head bones. There is no evidence to suggest that heads are used for the production of MRM.</p> <p>8. Food Science are embarking on a project to extend this work to develop a method to detect the presence of MRM in meat products. Several approaches are currently being evaluated and it is hoped to commission the work by the end of June. This analysis will provide enforcement officers with a method of analysis to quantify MRM in meat products to prevent consumers being deceived. It could of course equally be used to enforce a ban on the use of MRM, should this be necessary.</p> <p>9. If the risk of BSE from muscle meat is regarded as negligible, then the use of MRM would not seem to add to that risk provided the MRM was prepared in accordance with para 7 above.'</p>
43A	<p>[Insert new para 43A:] In a statement to the Inquiry Mrs Attridge said [insert new footnote 40A: S Attridge 5 (78D) para 31]:</p> <p>'31. I believe that the majority of MRM producers did adhere to the BMMA Code. Under that Code, heads were excluded for use in MRM (see above). This tied in with what I understood the practicalities to be, as the Inquiry has been told (Para. 3 of DFA 14, "heads are not really suitable for the production of MRM ... because the enamel of the teeth was such as to damage the machine." T 37 [vol T4, tab 7] p 55) This view was supported by Mr Clark, a Deputy Senior Meat Hygiene Inspector (also quoted in Para. 3 of DFA 14; T 62 [vol T7, tab 2] p23). Since the code of practice also excluded the long limb bones the question of whether MRM posed a unique and unacceptable risk in respect of BSE would have related to the vertebral column only. The vertebral column (once the spinal cord was removed) was not prohibited from the food chain and if residual meat was not recovered mechanically it would have been recovered by other means....'</p>
49A	<p>[Insert new para 49A:] In a statement to the Inquiry Sir Derek Andrews said [Insert new footnote 47A: S Andrews Sir D 2 (281A) para 187]:</p> <p>'187. A number of organisations expressed opinions at this time about MRM. However, it is not clear what experience individual organisations had of slaughterhouse practices or on what basis they offered their assessments of risk. Consideration of the submissions made</p>

	by the organisations to the Select Committee suggests that several of the submissions relied on the general circumstantial evidence about MRM which was at that time being reported in the media.'
49B	<p>[Insert new para 49B:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 47B: S Meldrum 6 (184E) para K9]:</p> <p>'19. In addition, there is the evidence submitted to the Agriculture Committee in the memorandum from the Meat and Livestock Commission (see page 91 of the Fifth Report(IBD 7, Vol. IBD1, Tab 7)). Paragraph 19 of that memorandum reads as follows: "Following dressing the carcass is split either by saw or by chopping. This involves exposure of and damage to the spinal cord. At this stage it is possible that a very few fragments of spinal cord could be left on the carcass but these will be removed by wiping or washing as the carcass is processed. The spinal cord is then removed under hygienic conditions and disposed of as 'specified offal'." This was also discussed during oral evidence to the Agriculture Committee on 20th June, 1990. Mr Cracknell (of Anglo Beef Processors Limited which operated nine abattoirs in the UK) said the following, "I am satisfied that in the abattoirs that I visit regularly in the act of splitting a carcass the saw moves backwards and forward through the backbone and undoubtedly there is some raking of the spinal column. That is then followed by a cleaning process. The spine is actually hosed from the inside down...that also removes any remaining pieces of spinal cord that the actual scraping process has failed to remove" (page 119 of the Fifth Report, question 420(IBD 7, Vol. IBD1, Tab 7)). Mr Cawthorne (of the Fresh Meat Company Limited and Chairman of the British Meat Export Council) said the following: "It is possible to account for the spinal cord, whether it has been split or whether it comes out whole. In a great many cases - and I mean a great many - the spinal cord falls into the left hand or right hand side of the channel and can be taken out from neck to sternum in one piece and cut into bits. That happens in most cases" (pages 119 and 120 of the Fifth Report, question 421(IBD 7, Vol. IBD1, Tab 7)).'</p>
52A	<p>[Insert new para 52A:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 48A: S Meldrum 6 (184E) para K7]:</p> <p>'7. I would not have seen the evidence submitted to the Agriculture Committee by outside parties, with the possible exception of the evidence from the British Veterinary Association. Also, I doubt whether I read all the annexes and appendices to the Fifth Report published in July 1990 (IBD 7, Vol. IBD1, Tab 7) detailing all the memoranda and correspondence received by the Agriculture Committee relating to MRM, because there was no reason to do so as the narrative in the Fifth Report did not address the matter of MRM in any detail (see paragraph 10 below). Put simply, it was not an issue. Despite the various points raised in some of the evidence received by the Agriculture Committee, I do not appear to have been questioned on the issue of MRM during my appearances before the Agriculture Committee in June 1990. It was however discussed by the Agriculture Committee with the CMO (Sir Donald Acheson) in the context of his statement on the safety of beef (see page 125 of the Fifth Report of the Agriculture Committee(IBD 7, Vol. IBD1, Tab 7)). The CMO told the Agriculture Committee that his statement applied to "any type of bovine material that is for human consumption" and that included MRM.'</p>
52B	<p>[Insert new para 52B:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 48B: S Meldrum 6 (184E) para K10]:</p> <p>'10. In the event, having received all this evidence, the Agriculture Committee did not include a specific recommendation in relation to MRM in its Fifth Report, although in contrast the issue of head splitting and brain removal had been looked at in some detail (see paragraphs 50 to 54 of the Fifth Report (IBD 7, Vol. IBD1, Tab 7)). The Agriculture Committee did note that SEAC was "engaged in its own review [of slaughterhouse practices] which will no doubt lead in due course to supplementary guidance" (paragraph 52 of the Fifth Report (IBD 7, Vol. IBD1, Tab 7)). It therefore follows that MAFF were following the advice of those organisations that recommended that the procedures for the production of MRM should be reviewed. This was a proper course to follow in order to ensure that the consumer was fully protected.'</p>

58A	[Insert new para 58A:] On 25 June 1990, the Consumers Association issued a press release calling for the government to take urgent action on BSE. The CA recommendations were stated to include measures to improve consumer confidence, disease investigation and slaughterhouse practices. Among the recommendations made was that the government “ban the use of beef spinal bones for making Mechanically Recovered Meat (MRM) – scraps stripped from the bones- and review the safety of the process”[Insert new footnote 54A: YB90/6.25/17.1].
61A	[Insert new para 61A:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 52A: S Meldrum 6 (184E) para K12]: ‘12. ... I had no reason to doubt the opinion of Mr Bremner who was an acknowledged expert in meat hygiene and knew a great deal about the processes for the production of MRM. In particular, it was important to note that Mr Bremner had accompanied Mr Curry on the visit to Canvin and was therefore in a very good position to comment on what had been seen.’
63	[Insert after “Mr F Taylor” the text (“Meat Hygeine Division”)]
66A	[Insert new para 66A:] In a statement to the Inquiry Sir Derek Andrews said [Insert new footnote 64A: S Andrews Sir D 2 (281A) para 193]: ‘193. Mr Maclean correctly drew attention to the fact that MRM was disliked by many consumers in his minute ... But this was not sufficient grounds for banning its production as a safety risk. This was the background against which a paper was being prepared for SEAC's consideration.’
66B	[Insert new para 66B:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 64B: S Meldrum 6 (184E) para K14]: ‘14. ... The "dislike" of MRM did not relate solely to BSE. In truth there were general concerns about the use of MRM in food which were totally unrelated to BSE. Organisations which would not immediately appear to be ones that would be expected to have any detailed knowledge or expertise in slaughterhouse practices or the systems available for the production of MRM, raised concerns about MRM to the Agriculture Committee, for example Consumers in the European Community Group, the National Consumer Council, the Food Safety Advisory Centre and the British Federation of University Women. As Mr Maclean's comments suggest, there was "increasing media interest" at this time, and the logical assumption/supposition is that the concerns expressed by some of these organisations may well have stemmed largely from such "media interest" as opposed to first hand knowledge of the production processes (YB90/6.00/2.2).’
68A	[Insert new para 68A:] In a statement to the Inquiry Mr Lowson said [Insert new footnote 66A: S Lowson 3 (104B) para 80]: ‘80. ... the responsibilities of my Division related to animal health. I therefore had no Divisional responsibility for considering the safety and fitness for human consumption of MRM derived from bovine carcasses from 1990 onwards. As Joint Secretary of SEAC, it was my job to ensure that SEAC’s views on these matters were conveyed to those with policy responsibility and that SEAC had the necessary advice available to it. My minute of 9 July 1990 (YB90/7.9/13.1-13.2) reflects my activity in this area’.
68B	[Insert new para 68B:] In a statement to the Inquiry Mr Lowson said [Insert new footnote 66B: S Lowson (104D) paras 36-37]: ‘36. At the time I had no grounds for believing that local authority enforcement was such that the industry could not be relied upon to comply rigorously with the SBO Regulations; and I was aware that SVS colleagues were active in monitoring the situation. Mr Meldrum’s evidence referred to above supports this.

	<p>37. At the time I was aware that there was a need to improve standards in slaughterhouses but believed that this was primarily driven by a need to meet European standards. My belief was that the standards in question related to the handling of meat fit for human consumption rather than, for example, the removal and continued separation of material unfit for human consumption.’</p>
69	<p>[Delete the first sentence of the quotation; Immediately before the quotation replace “The minute said” with “In his covering minute, Mr Cockbill referred to the proposed paper for SEAC which had been circulated by Mr F Taylor with his minute of 27 June to Mr Lowson, and continued”]</p> <p>[After the end of the quote insert further quote as follows:]</p> <p>‘Please therefore find attached a rewrite of the paper which nevertheless follows the format of the paper submitted by Mr Taylor. To that extent therefore we have continued to conclude a recommendations section although I am not certain of the appropriateness of that.’</p>
83	[Insert the initial “F” before “Taylor” in the text]
83A	<p>[Insert new para 83A:] On 30 July 1990 Mr Meldrum minuted Mr Lowson, Mr Baker and Mr Dugdale under the heading “BSE: Food Safety Advisory Centre”. The minute included the following [Insert new footnote 76A: YB90/7.30/12.1]:</p> <p>‘4. Research. The Centre have money available for research and asked whether there were any areas on BSE for which we were seeking outside funding. I wonder whether we should be seeking an R & D project on slaughterhouse hygienic practices and particularly development of equipment for removal of residual spinal cord from the cut spinal column. I would be grateful for advice from Mr Baker.’</p>
83B	<p>[Insert new para 83B:] On 7 August 1990 Mr Baker minuted Mr Meldrum in reply to Mr Meldrum’s minute of 30 July 1990. Mr Baker’s minute included the following [Insert new footnote 76B: YB90/8.7/4.1]:</p> <p>3. ‘Paragraph 4 indicates that the Centre have money available for research. You will be aware that there are already commercially produced devices for the removal of pig spinal cord and in at least one slaughterhouse this has been modified to removal of sheep spinal cord. Theoretically this could be extended to cattle carcasses but I believe that the main problem with such a device is the variation in accuracy in splitting the spinal column exactly down the middle.</p> <p>4. There has been a suggestion that an alternative method of spinal column removal could be to use a double saw cut to remove the cord intact but I am aware that this would create problems of support for the resulting sides of beef. They would become extremely difficult – if not impossible – to handle.</p> <p>5. If any basic research was to be considered then it might be conceivable to think of some technique for removing the spinal cord from the intact carcasses before splitting. I am not quite sure how this would function but I would suspect that some form of engineering knowledge would be required. On first thought I do not see how a suction device could operate unless both ends of the vertebral canal were open.’</p>
83C	<p>[Insert new para 83C:] On 28 August 1990 Mr Meldrum minuted Mr Lowson, Mr Baker, Dr Shannon, Dr MacOwan, and Mr Dugdale, under the heading “BSE: Food Safety Advisory Centre”. The minute included the following [Insert new footnote 76C: YB90/8.28/6.1]:</p> <p>‘Mr Baker has minuted me on funding of research into removal of the spinal cord. Could he please take this discussion forward with Dr MacOwan as to how the proposal could be progressed and Dr MacOwan may wish to cover this in his discussions with Nicola Harrison.</p>

	I note that Drs Shannon and MacOwan were not included in the original circulation, for which my apologies.'
84A	<p>[Insert new para 84A:] During the oral evidence of Mr Meldrum, the following exchange took place [Insert new footnote 77A: T123 p91]:</p> <p>'LORD PHILLIPS: ... First of all you had referred in your minute of 3rd September to commenting on the advice given to local authorities on removal of spinal cord tissue. I think you said a moment ago that that showed you assumed there had been such advice. Had there been such advice?</p> <p>MR MELDRUM: I am having difficulty in finding what I wanted to find. I have been searching and searching and searching because at that time when I made that comment I assumed that to be the case. And nobody came back to me and said "that is not the case". I am certain that there was a great deal of discussion between Veterinary Officers who were working, doing audits in slaughterhouses between themselves, and EHOs and meat inspectors at the time they did their routine inspections both of export approved and domestic premises. I am certain that was an ongoing discussion. I have failed to find any specific instructions of the nature that I had been driving at in the papers that I have reviewed so far.'</p>
85A	<p>During the oral evidence of Mr Meldrum, the following exchange took place [Insert new footnote 78A: T123 pp91-93]:</p> <p>'LORD PHILLIPS: Yes. Could we just look on to YB 90/9.6/3.2? This was Mr Cockbill's reaction to the draft paper. The original draft that SEAC had had some options at the end of it, one of which was legislating to prohibit using this spinal column for making MRM. This paper shows Mr Cockbill had some reservations about that being present as a simple option when in fact it involved considerable practical and legal complexities. What he says at the bottom, he suggests the paper is far more tentative in its conclusions as regards possible legislation and it ought to develop rules and guidance and controls on ensuring that spinal cord material is properly removed from the carcass at the slaughtering stage. Our concern, I think, is this: you have pointed out that when attention was really focused on this, it has proved possible to do the job cleanly. We are concerned that attention was not focused on really emphasising the need to do the job cleanly and making sure it was done cleanly at a much earlier stage.</p> <p>MR MELDRUM: Yes, I understand full well the question. Commenting upon what you have said, Chairman, the action that was taken post July/August 1995 was extreme insofar as a significant number of additional staff were taken on, and we are talking about hundreds of additional staff were taken on to ensure that spinal cord was removed. So, it is difficult for me now to compare the two. I hope it is clear that I was concerned about spinal cord. I was suggesting that other avenues should be pursued to try to ensure that the last remnants, if they were there, were removed. I know that that particular research project with the Meat and Livestock Commission did not in fact come to fruition although it was resurrected again in 1996 and more work was done by the Meat and Livestock Commission on a variety of equipment and we also looked at equipment in France. At that particular time we were working within the resources at our disposal, bearing in mind of course that it was local authorities then who were responsible for carrying out the inspection of carcasses and therefore also to check upon spinal cord removal. We were one stage back from that as you are, I know, very well aware. We did have some difficulties in this respect. There are other papers in the documents that you have seen indicating the difficulties that we sometimes experienced with local authorities who said: "Not you, it is not you, get off our patch. Domestic premises are not your responsibility, where is your right of access?" We did have difficulty. It had to be dealt with in a very careful and circumspect manner.'</p>
85B	<p>[Insert new para 85B:] During the oral evidence of Mrs Brown, the following exchange took place [Insert new footnote 78B: T129 pp4 - 6]:</p> <p>'MR MATOVU: So when you joined the Meat Hygiene Division what did you know about slaughterhouses?</p> <p>MRS BROWN: Well, I had a certain amount of knowledge because I had worked in that</p>

	<p>area at an earlier stage in my career, in the mid to late 1970s. I had had two years in the Animal Health Group, where part of my responsibilities related to slaughterhouses. So I had an idea of the way the system worked, if you like, and I had at that stage also visited slaughterhouses. So I was not coming to it completely cold.</p> <p>MR MATOVU: Thank you. When you joined the Meat Hygiene Division in September 1990, how important an issue in the work of that Division was the question of ensuring compliance with the SBO ban in slaughterhouses?</p> <p>MRS BROWN: I was aware, when I joined the Division, that this had been an area which had taken up a great deal of effort during the year since the 1989 regulations had been made; and there had been extensive discussions with the local authority enforcement organisations and with the meat industry about the practicalities of enforcing the legislation. By the time I joined, apart from the ongoing consideration with SEAC, things had quietened down and the impression I had was that after quite a lot of teething troubles, if you like, whilst the local authorities became familiar with the legislation and got to grips with it, and the industry similarly; after that stage had been passed, the regulations appeared to be working pretty well in practice. And it was no longer an issue that was being raised by the local authorities or indeed by the industry. It had become if you like part of the background. An important part of the background, but not something that was causing difficulties on a day-to-day basis.</p> <p>MR MATOVU: Yes. You said when you gave oral evidence last year that your Division worked extremely closely with the vets at Tolworth in the Meat Hygiene Veterinary Section. You mentioned you were both colocated in Tolworth and that facilitated close working relationships.</p> <p>MRS BROWN: Yes.'</p>
85C	<p>[Insert new para 85C:] On 19 September 1990 the fifth meeting of SEAC took place. The minutes included the following [Insert new footnote 78C: YB90/9.19/2.1-2.5]:</p> <p>“If the Committee was to reach worthwhile views about the implications of those slaughterhouse practices which it had not examined, it would need both to see the papers on the topic that had been promised by the Secretariat, and to see at first hand how the practices under review worked.”</p>
86	<p>[Insert the initial “F” before “Taylor’s” in the text]</p>
86A	<p>[Insert new para 86A:] In a statement to the Inquiry Mr Robert Lowson said [Insert new footnote 86A: S Lowson (104D) para 33]:</p> <p>‘33. I should first recall the division of responsibility in these matters:</p> <ul style="list-style-type: none"> - Department of Health took the lead in Government on matters relating to human health; - within MAFF, my <u>Divisional</u> responsibilities related to animal health and I had no responsibility for considering the safety and fitness for human consumption of MRM derived from bovine carcasses. However, as joint Secretary of SEAC, it was my responsibility to ensure that the Committee had adequate opportunity to consider all matters in which they were interested, or which Ministers wanted to draw to their attention; - it was for local authorities to enforce most slaughterhouse legislation, including ensuring adherence to the SBO ban in human and animal food; and - within the constraints of the legislation, it was for SVS colleagues to monitor activities in slaughterhouses (see above); and within MAFF, legislation relating to the human health aspects of slaughterhouse practices was the responsibility of Meat Hygiene Division.’
90A	<p>[Insert new para 90A:] During the oral evidence of Mrs Brown, the following exchange took place [Insert new footnote 82A: T129 pp10-12]:</p>

	<p>‘MR MATOVU ...</p> <p>Were you aware, Mrs Brown, by November 1990 that Mr Meldrum was keen to ensure that remnants of spinal cord were removed in order that any residual risk to man was minimised?</p> <p>MRS BROWN: I was certainly aware that consideration was being given to whether there were any particular pieces of equipment that might be available to improve the way that this was being done, not just spinal cord but other aspects of slaughterhouse practices. Removal of the brain for example. It was not something that I was directly involved in, because it was very much a matter for the veterinary team who obviously had much more direct experience of the practicalities of slaughterhouse operations. I am not quite clear, from having read paragraph 19 out of context, as it were, exactly what time Mr Meldrum is talking about here. It looks as if it was possibly May/June, rather than November. Obviously I do not know precisely what was going on in May or June because I was not there at the time. But during my period in Meat Hygiene Division I knew that my veterinary colleagues were, from time to time, in detailed discussions with people with a particular interest, like the University of Bristol who had a meat research department there, about possible pieces of equipment which could be designed; the Meat and Livestock Commission were also involved at various times on work on this. It was an ongoing issue. I think it was happening before November 1990. It continued after SEAC provided its advice in November 1990. There was a continuous hunt for ways of doing this better. A lot of these ideas, I think, proved to come to nothing or were not practical, but it was an item that remained on the agenda if you like.</p> <p>MR MATOVU: Just focusing on November 1990 and the views of the CVO, were you aware at that stage that one of the things that prompted this research was a concern in his mind that remnants of spinal cord should be removed in order to minimise any residual risk to man? Can you recall whether you knew that?</p> <p>MRS BROWN: Well, I can certainly recall that I knew that the CVO was taking a very close personal interest in the slaughterhouse end of the BSE story, if you like; and that he was very concerned to minimise or to make sure that the residual risk was being minimised. I cannot honestly recall whether I was specifically aware that spinal cord, fragments of spinal cord was a particular issue as distinct from other types of possible contamination. It is very difficult now to remember exactly how detailed my understanding was in those very early days. As I say, you know, I had been involved in the preparation of the paper from SEAC -- not directly involved because I did not have a great deal to contribute but I certainly had been aware that it was going on and had looked at the drafts. So I did have that level of understanding.’</p>
93	[Replace footnote 85 as follows: SEAC 6/1 para 3]
94	[Replace footnote 86 as follows: SEAC 6/1 para 6]
95	[Replace footnote 87 as follows: SEAC 6/1 para 8]
96	[Replace footnote 88 as follows: SEAC 6/1 para 9(a)]
97	[Replace footnote 89 as follows: SEAC 6/1 para 14]
98	<p>[Replace footnote 90 as follows: SEAC 6/1 para 15]</p> <p>[After the second sentence, insert new text as follows:] Paragraph 18 of the paper read as follows [Insert new footnote 90A: SEAC 6/1 para 18]:</p> <p>‘18. A MAFF project at IFR-Bristol has shown that there is no consistently significant difference in gross composition between MRM and hand deboned meat. However, significantly higher levels of calcium, iron and total purines, coupled with lower nitrogen and connective tissue levels, were noted in the MRM samples. Although it is not yet proven, it is probable that these increased levels of calcium, iron and purines are derived from bone fluids expelled under the higher pressures generated by the machine. The actual level of these components varies depending on the part of the animal used and its condition (e.g. whether or not it is trimmed of fat, cooked or frozen) as well as the type of machine used and the</p>

	<p>conditions under which it is operated.’</p> <p>[Replace footnote 91 as follows: SEAC 6/1 para 19]</p>
99	<p>[Replace footnote 92 as follows: SEAC 6/1 para 23-4]</p>
101A	<p>[Insert new para 101B:] In a statement to the Inquiry Sir Derek Andrews said [Insert new footnote 92B: S Andrews Sir D 2 (281A) paras 198-199]:</p> <p>‘198. ...MAFF were taking appropriate steps to ensure that SEAC were in possession of the relevant facts. Papers I have reviewed in preparing this statement (but which I did not see at the time) show that the paper prepared for SEAC was widely circulated in draft within MAFF and DoH and that much detailed consideration of risk went into its preparation with contributions from various areas of expertise within the two departments.</p> <p>199. As far as I was aware the paper submitted to SEAC presented an accurate assessment of what MAFF and DoH knew at the time about the MRM process and the scientific evidence relating to it. The paper refers to the draft code of practice of the BMMA to which the majority of MRM processors adhered [SEAC 6/1].’</p>
101B	<p>[Insert new para 101B:] During the oral evidence of Mrs Attridge the following exchange took place [Insert new footnote 92B: T117 pp63-64]:</p> <p>‘MR MATOVU: ... were you aware in 1990 of concerns within MAFF that general standards in UK slaughterhouses and the enforcement of slaughterhouse regulations by local authorities were certainly variable and in some cases inadequate?</p> <p>MRS ATTRIDGE: I think most people in dealing with the animal health hygiene area would have been very well aware of the variable standards. We had raised this in relation to again the Whetnall discussions, and the status quo, which was a rather untidy division between local authorities and central Government, was maintained. It was clear to me then that we were going to have to change the arrangements to meet EC standards. There was very little in the way of Parliamentary will to move the authority of the local authorities in terms of enforcement, but it was obvious that we were going to have to have a unified system. And in that respect the way which I felt was the best way to deal with it was to encourage -- a lot of the argument was: this will be far too costly to run centrally but if we create a mass of bureaucracy, a terrible cost, and it will totally cripple the industry. So the way forward in my opinion was to set up a feasibility study. That in fact had been set up in the spring of 1990; and I think Mrs Brown will have given you information about that. And she was within my Group and resources were made available to have that Price Waterhouse survey of costs, which brought out that the costs were not going to be that enormous, and therefore this was a perfectly good and feasible option to having an advice service. Mr Capstick carried this forward after I left the -- in fact he carried it forward at the tail end when I was in the Animal Health and Veterinary Group. That was the only way in which we could actually directly tackle the uneven standards in slaughterhouses. Indirectly, and this comes back to the informal ways of trying to ensure that concerns are met, the situation with export slaughterhouses I think I have already set out in my statements; the non-export slaughterhouses were more difficult because we actually had no powers of entry. Therefore we had to come along, I say we this was effectively the Field Service, the meat hygiene vets, would have had to tag along with the local authority inspector, so that it was a little bit of an informal arrangement. But the position was that the visits to slaughterhouses had been stepped up considerably.’</p>
101C	<p>[Insert new para 101C:] During the oral evidence of Mr Kevin Taylor, the following exchange took place [Insert new footnote 92C: T122 p105-108]:</p> <p>‘MR MATOVU: Thank you. My question is whether that reflected your understanding at the time of the position in slaughterhouses. You have previously given evidence just a little earlier saying that it was your view at the time that the spinal cord could be properly removed?</p>

	<p>MR TAYLOR: Yes. Well, the first thing to say is that some of the areas in this report to SEAC were outside my area of experience. I have certainly read the whole thing for the purposes of this hearing. There were several points that I noticed. One was in (2), and you have not asked but it said that part of the Government's strategy was "to ensure that possible human exposure to the BSE agent is reduced to the minimum practicable level". So it was not saying zero --</p> <p>MR MATOVU: Sorry, where is that?</p> <p>MR DAVIS-WHITE: Paragraph 2 of the minute.</p> <p>MR TAYLOR: The final sentence in paragraph 2, where it says: "... the Government's strategy [is] to ensure that possible human exposure to the BSE agent is reduced to the minimum practicable level." It was not talking about zero at all. Going to the point that you have made, if you look at 23, it makes a clear distinction between nervous tissue remaining and central nervous tissue. It says: "Inevitably when bovine carcasses are split through the centre of the vertebral column in the slaughterhouse some nervous tissue can remain and some contamination of the vertebrae with central nervous system tissue can occur." Those are two quite different things. It is not working on the basis that the SBO cannot be removed, it is working on the basis that it can. So what we are actually talking about is the question -- then, if you go to 24, again it says --</p> <p>LORD PHILLIPS: Just before we do, actually it goes on to say: "This will be as a result of:- "(a) small pieces of spinal cord inadvertently remaining ..."</p> <p>MR TAYLOR: Yes, I do see that.</p> <p>LORD PHILLIPS: Never mind.</p> <p>MR TAYLOR: Nevertheless, the distinction is made there and it also talks then, in 24, about some peripheral nervous tissue still present within the vertebral column. As I say, from my experience from what I saw over subsequent years, from what we know from 1996 onwards, there is no doubt that the spinal cord can be removed. Equally, there is no doubt that in splitting the carcass there is some damage to the spinal cord but a lot less, in my view, than is often suggested because the consistency of it -- it sort of rides with the saw blade. Although it saws through the solid tissue, the rest of it sort of jogs in time and does not get damaged to the extent that people suggest.'</p>
101D	<p>[Insert new para 101D:] During the oral evidence of Mr Keith Meldrum, the following exchange took place [Insert new footnote 92D: T123 p83-84]:</p> <p>'MR WALKER: Then at page 10, I think, of our document SEAC 6/1 we find paragraph 23: "Inevitably when bovine carcasses are split through the centre of the vertebral column in the slaughterhouse some nervous tissue can remain and some contamination of the vertebrae with central nervous system (CNS) tissue can occur. This will be as a result of..." There are three reasons why CNS contamination can occur: "(a) small pieces of spinal cord inadvertently remaining in the vertebral column; "(b) contamination from carcass splitting ... "(c) the failure to remove nerves from between the vertebrae". It is (a) that I wanted to focus on, Mr Meldrum. As I understand it, this paper recognises that even after -- was it Mr Bremner's directive that you mentioned earlier -- there would be small pieces of spinal cord inadvertently remaining in the vertebral column. That was your understanding at the time, is that right?</p> <p>MR MELDRUM: I think I have explained I hope that what I expected at the time was that it was perfectly reasonable in the context of this paper to express it in this way, because one cannot give 100 per cent guarantee.'</p>
101E	<p>[Insert new para 101E] During the oral evidence of Mrs Brown, the following exchange took place [Insert new footnote 92E: T129 pp18-20]:</p> <p>'MR MATOVU: Thank you. Then at the end of the draft paper, on the last page, it is suggested that: "The Committee is invited to consider on the basis of the available evidence whether any action or guidance is required in relation to slaughterhouse practices, and whether any new R&D is needed." May I just ask: did you consider that that last question was appropriate for a group of scientists like SEAC to advise on?</p> <p>MRS BROWN: I certainly did not think that it was inappropriate that they should be asked. I mean, I think I understood this paper to be spelling out in some detail precisely what the practical implications of slaughterhouse operations were. I think it made it quite clear, for</p>

	<p>example by using the word "inevitably" in the section that you have just quoted from, that some contamination was bound to occur. I think the context was set out quite clearly in the first paragraph of this draft of the paper, which refers to the Government's strategy to ensure that the possibility that people might be exposed to the BSE agent is reduced to the minimum practicable level. What we were really looking at is what is the minimum practicable level given the way that slaughterhouses are currently operating, and in the light of that does the committee think that there are any additional actions which need to be taken? Now those actions could presumably be to say: well, this is totally unacceptable, because it is inevitable that you get a certain level of contamination, then you know you will have to stop this altogether. Or you can say: well, provided that things are done carefully and properly and the legislation is observed, then we think that the level of risk is acceptable. I think they could have said: we think it is very important that one or more of those three theoretical alternative methods of removing the spinal cord are developed; and therefore research and development should be carried forward as a matter of urgency. These were all questions, I think, that arose out of this paper, which SEAC could, if they thought it appropriate, have highlighted in their response.</p> <p>MR MATOVU: So were you looking to receive advice from SEAC as to what was the minimum practicable level of exposure to the BSE agent that they thought acceptable?</p> <p>MRS BROWN: I think what I was expecting from this -- and it is quite difficult to put myself back into the position that I was in in November 1990 -- but I think that what I was expecting was either an endorsement that the controls that were currently in place were adequate or a statement that a further step change, if you like, in the level of control was required, which could have been either a ban on the use of bovine MRM or a requirement that as a matter of urgency some new equipment should be developed or whatever. That was the sort of thing that I think I thought before that 1st November meeting might come out of SEAC's consideration.'</p>
102A	<p>[Insert new para 102A:] In a statement to the Inquiry Dr Tyrrell on behalf of SEAC said [Insert new footnote 93A: S Tyrrell 3 (11B) paras 100-101]:</p> <p>100. 'Mr Pepper joined SEAC in September 1990 and was a practising field veterinary surgeon who had experience of slaughterhouse practices.</p> <p>101. The other members had no relevant professional experience that would have enabled them to feel comfortable giving advice without making a visit. Not all the members of an advisory committee could have relevant experience for all issues; to do so would defeat the purpose of a committee.'</p>
102B	<p>[Insert new para 102B:] In a statement to the Inquiry Dr Tyrrell on behalf of SEAC said [Insert new footnote 93B: S Tyrrell 3 (11B) paras 112-117]:</p> <p>112. 'The conclusion of SEAC, at the meeting, did not cover research and development or its priority. It gave advice, from the perspective of its expertise, which was properly qualified.</p> <p>113. The Minister had told the House of Commons that he would seek the advice of SEAC and in these circumstances it is unreasonable to expect SEAC to have declined to give the Minister the advice which he sought.</p> <p>114. The advice given by SEAC was expressed to be subject to a proviso or condition. That condition or proviso is set out above and is in the use of the words "if" and "provided". It is necessary to read the conclusion in full to understand it. It was for Ministers and their officials to consider SEAC's advice and decide if the provisos or conditions explicitly mentioned could be met. Sir Derek Andrews said, in Witness Statement No 281 (At paragraph 132), that SEAC's conclusion was that:</p> <p style="padding-left: 40px;">"So long as the rules were properly observed and proper supervision was maintained, there was no need to recommend further control measures on grounds of food safety".</p>

	<p>It is clear that he understood, at the time, the conditions or provisos attached to the advice.</p> <p>115. SEAC members regarded giving advice, in the qualified terms in which it was expressed, to be within their role and expertise. The conclusion was, essentially, negative.</p> <p>116. The advice given by SEAC left it open to those considering the advice, who knew the composition and expertise of the Committee, to seek other advice.</p> <p>117. Within MAFF there was a specialist meat hygiene section responsible for the oversight of slaughterhouse standards. MAFF appointed practising veterinarians as OVS who were, or should have been, regularly visiting slaughterhouses and had the opportunity to view abattoir practices in the course of their ordinary work at first-hand. The opportunity to acquire information at first-hand available to MAFF employees was known to members of SEAC, particularly Dr Watson, who had been a MAFF employee and Mr Pepper, who was a practising field veterinarian.'</p>
102C	<p>[Insert new para 102C:] During the oral evidence of SEAC the following exchange took place [Insert new footnote 93C: T109 pp99-100]:</p> <p>'LORD PHILLIPS: ... We are rather more interested in the principle, but your conclusion was that it is possible to remove the spinal cord. You were not saying, "We are satisfied that throughout the country what is possible is being done properly and satisfactorily".</p> <p>DR TYRRELL: Exactly.</p> <p>MR MATOVU: If you had been made aware that there was considerable anxiety about standards in slaughterhouses, would that have coloured the advice that you gave?</p> <p>DR TYRRELL: I think it would be bound to. It has been quite interesting and informative to me to read the Inquiry documents which show that at the very time all this was going on, there was also concern in Whitehall about the pressure they were under from the European Community to raise standards, and I have mentioned that, again on this one visit to a particular abattoir, which we thought was a very good one, we were told that they were at times pressurised by the supermarkets to improve the standards of some of the things they did, and that the bacteriological contamination levels that they were using were perhaps tenfold higher than those in some other countries; I think they mentioned New Zealand. But those were just little hints, we did not pick them up, that there were serious concerns about the way that abattoirs were run.'</p>
102D	<p>[Insert new para 102D:] During the oral evidence of SEAC the following exchange took place [Insert new footnote 93D: T109 pp102-105]:</p> <p>'MRS BRIDGEMAN: ... Can you remember -- I recognise that, as you said, you have not looked at this detail -- whether you had any kind of briefing before you went to this slaughterhouse about what was the state of the slaughtering industry, what were the most difficult aspects of it and so on? Did you just go absolutely cold or did you have a briefing from the Ministry?</p> <p>DR TYRRELL: We had had these papers asking us questions which had revealed to us how much was going on or was being proposed that we did not know about, but I do not think we had -- it was a fairly well structured visit. When we got there, we were taken through the whole process and told how it was all done, how the animals were brought in and stunned or whatever it was, but no, there was not a formal presentation of slaughterhouse practice, I think.</p> <p>MRS BRIDGEMAN: I can understand you would be shown the logical processes as they were gone through, but I think from what you are saying, you were expected as a committee to extract from this paper what were the things you might particularly want to look at because they would be bothersome. Perhaps I am asking, did you feel sufficiently equipped, or would you have expected more on moving into an area which was not very familiar, frankly, to most of the members of the committee?</p> <p>DR TYRRELL: That paper covered such a range of things, there was no way we could have seen it all in one abattoir, because one abattoir would tend to use one type of process. I think David would probably be -- he went to a different abattoir, but I think he knows about</p>

	<p>enough of them to say that they tended to have different practices and they stayed with them. So without going to a lot of different abattoirs, we would not have been able to cover the full range of things on which we were being questioned. We had, as was said earlier, to look at the thing on the basis of broad principles and get a bit of a feel of it by going to one or two particular abattoirs.</p> <p>PROFESSOR FERGUSON-SMITH: Would you see the process of mechanically recovered meat, for example?</p> <p>DR TYRRELL: We saw machines pounding away, yes.</p> <p>LORD PHILLIPS: That is a specific area that you were asked to advise on, one of great interest to us.</p> <p>DR TYRRELL: We did see that.</p> <p>LORD PHILLIPS: Could we perhaps just explore that a little?</p> <p>MR MATOVU: Yes. This is referred to also in the document we were looking at at SEAC 6/1, the process of production of mechanically recovered meat. Was this something you were familiar with, Mr Pepper?</p> <p>MR PEPPER: No, it was not part of my inquiry or visits to slaughterhouses to look at that sort of thing. I was going there with a clinical viewpoint, not with a commercial hat on, looking at what they did with the bits; not at all.'</p>
102E	<p>[Insert new para 102E:] During the oral evidence of SEAC the following exchange took place [Insert new footnote 93E: T109 pp106-108]:</p> <p>'MR MATOVU: ... I wonder whether you can recall, Mr Pepper or Dr Tyrrell, what consideration SEAC gave to MRM at that meeting?</p> <p>MR PEPPER: My answer is no, I do not remember.</p> <p>MR MATOVU: Dr Tyrrell?</p> <p>DR TYRRELL: I do not think it was much anyhow. Maybe that is why it is not mentioned in the minutes. I seem to remember that MRM – we could check this later -- was a matter which returned on later meetings. As we have mentioned before, sometimes the meetings were very busy, and if it was something we did not feel like giving an instant answer on, it may have been left over for another meeting; perhaps even forgotten, I do not know.</p> <p>LORD PHILLIPS: It came back, I think, in 1994.</p> <p>MR MATOVU: Were you aware, either of you, in 1990 that various senior officials and Ministers in MAFF had expressed considerable concern about the process of MRM; were you aware of that? The Parliamentary Secretary, Mr Curry, had visited an MRM plant and he had been very worried by what he saw. Had anybody told you that?</p> <p>DR TYRRELL: No, I do not think so, no.</p> <p>MR MATOVU: Mr Meldrum, we have seen documents where he is shown as expressing anxiety about the MRM process, production process, in relation to BSE.</p> <p>DR TYRRELL: In relation to BSE, yes.</p> <p>MR MATOVU: Was that something you were aware of?</p> <p>DR TYRRELL: I do not think so, no.</p> <p>MR MATOVU: Do you think it ought to have been mentioned to you that the CVO had anxieties about MRM?</p> <p>DR TYRRELL: I should think so.</p> <p>MR PEPPER: Could you repeat that?</p> <p>MR MATOVU: I was asking whether you believed that it should have been mentioned to you that the CVO had anxieties about the MRM production process.</p> <p>MR PEPPER: It would seem fundamental, but not inevitable, because that is to do with policy, not to do with science.</p> <p>MR MATOVU: Although he has obvious scientific qualifications which --</p> <p>MR PEPPER: It is a reasonable thing to tell anybody.'</p>
102F	<p>[Insert new para 102F:] During the oral evidence of SEAC the following exchange took place [Insert new footnote 93F: T109 pp109-111]:</p> <p>'DR TYRRELL: Chairman, trying to guess really what happened -- I will call it "recall" -- we had at about that time this visit to an abattoir where we saw the technique applied satisfactorily. Sir John has mentioned, we were told that the regulations were being applied and I suspect that what happened was that we reckoned that there was not really a problem</p>

	<p>with MRM if the vertebral column was being cleanly cut and dissected. So that was really in a sense -- the MRM was in a sense covered by our comment that if the regulations were satisfactorily carried out, and they were properly monitored, then there was not a problem.</p> <p>LORD PHILLIPS: That was your proviso; it was not up to you to decide whether that proviso was satisfied or not.</p> <p>DR TYRRELL: No. It could be advisable, but was it done; that was the question which was not for us. Sir John and I were both there at the time when we suddenly had the jolt of realising that when the local health authorities' overworked inspectors were replaced by the Meat Hygiene Service, suddenly all sorts of facts about the failures were brought to our attention. It had slipped through the net prior to that.</p> <p>MR MATOVU: Going back to 1990, if you had been -- Mr Pepper says that it was fundamental that SEAC should be told the CVO had concerns. If that information had been given to SEAC, can you say what advice might have come from SEAC, or what different consideration might have been given to MRM as a result?</p> <p>...</p> <p>DR TYRRELL: My thought would be that if the CVO had actually come with a complaint -- not a theoretical one, but one where he could say, "I have observed the process and in the abattoir I went to, I could see that the CNS was not being adequately removed", if we had any sort of well documented statement of that sort, we would have probably much earlier said, "This requires further investigation". I mean, as it was, people like David Pepper could say -- and he did, good for him -- from time to time, "The abattoirs are not as good as the one you saw", and we said, "Yes, but David, we have had reports that there is a meat inspection service which says they are all right, you have just been unlucky". He was unlucky in what we said about him rather than anything else.'</p>
102G	<p>[Insert new para 102G:] In a statement to the Inquiry Sir Derek Andrews said [Insert new footnote 93G: S Andrews Sir D 2 (281A) paras 200-201]:</p> <p>'201 I was aware of the reservations that some people held about MRM. The advice to Ministers was based on careful assessment of risk by officials in MAFF and in DoH, in consultation with independent experts outside the two departments. I had no reason to question the advice that was given at the time.</p> <p>202. Any action by Government to ban or otherwise restrict the production of MRM in 1990 would have had to be justified and proportionate. I was not aware, during my period as Permanent Secretary, that there was a scientific justification for further measures that would have prohibited or restricted the production and sale of MRM.'</p>
102H	<p>[Insert new para 102H:] In a statement to the Inquiry Mrs Attridge said [insert new footnote 93H: S Attridge 5 (78D) para 33]:</p> <p>'33. ...From this it would be reasonable to conclude that the MRM process, in itself, was not inherently more of a risk than other processes, nor was use of the vertebral column, and the essential element was the enforcement of the SBO ban, in particular the removal of the spinal cord which has been dealt with in my earlier statement.</p> <p>34. In summary, I have already dealt with enforcement of the SBO ban in my Supplementary Statement paragraphs 50 to 54 [WS 78B]. There was no reason to consider that the regulations were not being effectively enforced. The need for guidance on certain slaughterhouse practices was recognised following discussion with the IEHO and others and Ministers decided in May 1990 to refer these to the Tyrrell Committee. With regard to MRM I understand this had been considered before I joined the Animal Health Group in relation to the SBO ban in 1989 [L2 tab 3B] and a decision taken in the light of that consideration not to include it in the SBO ban. This decision was revisited in June 1990 by the CVO when considering various issues that could be raised in the European Community forum and also in June 1990 the Minister, in response to a minute from me [YB90/6.11/1.1] suggesting further information was needed on the process as it related to bovines decided that a detailed assessment needed to be undertaken and that no immediate controls should be imposed. The matter was referred to SEAC in the paper SEAC 6/1 and SEAC considered that the spinal cord could be extracted satisfactorily</p>

	and provided the rules were properly followed and supervised, there was no need to recommend further measures on the grounds of consumer protection.'
102I	<p>[Insert new para 102I:] In a statement to the Inquiry Mr K Taylor said [insert new footnote 93I: S Taylor K 5 (98D) para 45]:</p> <p>'45. I was aware of the advice given by SEAC following consideration of the matter at the sixth meeting on 1 November 1990 (YB90/11.1/7.1-7.9). Their advice was the same as the opinion which I had already reached on the basis of my practical experience of MRM production during the period 1978 to 1986, even though at the time the subject was of personal interest only and formed no part of my official responsibilities. Because the SEAC advice was the same as the opinion I already held, it did not influence my views. Whether it would have done so if I had held a different opinion before it was given must be conjectural, but I expect that I would have been influenced as I held the scientific expertise of the Committee in high regard.'</p>
102J	<p>[Insert new para 102J:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 93J: S Meldrum 6 (184E) para K 17]:</p> <p>'17. ... I would comment that in addition to the members of SEAC who visited slaughterhouses on 29th October, 1990 both Dr Watson and Mr Pepper would have some knowledge of slaughterhouse practices, although I do not know the extent to which they would be <i>au fait</i> with MRM production systems.'</p>
102K	<p>[Insert new para 102K:] In a statement to the Inquiry Mr Meldrum said [Insert new footnote 93K: S Meldrum 6 (184E) paras K18-21]:</p> <p>'18. ...I take the view, which is supported by the facts, that I had no evidence that spinal cord was not being completely removed from the spinal column until July 1995. This is hardly surprising since at that time each and every carcass received an inspection by a local authority inspector before the carcass was stamped. This would include a visual inspection of the spinal canal for abnormalities and at that time the inspector would be able to check that the spinal cord had been removed.</p> <p>19. I was aware of the risk of residual nervous material remaining in the spinal canal once the spinal cord was removed in accordance with the SBO regulations. This had been recognised when MRM had been discussed back in late 1989 and subsequently (for example see paragraphs 1 and 6 above). At the time of the discussions in late 1989 I believed that MAFF had gone as far as was possible on the evidence available at the time in moving away from the initial advice on baby food that was contained in the Southwood Report to the introduction of the SBO regulations. However, by May/June 1990 the situation had moved on, as explained in paragraph 11 above. For that reason, whilst I did not have doubts about the use of MRM derived from bovine carcasses, and more particularly the vertebral column, I was keen to ensure that remnants of spinal cord in the spinal canal were removed in order that any residual risk to man was minimised. It was for this reason that I was so keen to pursue the possibility of the use of suction devices/pumps. Whilst recognising that zero risk was an impossibility, if such a method of removing any residual tissue was viable it was worth pursuing to reduce an already minimal risk even further - the same sort of principle led to the SBO regulations (L2 Tab 3B) being introduced in the first place.</p> <p>20. I believed, and had no reason not to believe, that the vast majority of the spinal cord could be removed from the carcass without undue difficulty. In my oral evidence to the Inquiry, I referred to a video produced by the MHS on the removal of SBO's, including the spinal cord. I went on to say the following: "Those that say it is a difficult operation to remove the spinal cord, I do not think that to be true. It is time consuming and needs to be done with great care. It is not difficult to ensure that all the spinal cord is removed" (T68, Vol. T7, Tab 8, page 33). The failure of slaughterhouses to comply with, and Local Authorities to enforce, the SBO regulations such that spinal cord was not removed properly and fragments were left in the spinal canal, was not something which had been</p>

	<p>made known to me at the time SEAC were considering MRM in 1990. It was not until 1995 that these worrying failures were brought to my attention (see my previous statement; WS 184A, section F). Although I was aware of many slaughterhouse practices I would not claim to be an expert in the splitting of the bovine carcass nor the removal of the spinal cord. I relied on colleagues in the Veterinary Meat Hygiene Section and in the Veterinary Field Service who frequently visited slaughterhouses and were expert in this area for advice. If they had concerns on the removal of the spinal cord or the safety of MRM I would have expected these concerns to be brought to my attention.</p> <p>21. As explained in paragraphs 18 and 19 above, my concerns at the time related to risks related to the use in food for human consumption of MRM derived from bovine carcasses as a result of fragments of spinal cord inadvertently remaining in the spinal canal and contamination from carcass splitting. All the background information available at the time which was pertinent to an assessment of these risks and which had been put together as a result of extensive consultation within MAFF had been provided to SEAC in SEAC 6/1, the paper on slaughterhouse practices (see paragraph 16 above). SEAC had been asked to consider "on the basis of the available evidence whether any action or guidance is required in relation to slaughterhouse practices, and whether any new R&D was needed, and if so, with what priority". Having received the information in SEAC 6/1, coupled with the visit of several members of SEAC to slaughterhouses, the Committee had concluded that there was no need to recommend further measures on the grounds of consumer protection. This allayed my concerns to the extent that it indicated that SEAC were not unduly worried about any risks raised in SEAC 6/1, in particular those risks arising from the fact that "inevitably when bovine carcasses are split through the centre of the vertebral column in the slaughterhouse some nervous tissue can remain and some contamination of the vertebrae with central nervous system (CNS) tissue can occur" (SEAC 6/1, paragraphs 23 to 24). SEAC made the important caveat that they were content provided that all the rules were properly followed and supervised. I had no reason to believe that this was not the case. ...'</p>
102L	<p>[Insert new para 102L:] In a statement to the Inquiry Mrs Brown said [Insert new footnote 93L: S Brown K 3 (79B) paras 14-16]:</p> <p>14. 'I had responsibility for advising Ministers directly, in consultation with Meat Hygiene Veterinary Section, on hygiene aspects of MRM production. I would also have regarded it as my responsibility to draw the attention of colleagues in Animal Health Division and the CVO to any specific concerns over MRM in relation to BSE, if such concerns were raised with me or came to my attention for any reason. In practice no such concerns were raised, to the best of my recollection. In the absence of any external factors which might cause doubt about the policies which we were operating, I did not see it as my role to second-guess the scientific advice of SEAC or the technical advice of my veterinary colleagues who were much more expert than I was on the practicalities of slaughterhouse operations.</p> <p>15. I was aware that a great deal of detailed consideration had been given to the safety of MRM in the period before I joined Meat Hygiene Division in September 1990 (SEAC Vol 6 Tab 1). I saw the paper which went to SEAC in November 1990 and was aware of their conclusion that there was no need to recommend further measures on the grounds of consumer protection. That paper had outlined possible risks in relation to MRM production and members of the Committee had visited a slaughterhouse to observe the removal of SBOs. I believed that SEAC had considered the issues properly and that their conclusion was proportionate to the risk associated with MRM. I took this view because:</p> <ul style="list-style-type: none"> • the generally accepted scientific advice was that the risk to human health from BSE was remote and theoretical • the requirements of the Bovine Offal (Prohibition) Regulations were a precautionary measure

	<ul style="list-style-type: none"> the initial concerns about the practicality of removal of the spinal cord had disappeared and the monitoring reports produced by MHVS together with my contacts with local authority enforcement officers and the meat industry gave me no reason to think that there were significant difficulties over compliance with the legal requirements consumer concern about MRM (on grounds other than BSE) was relatively high and I believed that for that reason local authorities were likely to supervise its production more carefully than they supervised other aspects of slaughterhouse operations. <p>16. I did not therefore consider that there was any need for me to raise concerns over the acceptability of MRM derived from bovine carcasses. The picture changed, of course, in 1995 when the results of the attack rate experiments showed that the infective dose was much lower than anticipated.'</p>
102M	<p>[Insert new para 102M:] In a statement to the Inquiry Mr Capstick said [Insert new footnote 93M: S Capstick 5 (102D) para 28-29]:</p> <p>'28. The Animal Health Division (from November 1989) and SVS (from 1990) were both within the Food Safety Directorate, and therefore aspects of MRM were within my command. I had, however, no technical knowledge or expertise on MRM, and thus relied heavily on advice proffered by Southwood and SEAC, and also SVS staff. I was technically in no position to second guess those who possessed anatomical knowledge and/or who had acquired expert knowledge of the process. In fact, in spite of many visits to slaughterhouses and meat plants that I made, the MRM process had unfortunately never been operating when I was present.</p> <p>29. After much consideration during 1990 including that by SEAC a decision was made by Ministers not to proscribe MRM derived from the vertebral column. I agreed with that decision at the time on the basis of what SEAC and those with expertise in the system advised. Once Ministers had made a decision, and where this decision was based on the advice of scientific advisors, it was the responsibility of officials in the Food Safety Directorate to carry out this decision. I did not have any doubts that SEAC's advice derived from a thorough look into the matter, and it was appropriate that that advice should inform policy.'</p>
102N	<p>[Insert new para 102N:] During the oral evidence of Mrs Attridge the following exchange took place concerning the proviso in SEAC's advice [Insert new footnote 93N: T117p70-73]:</p> <p>'MR MATOVU: ... how important did you believe the proviso in SEAC's advice to be? The proviso that all the rules should be properly followed and supervised?</p> <p>MRS ATTRIDGE: That was obviously a sensible proviso, because given, as I have already indicated, the need to ensure that the SBO ban was working well and various other things were working well, I would have thought that that was a sensible proviso for them to add. As I say, there were arrangements put in hand to check what was the position at slaughterhouses. And the reports indicated that problems were being dealt with as and when they arose.</p> <p>MR MATOVU: The reports did not come in -- the first summary did not come in until I think April 1991?</p> <p>MRS ATTRIDGE: That was in the format -- prior to that it had been a more informal report back. Particular problems that had been identified with particular local authorities were I think addressed on the direct person to person basis. But the formal reports came in in the spring. But it was not that there were no reports coming in prior to that, it was just the formal reports with the sort of checklist came in in the spring.</p> <p>MR MATOVU: What confidence did you have that those reports would be painting a true and accurate picture of what was happening in slaughterhouses in relation to the removal of spinal cord?</p> <p>MRS ATTRIDGE: Every confidence. I mean our own veterinary staff were very anxious to ensure that the regulations were met. This was not, as it were, a local authority inspection of local authority staff; it was the Meat Hygiene and the vets, Central Government checking. So</p>

	<p>I had every confidence in those reports.</p> <p>MR MATOVU: It was originally just a one off visit, random visits to slaughterhouses which the SVS was asked to carry out. It is not clear that they were unannounced visits, where they suddenly turned up to take out spot checks?</p> <p>MRS ATTRIDGE: I already told you they have no powers of entry. You cannot make spot checks if you have no powers of entry. You will have the door shut in your face, and what do you do?</p> <p>MR MATOVU: That was my point?</p> <p>MRS ATTRIDGE: That may be your point, but that was the law.</p> <p>MR MATOVU: So did that cause some concern as to whether the true picture was being portrayed?</p> <p>MRS ATTRIDGE: No, I do not think it would have done, I think for two reasons. This is really very much a matter on which Mr Meldrum is very much better to go into the details. I would make that caveat, because the whole question of veterinary certification is a very important point in relation to veterinary ethics. You can have your veterinary certificate taken away from you if you mis-certify. It is a matter of concern to vets that they do not mis-certify things. In relation to the export slaughterhouses where there were what are known as Official Veterinary Surgeons in operation, those we had much better direct contact with. And they would have an interest -- I mean they were people who were part of large veterinary practices in the country; and quite apart from the need to make sure they certified things correctly, they also would have had a very lively interest in ensuring that there was no potentially diseased material getting back to animals. I mean, the whole of the veterinary profession in this country is sensitised to animal disease recycling through animal products. I therefore think it would be most unlikely that we would not have picked up areas which were clearly showing that the regulations were not working, in 1990/1991, because I think the inspections we had and feedback that we had would have identified those. But again this is a matter which I really do think would be more appropriate to pursue with my veterinary colleagues.'</p>
102O	<p>[Insert new para 102O:] During the oral evidence of Mrs Attridge the following exchange took place [Insert new footnote 93O: T117 pp75-78]:</p> <p>'MR MATOVU: At the time you were aware, at any rate, of the view that inevitably spinal cord material would be left on carcasses and meat intended for human consumption?</p> <p>MRS ATTRIDGE: I am sorry, that I think is a rather misleading question. I was aware of the discussions which we had with -- I think it was -- no, it would be the renderers. I cannot remember the particular trade organisation, at which they said they could not guarantee 100 per cent removal. I think in that aspect, it was the meeting with Mr Maclean, referred to in paragraph 24 of my supplementary statement 78D. If that is what you are referring to, if there is something else you are actually referring me to, fine. That simply indicated that a guarantee of 100 per cent of all specified offal was not a guarantee they could give. That seemed to me an honest way of looking at it, because, as the SVO responded, zero risk is an impossibility.</p> <p>MR MATOVU: I was referring to the paper that went to SEAC.</p> <p>MRS ATTRIDGE: The final paper that went to SEAC?</p> <p>MR MATOVU: Yes, or even the draft.</p> <p>MRS ATTRIDGE: I did not see the -- I do not know to what extent the final paper that went to SEAC indicates this, again, this point whether it is 100 per cent or not. I think it probably would have brought out the problems, I think it did bring out the problems in the draft that I saw. So SEAC did have the information in front of them.</p> <p>LORD PHILLIPS: I think you ought perhaps just to remind Mrs Attridge and us of the precise language used in that draft.</p> <p>MR MATOVU: Thank you Chairman. Maybe we should look at that paper. The bundle in question is SEAC 6, which is a slim bundle.</p> <p>MR DAVIS-WHITE: Could I intervene here? I think this is a paper Mrs Attridge has not seen recently. The paper she has seen is an earlier draft which is within the FAD. I put that caveat on what she is now being asked to look at.</p> <p>MR MATOVU: Maybe we should look at the earlier draft. Since we have SEAC 6, let us look at that if we may. I would like to refer you, Mrs Attridge, to paragraph 23. Perhaps you could read that through to yourself?</p>

	<p>MRS ATTRIDGE: Hmm (Pause). Yes, paragraph 23 I have read.</p> <p>MR MATOVU: Is that something of which you were aware before SEAC gave its advice in November 1990?</p> <p>MRS ATTRIDGE: Yes, because that was part of the inability to guarantee the 100 per cent removal. But I mean I do want to make the point undoubtedly made ad nauseum by other witnesses that these animals were ones which were clinically healthy. I mean this is a question of what point in terms of zero you wish to settle on. But that does tie in with the statement which was made by the meat industry that they could not guarantee 100 per cent.</p> <p>MR MATOVU: And so bearing that in mind my final question is, again, what view did you take of SEAC's proviso in its advice that the rules should be properly followed and supervised?</p> <p>MRS ATTRIDGE: I am sorry, we have already dealt with this, I think. I do not think I can add anything further other than to say that vertebrae were not banned. There were other ways of recovering meat than through mechanically recovering it. And if there was a worry about these other bits and pieces being still in the vertebrae, it extended much wider than mechanically recovered meat. The question which SEAC was looking at is: Is there something inherent in the production of mechanically recovered meat that makes it inherently more difficult or more dangerous or more potentially likely to have something in it which should not be there? I mean that was the question which they were asked to look at.</p> <p>MR MATOVU: They were asked to look at slaughterhouse practices generally as well?</p> <p>MRS ATTRIDGE: Yes, but on the MRM it was the question as to whether or not the MRM process was one which raised what I suppose one would term unacceptable risks. And they did not -- what they said was provided that the slaughterhouse processes, the practices in slaughterhouses, are carried out correctly, the MRM process of itself did not appear to be inherently more dangerous than other ways. That is certainly what I would have taken out of that.</p> <p>MR MATOVU: So by rules, you understood slaughterhouse practices?</p> <p>MRS ATTRIDGE: Yes. Sorry, when are you referring to rules, in which context?</p> <p>MR MATOVU: SEAC's advice, provided the rules were properly followed.</p> <p>MRS ATTRIDGE: That is shorthand for saying practices.'</p>
102P	<p>[Insert new para 102P:] During the oral evidence of Mr Capstick the following exchange took place [Insert new footnote 93P: T119p56-59]:</p> <p>'LORD PHILLIPS: ... If the question is: is the process of removing the spinal cord one that is being done effectively throughout the industry, it would seem to us that SEAC are not the right people to form a conclusion on that.</p> <p>MR CAPSTICK: Well, they in fact I think ducked that question by saying: "Provided the rules are applied"; in other words, they were not going to say, "Yes, we have judged the rules are always applied". I think that was the responsibility of the meat inspectors and ourselves who sometimes had powers of entry, sometimes did not have powers of entry into slaughterhouses to see that there were satisfactory arrangements. I think all you can do, Chairman, is to ensure that there are satisfactory procedures and supervision of the people in the plant who are inspecting.</p> <p>LORD PHILLIPS: They made that proviso. Who should have become aware of it and who should have asked the question: are we happy that we can satisfy it?</p> <p>MR CAPSTICK: Well, the question came from SEAC, or the Recommendation came from SEAC, with the proviso that went to the Meat Inspection Service and Enforcement Service and local authorities. Now, I cannot honestly say whether this particular proviso was transmitted saying, "Hey, we have another statement from SEAC and here is a wakeup call to you all to devote more time to the inspection of the removal of spinal cords from carcasses".</p> <p>LORD PHILLIPS: Is it something with which you personally were concerned?</p> <p>MR CAPSTICK: I doubt it. I do not think I was. I am afraid not. No, I am afraid not.</p> <p>MR MATOVU: So whose job would it have been, again, to ensure that the meat inspectors and other local authority officers were aware that there was a wakeup call that had been indicated by SEAC?</p> <p>MR CAPSTICK: Well, first of all, themselves. Themselves; the Environmental Health Officers. He is in charge, he is --</p> <p>MR MATOVU: With respect, sir, they would not know SEAC's advice unless they were</p>

	<p>told.</p> <p>MR CAPSTICK: Well, it would be published. It would be published. I am not aware -- I have not seen a press notice relating to this specific issue, but I would be surprised if it was not published or made widely known.</p> <p>MR MATOVU: If it was not published, who in MAFF would make it widely known to these Environmental Health Officers and others? Whose job would it be?</p> <p>MR CAPSTICK: Department of Health.</p> <p>MR MATOVU: And local authority meat inspectors?</p> <p>MR CAPSTICK: Yes. Well, yes -- yes, local authority. We are talking here about a human health issue.</p> <p>MR MATOVU: Yes.</p> <p>MR CAPSTICK: Potentially. So it would be for the Department of Health, who had responsibility for food hygiene, to tackle that issue. They also had a much closer relationship with Environmental Health Officers than we did in MAFF. We tended to have a very close relationship with Trading Standards Officers from a food contamination side, labelling, et cetera, et cetera, whereas they were more involved in food hygiene which was the responsibility of Environmental Health Officers. So they would, I think, have the primary responsibility for tackling that problem.</p> <p>LORD PHILLIPS: We have had evidence that, as a matter of practicalities, the Department of Health would leave it to MAFF to overview, if you like, what was happening in the slaughterhouses.</p> <p>MR CAPSTICK: Yes, we had pretty serious responsibilities for meat hygiene, but when it comes to communications on SEAC business to the local authorities and therefore the Environmental Health Officers, I would have thought the Department of Health had a role. I do not think they could just abdicate the responsibilities there.</p> <p>MR MATOVU: Did MAFF also have a role?</p> <p>MR CAPSTICK: I think we did. Not so much as inspectors but as supervisors, if you like. It is difficult to find words, but as supervisors, if you like, of the whole meat hygiene area. But here we are not so much talking about in a sense meat hygiene. We are going beyond the meat hygiene, we are going into the production of a different type of product; of mechanically recovered meat, in another plant.'</p>
102Q	<p>[Insert new para 102Q:] During the oral evidence of Mr Capstick the following exchange took place [Insert new footnote 93Q: T119p59-62]:</p> <p>'MR MATOVU: ... Mr Lowson was the SEAC Secretary at the time. He was also Head of the Animal Health Division which had lead responsibility for BSE. There was also in the Food Safety Directorate the Meat Hygiene Division, which was led by Mrs Brown at that time, and they had experience of slaughterhouses and how things worked in slaughterhouses. Do you think that either of those two Divisions might have had a role to play in ensuring that SEAC's proviso, or the wakeup call implied in SEAC's proviso, was clearly disseminated to those with responsibility for enforcement in slaughterhouses?</p> <p>MR CAPSTICK: Well, I think, yes -- I think it goes a bit further than that. It goes to the meat hygiene inspectors who were headed by Keith Baker and his team, spread out across the country.</p> <p>MR MATOVU: So are you saying there is a third group, a veterinary group?</p> <p>MR CAPSTICK: Yes, that is right, yes. ...</p> <p>...</p> <p>MR MATOVU: ... of the three groups identified, the Animal Health Administrative Division, the Meat Hygiene Administrative Division and the Meat Hygiene Veterinary Section, are you able to help us as to which of those might have had a role to play in ensuring that people in slaughterhouses were made aware of the concern that spinal cord should be removed?</p> <p>MR CAPSTICK: Okay. The Animal Health Division had a role in this area only because Robert Lowson was Secretary to SEAC. The Meat Hygiene Division was responsible for, shall I say, policy on the regulations and the rules in law, the legislation if you like, and the general policy of the area; whereas the meat inspectors out in the field, who had a headquarters team in Tolworth under Keith Baker, had the problem of liaising with local authorities and visiting the export approved slaughterhouses and also the visits to non-export approved slaughterhouses, which I am sure you have been briefed on, Chairman.</p>

	<p>LORD PHILLIPS: Yes.</p> <p>MR CAPSTICK: So in a sense I think that the message should have got through and probably did get through to people like Keith Baker and they would respond by checking this matter when they visited the slaughterhouses, and presumably reminding the inspectors at those slaughterhouses.'</p>
102R	<p>[Insert new para 102R:] During the oral evidence of Mr Kevin Taylor, the following exchange took place [Insert new footnote 93R: T122 pp99-100]:</p> <p>'MR MATOVU: ... You have said that – may I ask you, who on the veterinary side did you believe had responsibility for advising on the risks involved in slaughterhouse practices and the production of mechanically recovered meat as far as BSE was concerned?</p> <p>MR TAYLOR: The first thing is, it is very clearly not my area of responsibility. It is public health and it is downstream from the abattoir. As I tried to make clear in my opening statement, in general the division of responsibility was at the door of the abattoir. That is the first thing. The second thing is that quite clearly we all actually had an input on the veterinary side, even into things which were not our own areas of responsibility, so I do not want to be appearing to just shrug my shoulders and saying, "It had nothing to do with me", but my feeling was that the primary responsibility would clearly rest with the Meat Hygiene Division and the vets in that section who advised meat hygiene. Of course, Mr Meldrum -- you know, the senior officers would be very much involved as well.</p> <p>MR MATOVU: But would the position be in 1990 that, again, Mr Baker or any other veterinary colleagues might approach you for specific advice on BSE-related matters?</p> <p>MR TAYLOR: Of course, yes.</p> <p>MR MATOVU: Even in relation to human health concerns?</p> <p>MR TAYLOR: You cannot make that sort of distinction. What you are asking for is information about BSE and what we knew about BSE.</p> <p>MR MATOVU: Yes.</p> <p>MR TAYLOR: What you use that information for is a different thing, so I do not make that distinction. If anybody asks me for information about what I knew about BSE, I would give them the advice and the information. There is a difference between information and what you use the information for.'</p>
102S	<p>[Insert new para 102S:] During the oral evidence of Mr Meldrum the following exchange took place [Insert new footnote 93S: T123 pp85-87]:</p> <p>'MR WALKER: ... 'SEAC [made] the important caveat that they were content, provided that all the rules were properly followed and supervised.</p> <p>That caveat, if I have understood it correctly, was saying: provided that the operation you, Mr Meldrum, thought was time consuming and needed to be done with great care was done in that way?</p> <p>MR MELDRUM: Yes.</p> <p>MR WALKER: To the extent that it was not, you had not got Any reassurance from SEAC?</p> <p>MR MELDRUM: To the extent that it was not?</p> <p>MR WALKER: Yes.</p> <p>MR MELDRUM: I did not have any evidence at the time that It was not happening.</p> <p>MR WALKER: That seemed to me to be the sub-paragraph (a) In our SEAC 6/1 document, that to some extent it would be happening, small pieces of spinal cord inadvertently remaining in the vertebral column?</p> <p>MR MELDRUM: I said just now I did not have any evidence That it was not. It was perfectly reasonable to put to SEAC this paper in the way it was expressed. If we had Said to them there is 100 per cent compliance at all Times, that was totally misleading. What we were doing was advising SEAC in the way that we were that my advisers in Meat Hygiene Division took the view that you could not provide a 100 per cent guarantee, hence this comment in here about small pieces inadvertently remaining in the vertebral column. I think it goes on, does it not, later on in paragraph 24 of that same document which went to SEAC, about line 9: "It is still not known however if even where the spinal cord is removed cleanly, any risk exists from the remaining nervous tissue in the vertebral column". So we were putting a picture, a situation, a description to SEAC I hope fairly and openly and explaining the situation as we understood it.</p>

	<p>MR WALKER: Yes. That last point, that last sentence in paragraph 24, when SEAC replied: providing the existing rules are followed and supervised, I understand it is giving you comfort about the last sentence of paragraph 24?</p> <p>MR MELDRUM: Yes, I was comforted by the conclusions of SEAC, but bearing in mind a number of other factors that we have not yet come to, which are relevant to my view at the time.</p> <p>MR WALKER: Yes.</p> <p>LORD PHILLIPS: I would like to come in here to try to get Some clarification. You said to SEAC: there will be the occasional small bit of spinal cord left in. SEAC did not come back in terms and say: that does not matter if it is only a small bit. They said: we have seen the operation done and seen it done cleanly, and provided it is done cleanly, we have no worries. Is that a fair summary of the exchange as far as spinal cord is concerned?</p> <p>MR MELDRUM: Yes, absolutely right.'</p>
102T	<p>[Insert new para 102T:] During the oral evidence of Mr Meldrum the following exchange took place [Insert new footnote 92F: T123 pp89-91]:</p> <p>'MR MELDRUM: ... 'Therefore I did believe that there was no evidence that spinal cord was not being properly removed, nor supervised. But having said... I was going to say but of course as you will know from the papers here it did not stop at that, as far as I was concerned, because there was continuing dialogue between myself and Keith Baker on the importance that I attached to equipment to ensure that all pieces of spinal cord were being removed.</p> <p>MR WALKER: The same applies to the other slaughterhouse practices that you were asking SEAC about, concerns about contamination of material from the brain for example. SEAC were not coming back in terms and saying it does not matter if it is only a small bit. Effectively they are saying: provided that the rules are complied with, there is no cause for concern.</p> <p>MR MELDRUM: But by that time surely we had already given advice, and that became legislation, on how head meat should be obtained. That had already been dealt with at earlier meetings of SEAC. That issue was not on the agenda on that occasion. We had already dispensed with that and required that the head meat should be harvested before the brain were to be removed from the skull.</p> <p>MR WALKER: I think it was pithing that was referred to them along with mechanically recovered meat?</p> <p>MR MELDRUM: Yes, there were a number of matters here that were discussed apart from the very important issue of mechanically recovered meat.</p> <p>MR WALKER: SEAC had not addressed concerns that the rules may not be properly followed; was it not desirable, given their caveat, to take further steps to satisfy yourself that time consuming tasks, tasks that required care, were indeed being done with the necessary care and that people were told: you must devote proper time to it?</p> <p>MR MELDRUM: I am having to reconstruct a fair bit as to what was happening at the time, I have to say, because I have looked very carefully at the papers which have been retrieved for me to examine. And yes, there was a thread running through the evidence I have given to the Inquiry and a thread running through my activities in 1990 relating to the importance of hygiene precautions being taken to avoid contamination of food.'</p>
102U	<p>[Insert new para 102U:] In a statement to the Inquiry Mr Lowson said [Insert new footnote 93U: S Lowson (104D) paras 40-44]:</p> <p>'40. The Inquiry has asked what view I took of the proviso in SEAC's advice concerning the need to ensure that the rules were properly followed and supervised. I thought the proviso concerning the need to ensure that the rules are properly followed was clear and logical.</p> <p>41. The Inquiry has asked how I applied this [presumably the proviso in SEAC's advice] to my knowledge of current attitudes and practices in the slaughterhouse industry, and the variability in standards across the industry. My Divisional responsibility did not require me to have detailed knowledge of these issues but see also above.</p> <p>42. The Inquiry has asked whether, on receipt of SEAC's advice subject to the proviso, I</p>

	<p>considered it necessary to check that all the rules were followed and supervised. I did not consider that this action needed to be pursued by me personally, as this was not my Division's responsibility. Clearly it was my responsibility to ensure that SEAC's advice was relayed to those with relevant responsibilities within Government, and this I did.</p> <p>43. The Inquiry has asked whether I believed SEAC to be qualified to advise definitively on slaughterhouse practices and the MRM production process. I would not have regarded it as SEAC's role to advise definitively on all aspects of these matters. Nor I suspect would they.</p> <p>44. I confirm that the concerns that SEAC were asked to consider went wider than MRM, and I ensured that the paper offered to SEAC, and the format of the visit which SEAC members made to slaughterhouses, covered these other aspects.'</p>
102V	<p>[Insert new para 102V:] During the oral evidence of Mr Lowson the following exchange took place [Insert new footnote 93V: T127 pp72-75]:</p> <p>'MR MATOVU: Yes. I wonder if you could just briefly tell the Committee about what you remember of the slaughterhouse visit. Professor Barlow has told us that he visited what he described as a good abattoir where the staff had been appraised of the visit.</p> <p>MR LOWSON: I think that is quite clear, yes.</p> <p>MR MATOVU: And that there was a discussion over lunch afterwards; do you recall that?</p> <p>MR LOWSON: It is worth pointing out first, I think, that the purpose of this visit was not to look at the way the average abattoir operated in practice. The purpose of the visit was to familiarise members of the group with the physical realities of the process. Nobody would have supposed that people would work normally with a group of government inspectors standing beside them, watching what they were doing, and nobody was under any illusion that that was what was happening. My impression of this being a high quality abattoir, that was certainly borne out. I think that one had export approval, which was a minority of the abattoirs at that stage. The committee divided into at least two groups on their visit that I participated in. The group that I went around the abattoir with saw the range of processes on the line, the handling of the specified offal and the preparation of mechanically recovered meat. It appears from Professor Barlow's letter that the group that he was in did not see that last element.</p> <p>MR MATOVU: So it was really a textbook presentation?</p> <p>MR LOWSON: Yes, yes, nobody was suggesting that this was what you would expect to see in any abattoir on any day of the week.</p> <p>MR MATOVU: Yes. So you did not attend the abattoir which Professor Barlow attended?</p> <p>MR LOWSON: I think I did not. I suppose this because the group that I was with did see mechanically recovered meat and Professor Barlow said he did not see it.</p> <p>MR MATOVU: Professor Barlow has also told us that his concerns involved the risk of cross-contamination, and he said that he was particularly concerned about the preparation of sides of beef?</p> <p>MR LOWSON: Yes.</p> <p>MR MATOVU: And the possibility that spinal cord might be smeared on to the saw and not removed, and another of his concerns was operator safety?</p> <p>MR LOWSON: Yes.</p> <p>MR MATOVU: Were these sorts of issues, do you recall, discussed by members of SEAC after the slaughterhouse visit?</p> <p>MR LOWSON: I do not remember the detail either over the lunch immediately afterwards or in the following SEAC meeting. But the question of operator safety was touched upon in the conclusions that the committee drew, they said operator safety is a matter for HSE.</p> <p>MR MATOVU: Indeed.</p> <p>MR LOWSON: As far as cutting methods were concerned, I think most of the members of the committee were constrained by their acceptance that they were not experts on slaughterhouse machinery, so there was a limit to how much they could usefully say about this. But whatever the discussion, the conclusion that they reached did not suggest that there would inevitably be a level of contamination such as to justify additional measures to protect public health, because they concluded overall that if the rules were followed, there would not be a need to take any further measures to protect the public.'</p>

102W	<p>[Insert new para 102W:] In a statement to the Inquiry Mrs Brown said [Insert new footnote 93W: S Brown K 4 (79C) paras 10, 11, 13 and 14]:</p> <p>‘10. I considered that the proviso in SEAC’s advice concerning the need to ensure that the rules were properly followed and supervised was an endorsement of the 1989 Regulations. The paper which SEAC considered had made it plain that in practice there was a risk that some contamination with fragments of spinal cord or nervous tissue could occur. I believed that if SEAC considered that these risks (which related both to MRM and to slaughterhouse practices affecting the production of carcase meat) were unacceptable, they would have phrased this conclusion in stronger terms, stressing the need to ensure 100% avoidance of this type of contamination.</p> <p>11. As explained in paragraph 6 above, I was not aware of significant deficiencies in compliance with the SBO Regulation by the slaughtering sector or of failures by the local authorities to enforce these Regulations (as opposed to the Slaughterhouse (Hygiene) Regulations) effectively.</p> <p>...</p> <p>13. As the Committee is aware, primary responsibility for monitoring local authority enforcement of the SBO ban lay with Meat Hygiene Veterinary Section. On receipt of SEAC’s advice subject to the proviso concerning the need to ensure that the rules were properly followed and supervised, Mr Baker sent a telex to Divisional Veterinary Officers on 12 November 1990, asking for visits to be made to slaughterhouses to check on the handling of specified offals and for a return to be made to Mr Hutchins by 17 December 1990. I cannot now recall whether I was involved in discussion of this instruction before it was issued but I would certainly have been aware of it. This was an entirely appropriate response to SEAC’s advice.</p> <p>14. The Committee has asked whether I believed SEAC to be qualified to advise definitively on slaughterhouse practices and the MRM production process. I was not involved in the appointment of members to SEAC, or in deciding which issues should be referred to it for advice. I was however aware that SEAC comprised a wide range of expertise, including at least one member with first hand experience of slaughterhouse operations, and that arrangements had been made for a number of its members to make a slaughterhouse visit. SEAC could also call on technical advice from Ministry officials or elsewhere if it felt it necessary. If SEAC itself, MAFF or the Department of Health had had any doubts about whether SEAC was qualified to advise on any issue put to the Committee, I would have expected these doubts to be raised and dealt with before the advice was given.’</p>
102X	<p>[Insert new para 102X:] During the oral evidence of Mr Brown, the following exchange took place [Insert new footnote 93X: T129 pp15-16]:</p> <p>‘MR MATOVU: My question is: were you aware in November 1990 that SEAC had expressed a view that spinal cord was just as likely to carry infection as brain material, and that for that reason it made sense to avoid contamination of meat fit for human consumption with spinal cord as well as with brain?</p> <p>MRS BROWN: I am not sure whether I was aware of it in precisely those terms. I was aware, in general, that SEAC considered that this was an area that needed to be considered carefully; and that that was the background to the paper which was being prepared for the November meeting.</p> <p>MR MATOVU: SEAC have told us that they thought that the SBO ban was an important measure for the protection of public health. Were you aware of that view by November 1990?</p> <p>MRS BROWN: Yes, I think I was.’</p>
102Y	<p>[Insert new para 102Y:] During the oral evidence of Mrs Brown the following exchange took place [Insert new footnote 93Y: T129 p25-27]:</p> <p>‘MR MATOVU: ... ‘Read it to yourself, but that does not, as I see it, mention the fact that members of SEAC have formed this view, that spinal cord could be extracted without difficulty.</p>

	<p>MRS BROWN: Yes. Certainly the document that I saw was the one which Robert Lowson sent to Mr Maclean's office.</p> <p>MR MATOVU: Yes.</p> <p>MRS BROWN: I cannot now recall whether I knew that this particular sentence, that the spinal cord could be extracted from the carcass without difficulty, was contained in the SEAC minutes.</p> <p>MR MATOVU: Whether it was there for you?</p> <p>MRS BROWN: I simply do not know whether I knew that at the time or not. I think the understanding that I can now recollect having is that SEAC had reached the conclusion that no additional measures needed to be taken in order to ensure that the Government's strategy of minimising the risk of exposure was fulfilled.</p> <p>MR MATOVU: If you had been made aware that they were taking this view that spinal cord could be extracted without difficulty, do you think that one could reasonably have expected that to be achieved across the industry?</p> <p>MRS BROWN: I think I was aware that there had been a great deal of discussion about the mechanics of removing spinal cord during the period since the 1989 regulations had come into force, and that initially, you know, there had been a number of people saying: "This is not workable" and I was aware of the general view which my veterinary colleagues and others had reached was that provided a reasonable amount of care was taken, yes it could be done. I think you have had quite a lot of evidence from veterinary colleagues who are obviously better equipped than I am to go into the detail of this, to the effect that actually it is not as difficult as you might think it would be.</p> <p>MR MATOVU: Mr Meldrum said that one needed to take particular care, and that it could be a lengthy job to ensure that that care was taken?</p> <p>MRS BROWN: Yes it needed to be done with proper care, yes; but it was not an impractical measure. It could be done.'</p>
102Z	<p>[Insert new para 102Z:] During the oral evidence of Mrs Brown the following exchange took place [Insert new footnote 93Z: T129 p21-23]:</p> <p>'MR MATOVU: ...First of all do you recall receiving a copy of these minutes?</p> <p>MRS BROWN: I do not think I received a copy of the full minutes. I do not think I ever saw a set of full SEAC minutes while I was at Meat Hygiene Division. What I did receive was a copy of a note from Robert Lowson reporting this particular conclusion. But I do not think I saw the complete minutes.</p> <p>MR MATOVU: Mr Lowson told us last week that he would copy minutes in draft to those of his colleagues he felt would be interested in the matters discussed. Does that make you any more clear as to whether or not you would have received these minutes?</p> <p>MRS BROWN: As I say, I do not think that I received them, but I cannot be absolutely sure at this distance in time. I do not remember ever seeing detailed SEAC minutes. I certainly do remember from time to time seeing bits of paper which recorded their conclusions. Normally I saw it at the stage that advice went to Ministers.</p> <p>MRS BRIDGEMAN: Could I ask a question there? We have been interested in exactly how these SEAC minutes were handled. We are told what mattered was the SEAC conclusions. When you had the conclusions sent to you in whichever way they were disseminated, did you also receive an explanation of the background argument or concerns that lay behind that, or was it simply conveying the bottom line advice?</p> <p>MRS BROWN: Well it was the advice that we needed to know about; and it was the advice that I was normally aware of. As far as this particular meeting is concerned, I think I can remember a discussion with colleagues around the time of the meeting, just, you know, I think I asked someone: how did it go? What came out of it? Because obviously it was a matter of some concern to us. And the answer was, you know: well it was okay, this is what the conclusion is. But I was not very frequently involved, of course, directly with SEAC's advice. Usually the action that flowed from SEAC meetings fell to other parts of the Animal Health or Veterinary Group rather than to Meat Hygiene Division. So there was not usually much occasion for me to know very much about the detail of what had been discussed. I needed to know the conclusions, because I needed to know what the general picture on the BSE story was obviously.'</p>
102AA	<p>[Insert new para 102AA:] During the oral evidence of Mrs Brown the following exchange</p>

	<p>took place [Insert new footnote 93AA: T129 pp 27-32]:</p> <p>'MR MATOVU: I was going to bring you then to the proviso which we see in SEAC's advice, that provided all the rules were properly followed and supervised, there was no need to recommend further measures on the grounds of consumer protection. Mr Lowson told us last week that he understood from that that SEAC were saying it was important that one did one's best to remove the spinal cord. Is that how you saw the proviso?</p> <p>MRS BROWN: Yes, I think so. I think they were saying that by implication they were saying that these 1989 regulations are important, and they do need to be observed; and that reflected, very much, the sort of discussions that my colleagues in Meat Hygiene Division had been having with the Local Authority Associations and the industry during the earlier part of the year, before I came into post.</p> <p>MR MATOVU: So if it could not be said that the SBO regulations were being properly observed and supervised across the industry, how would you have read SEAC's advice in those circumstances?</p> <p>MRS BROWN: I think if we had had evidence to suggest that the regulations were not being properly observed, we would have had to take some sort of new initiative with the industry and the local authorities to reemphasise the importance of making sure that the job was done properly.</p> <p>MR MATOVU: Yes.</p> <p>LORD PHILLIPS: Can I just try to make a summary about this? SEAC were not approached and told: "Standards are so variable in the industry and supervision is so variable that we simply cannot be sure that the removal of SBOs is going to be done properly everywhere, do you think that matters?" They were approached, as I understand it, on my reading of this paper: "The process of removing spinal cord inevitably maybe on occasion will involve a degree of contamination. Can you live with that or do you have to have some new process or stop it?" Their reaction was: "We must look at the process to see what is the nature of this inevitable contamination that may occur, or may occur from time to time". They looked at it. They said: "The process itself does not worry us. Provided it is done properly and properly supervised, we can live with that". Is that a fair summary?</p> <p>MRS BROWN: Yes, I think it is. But I think the paper that went to them made it quite clear that even when the process was done properly and carefully, there was inevitably a risk of some small degree of contamination. We were talking about minimising risk. We were not talking about getting rid of the risk completely. I think it is important to draw a distinction between the enforcement and supervision of the hygiene standards in slaughterhouses and the enforcement and supervision of the SBO controls, because as you have received a lot of evidence on problems relating to hygiene and inspection and veterinary supervision in slaughterhouses, I think it is fair to say that we did not have similar concerns about the way in which local authorities approached the enforcement of the SBO regulations. I think the discussions that we had had, that my colleagues had had in the early part of 1990 with the Local Authority Associations, indicated quite clearly that the local authorities regarded these regulations as a very important part of the mechanism to protect human health; and the reason that there were these obviously at times quite difficult discussions with the Institute of Environmental Health and so on were because they were concerned about the practicalities of enforcement, and were keen to see that the protection worked properly.</p> <p>LORD PHILLIPS: This is where, speaking for myself, I have some difficulty in the reasoning. It was the same individuals who were doing both jobs, was it not?</p> <p>MRS BROWN: It was the meat inspector who was checking on that, on the removal of the spinal cord in the slaughterhouse. And he was supervised by the Environmental Health Departments.</p> <p>LORD PHILLIPS: Was he not also responsible for general hygiene?</p> <p>MRS BROWN: He was, but actually the way the slaughterhouses were staffed by inspectors meant that actually the inspector had very little time to do anything other than inspect the carcass and make periodic checks on the disposal of waste and so on, which is something that we will no doubt come on to. But they were not staffed to a level which allowed them to spend a great deal of time on general supervision of hygiene standards; and indeed my impression was that in some instances meat inspectors did not really see that as part of their job. They had to do the actual inspection. They had to look at the correct bits of the carcass and incise the lymph nodes and do all the very detailed list of things that meat inspectors have to do, which of course included checking on removal of the spinal cord.</p>
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	<p>What we were really asking them to do in the context of hygiene was to take, if you like, a step back and look across the operation of the premises as a whole and make sure that the management standards were right, and that the whole process was operating correctly. It was a much more complicated sort of requirement. And it was that which was not being very well fulfilled; and also there were the structural requirements where there were problems as well. That is perhaps not relevant to what we are talking about here.</p> <p>LORD PHILLIPS: If the one was lamentable as it seems to have been, how could one be confident that the other was perfect?</p> <p>MRS BROWN: I think because our surveillance was carried out by the meat trained VOs in the field, Veterinary Officers in the field. The same person was going into a slaughterhouse to check on all aspects of the operation of that slaughterhouse. And I have in fact got with me an example copy of the report forms which were used. There are a number of copies here.'</p>
102BB	<p>[Insert new para 102BB:] During the oral evidence of Mrs Brown the following exchange took place [Insert new footnote 93BB: T129 pp 40-41]:</p> <p>'MR MATOVU: Just going back to the SEAC advice, you may have seen that in his evidence, Mr Capstick referred to it colloquially, the proviso was a wake up call. Is that the view you took of the advice?</p> <p>MRS BROWN: No, I do not think it was. I think I took the view that if you like the local authorities were already pretty well awake on this and that this was simply an endorsement of the need to maintain that level of awareness, rather than a requirement to make a step change in the way the enforcement was being carried out.</p> <p>MR MATOVU: If SEAC were effectively saying that there was a need to maintain awareness of the SBO regulations, did you think that that was something that needed to be relayed to slaughterhouse operators and local authorities in the field, to say something to the effect of: well done, I know you are observing these SBO regulations, but you really must make sure you continue to do so; that is the advice we have had from SEAC?</p> <p>MRS BROWN: I think that what was done on this was that Keith Baker sent a telex out to the vets in the field, in which he asked them to remind the local authorities of the importance of enforcing the SBO regulations; and that seemed to me to be the best way of getting this message across, because after all it is and was the local authorities who were the people who were going into every single slaughterhouse on a daily basis and who were therefore in the best place to make sure that the slaughterhouses were complying.'</p>
105A	<p>[Insert new para 105A:] During the oral evidence of Mr Kevin Taylor, the following exchange took place [Insert new footnote 96A: T122 p108-109]:</p> <p>'MR MATOVU: May I summarise your view in this way, and please tell me if I am doing it wrong. When you saw the SEAC advice saying that provided all the rules are properly followed and supervised there is no need to recommend further measures, you were satisfied that all the rules could be properly followed and supervised and were being properly followed and supervised; is that correct?</p> <p>MR TAYLOR: There are several different points you have put to me there.</p> <p>MR MATOVU: Yes.</p> <p>MR TAYLOR: Again, I did not pay very close attention to any of this at this time because it was quite clearly, in my opinion, something that was outside my direct area of responsibility, so I was aware of it. Having read the paper, which I do not think I had any great part in producing, perhaps no part at all, I still think it was a very fair presentation of the problems which were put to SEAC. It also struck me, reading them now with the benefit of hindsight, that they were questions very often which were a lot easier to ask than they were to answer, so I did not particularly envy them. However, within the limitations of what I have said and what I was doing at the time, I was aware of the advice that they had given and really thought no more about it because what they had said was no different than the conclusion that I already held, which I have made clear. So their conclusion was the same as what I thought. At that stage, when you have other things to worry about, you do not really know about it.</p> <p>MR MATOVU: So you agreed with them that one had to have regard to the proviso -- sorry, your view was that one had to have regard to the proviso; is that correct?</p>

	<p>MR TAYLOR: Of course. You know, it is inconceivable that -- if you say that this is a risk tissue, you cannot say that something is safe if it contains the risk tissue. It is so self-evident. You put it in but everybody knows it is true. It does not need discussion or thinking about. If the purpose was to remove the risk tissue, if the risk tissue was still there, clearly you have not achieved your objective. Their view was that if the risk tissue had been removed then this material could still be used for the production of mechanically recovered meat, and at the time I agreed with them.'</p>
105B	<p>[Insert new para 105B:] During the oral evidence of Sir Derek Andrews, the following exchange took place [insert new footnote 96B: T124 pp75-77]:</p> <p>'MR WALKER: ... It did not say, "Contamination with the spinal cord is something that we can live with"?</p> <p>SIR DEREK ANDREWS: No. I think you are now twisting the thing, if I may say so. What it actually did was two things. It said, "It is perfectly technically possible to carry out these procedures in the slaughterhouse", point one. That was something, of course, which Ministers were very concerned to know. We needed to be satisfied that this was something that one could defend as technically feasible, and they put in the proviso -- I cannot remember the words, but "providing it is done properly", or words to that effect.</p> <p>MR WALKER: Mr Lowson sets it out for you.</p> <p>SIR DEREK ANDREWS: I do not know whether these are exactly the words. "So long as the rules are properly observed and proper supervision maintained", I think those were the words. So the second part of the answer was that proviso. At one level, of course, it was a very obvious point to make and I think all of us accepted that we wanted to know whether it could be done technically. It could be done technically, but obviously there is no point in it being capable of being done unless it was being done properly, so that I think was the way I read it at the time.</p> <p>MR WALKER: Thank you. The remaining question is: given that proviso, did it not occur to you that it was rather important that the Ministry should make sure that the rules were properly observed and that adequate supervision was maintained?</p> <p>SIR DEREK ANDREWS: Yes, it was important and of course that is what we were doing. It was part of the responsibilities of the -- let me start at the beginning. First of all, I repeat what you have been told many times: our powers in this area were strictly limited by the legislation. We were not the enforcement authorities, we were dependent on the district councils in this case for carrying out the enforcement role. First of all, we made the laws. In that sense, we had to be satisfied that the laws were sensible and practicable. That, of course, lay behind seeking SEAC's view on the slaughterhouse practices point. Then we had a responsibility for overseeing, to the extent that we were able to under the legislation, what was going on in the industry, whether the functions were being carried out properly by the local authorities. We had very limited powers. We did not have rights of access and secondly, of course, we did not have staff in every slaughterhouse, so our ability to supervise comprehensively what was going on just was not there, but we took these responsibilities seriously and from before this period, from shortly after the SBO regulations came into being, and more generally in relation to slaughterhouse practices, the State Veterinary Service had responsibilities for seeing that things were being carried out sensibly and properly in the industry and for reporting back. I was not involved in any of that. I have, of course, seen the reports because preparing myself for a period before you, I inevitably have read papers I never saw at the time, and those papers seem to me to confirm what my understanding was at the time, that these functions were, in fact, being carried out satisfactorily; not with 100 per cent efficiency, 100 per cent success. I would never have expected that in a complex industry of this sort, but nevertheless all the reports indicate that it was not a subject for concern. I think that is the background from my point of view.'</p>
105C	<p>[Insert new para 105C:] In a statement to the Inquiry Mr Lowson said [Insert new footnote 105BA: S Lowson (96C) paras 38 & 39]:</p> <p>'38. The Inquiry has asked what precisely were my views or concerns regarding the matters raised in the SEAC paper (SEAC 6 Tab 1) and whether (and if so, in what respects) my concerns or views had changed since November 1989. As indicated above, my key concern</p>

	<p>was to ensure that the paper provided to SEAC covered all the relevant issues. Hence I ensured that it was subject to very wide consultation before it was submitted.</p> <p>39.The Inquiry has asked how I interpreted SEAC's advice on 1 November 1990 with reference to my views or concerns (SEAC 6 Tab 1). I did not believe that SEAC's advice of 1 November required interpretation, and if I had I would have asked the Committee to provide it. What was significant was that SEAC confirmed that relevant SBOs (and especially spinal cord) could be removed without causing contamination.'</p>
105D	<p>[Insert new para 105D:] During the oral evidence of Mr Lowson, the following exchange took place concerning advice from SEAC. [insert new footnote 96D: T127 pp75-79]:</p> <p>'MR MATOVU: ... They were not saying a little bit of spinal cord left on the carcass is nothing to worry about; is that how you read their advice?</p> <p>MR LOWSON: They had been advised in a paper that was presented to them that such contamination was unavoidable in some cases.</p> <p>MR MATOVU: Yes.</p> <p>MR LOWSON: I remember that passage going in to the paper. As they said that they did not see any need for further measures to protect public health, my conclusion was that they shared the view -- I cannot remember whether it was expressed in the paper but it was reached in the September 1989 meeting -- they shared the view that total avoidance of contamination was not necessary. But that is not written down in so many words in the minutes of the SEAC meeting or of the advice which they offered.</p> <p>LORD PHILLIPS: Could I just intervene to ask --</p> <p>MR LOWSON: I am sorry, perhaps I could go on and say they did watch the removal of the spinal cord and I think some members of the committee were actually quite surprised how cleanly the spinal cord could in fact be removed. This was I think quite an important factor in the conclusions that they reached.</p> <p>LORD PHILLIPS: I think we have always had concern as to whether this was really a sensible thing to have SEAC looking at at all. I know it was not your decision for us to look at it. One can understand the sense of asking a committee like SEAC to advise whether a degree of contamination or the occasional piece of spinal cord getting through would matter, but to ask them to advise on slaughterhouse practices seems to us a rather strange area for them to be involved with.</p> <p>MR LOWSON: It would certainly have been a strange area to have asked them to be involved with if they were the only people being asked to advise on this issue and the Government would be guided only by what they said, but I think we have to come back to what Mr Davis-White said in the beginning. Let us remember the context in which this activity was being carried out. As Mr Matovu rightly said, there was concern about this issue within MAFF through 1990, and a brisk debate about this issue during 1990. The preparation of the paper that was presented to SEAC itself occasioned a good deal of discussion among the experts within MAFF and the preparation of that paper was commissioned by the Permanent Secretary specifically as a result of his belief that SEAC were not qualified, and they would never claim to be, I do not think, to give definitive advice on this subject without a basis of information from the Department. Some of the papers which we discussed before the break illustrate the discussion that was going on within MAFF about this issue quite separately from asking SEAC to look at it. One would have to ask Mr Gummer why he did it because it was Mr Gummer who announced that he would be asking SEAC to look at the slaughterhouse practices in a debate in the House of Commons.</p> <p>LORD PHILLIPS: I think he announced that they had done, that they were looking at it?</p> <p>MR LOWSON: Yes. But I read that as being a perfectly reasonable step to ask laymen to validate from a layman's point of view the conclusions which his predecessor had reached about the specified offals ban. I think we have to remember too we are not talking about rocket science here. Perhaps the members of the committee did not know about how you design a reciprocating saw to split a carcass, but you can see whether or not it is possible to, for example, remove a spinal cord cleanly from the carcass. So the fact that the members of the committee had not been professional slaughterhouse experts did not invalidate the advice which they might have to offer. And since September of 1990, the membership of the committee had been strengthened by the addition of Professor Barlow and David Pepper, both of whom had more practical experience of this kind of area. So it was not the only</p>

	<p>advice which the Government was seeking on this issue, point one. Point two, I think within their limits it was quite clear that the committee would have had a useful job to do.</p> <p>MRS BRIDGEMAN: When you say that it was not the only advice you were seeking, was anybody else being asked to say how risky was it?</p> <p>MR LOWSON: How risky was?</p> <p>MRS BRIDGEMAN: How risky are slaughterhouse practices, what is happening during the harvesting of these brains and spinal cord?</p> <p>MR LOWSON: Well, there was the whole range of slaughterhouse legislation policed by Local Authorities designed to secure hygienic practices in slaughterhouses.</p> <p>MRS BRIDGEMAN: But perhaps I am not quite making myself clear. I mean scientifically risky, how much risk is attached of this mattering? That is really the point.</p> <p>MR LOWSON: For example, we referred before the break to the meeting of November 1989, and Dr Kimberlin's views about the risk associated with mechanically recovered meat being no greater than the risk associated with other products to which the ban did not apply.</p> <p>MRS BRIDGEMAN: Yes, I was just trying to build up a picture when you said other people were looking in parallel, so the fact that they wrote this in a particular way did not matter?</p> <p>MR LOWSON: The process of discussion through 1989 involved MAFF experts, the involvement as I said before the break of Dr Kimberlin of Department of Health, for example. The conclusions of the 27th September meeting were sent by my colleague Alan Lawrence to Dr Pickles in the Department of Health, so the debate was widened among those whom the Department felt had a contribution to offer on this.</p> <p>PROFESSOR FERGUSON-SMITH: Was there a Mr Johnston involved, or was that later?</p> <p>MR MATOVU: I think that was 1990.</p> <p>MR LOWSON: I think it was 1990, yes.</p> <p>LORD PHILLIPS: I think he was involved as a direct consequence of the Minister saying that SEAC were going to be asked to look at this. The point was then made that they are going to need some expert help.</p> <p>MR LOWSON: That is right. The phasing, as I recall, was that a MAFF expert drew up a paper and Matt Johnston was asked to examine it.</p>
105E	<p>[Insert new para 105E:] The following exchange also took place during the oral evidence of Mr Lowson [insert new footnote 96E: T127 pp83-85]:</p> <p>‘MR MATOVU: ... And we started exploring this. Mr Capstick's view, as he expressed it to us, was that SEAC had ducked the question that was put to them, as he understood it, that they did not say whether or not it was acceptable to have a degree of inevitable contamination.</p> <p>MR LOWSON: Yes.</p> <p>MR MATOVU: Was that your view?</p> <p>MR LOWSON: Not at the time, nor was it Mr Capstick's view as he expressed it at the time. As I said, it was my habit to circulate minutes of SEAC meetings in draft. I have checked and Mr Capstick did receive the draft minutes of this meeting. He did not say, "I believe you should go back and ask that question". I mean, it is true that they did not seek to make an assessment of the effect of daily slaughterhouse practices not supervised by six government officials standing next to them on the level of contamination that was taking place, but then one could not have expected them to do that because their visit to the slaughterhouse and their knowledge of the slaughterhouse practices was limited, so I would not say that they ducked the issue. I think they sensibly realised that it was one that they were not in a position to tackle and that that matter was a matter for the enforcement authorities.</p> <p>LORD PHILLIPS: As I understand it, your reading of their answer was: "Having seen it done, we are satisfied that providing it is done properly and properly supervised, this degree of small pieces getting through the net is not going to be something that one need worry about"; is that it?</p> <p>MR LOWSON: They did not, as I said before, talk about small pieces getting through the net. What they did say was -- the way I interpret it now and interpreted it then was that it would not inevitably be the case that a risk was produced in applying the specified offal ban that required further public protection measures to be taken.</p> <p>MR MATOVU: Did you understand them to be saying that it was important to make sure that you did your best to remove spinal cord?</p> <p>MR LOWSON: Yes, I think that is implied by the conclusions. They did not actually say it</p>

	<p>in so many words, but I think that is a clear indication of what they said.</p> <p>MR MATOVU: Picking up from your more recent answer to my question, bearing that in mind, would you have had a responsibility to take up the message as you understood it and ensure that it got out to the people in the field?</p> <p>MR LOWSON: Not directly from me to the people in the field. If I had believed that this advice required further specific action in addition to simply drawing the advice to the attention of those concerned, I would have taken it so that for example if the committee reaches a conclusion that something should be done which clearly was not being done, I would not just have said to my colleagues, "Here is the committee's advice", I would have said to the relevant colleague, "I now assume that you will pursue this". In this case -- I am sorry, perhaps we could stop there and you can go on to ask me the question I was about to answer.</p> <p>MR MATOVU: You can probably remember the note you circulated of SEAC's advice, YB 90/11.9/3.1. Mr Capstick referred to -- Mr Capstick referred colloquially to what he understood the message from SEAC to be as being a wake-up call.</p> <p>MR LOWSON: Yes.</p> <p>MR MATOVU: Did you think it was that or did you not take such a view?</p> <p>MR LOWSON: No, I believe those responsible were already aware and I think if you look at the measures that were being carried forward in the context of the time, there is a good deal of evidence of that, and this is not intended as a complete list of all the action that might have been taken. For example, the Chief Veterinary Officer asked Mr Baker to check on the enforcement of the regulations in February of 1990, that is YB 90/02.06/6.1. In June of 1990, YB 90/6.21/18.1, there had been a telex sent out from Tolworth calling for checks on slaughterhouse practices that had been sparked off by concerns relating specifically to mechanically recovered meat. At the time that the SEAC slaughterhouse visit took place, we were of course setting in hand the measure to remove specified offals from the animal feed chain which was implemented in September of that year, and that was associated with further instructions from headquarters, Mr Baker and Mr Crawford, to the Veterinary Service to ensure that specified offal measures were being correctly enforced, and a letter from my Division to Local Authorities, again drawing their attention to the need to enforce the regulations. Although these were in the context of the animal feed regulation, the part of the process which happened in the slaughterhouse was the same, and the measures that had to be enforced in the slaughterhouse were not changed as a result of the introduction of the feed ban. So instructions to the field and requests to local authority enforcement agencies to check on the enforcement of the SBO ban in the context of introducing a feed measure were equally relevant to the enforcement of the SBO ban that it was already in existence. So I was satisfied in brief that those responsible for enforcement did not need to be reminded of the importance of adequate enforcement implied by the SEAC advice.</p> <p>LORD PHILLIPS: Did anyone say to them, "SEAC have advised that it is essential from the point of view of human health that the removal of spinal cord is done properly"?</p> <p>MR LOWSON: SEAC did not advise that in so many words. It is the implication of their advice. I do not remember any of these instructions including a mention of what SEAC had said. But that does not mean it did not happen because they would not have issued from me.</p> <p>MR MATOVU: We have heard evidence from vets in the Meat Hygiene -- sorry, just consider that document. (Pause). I was just saying that we have heard from vets in the Meat Hygiene Veterinary Section that when they were monitoring what was going on in slaughterhouses from 1990, they were focusing mainly on the handling and disposal of SBO and not on the removal of SBO from the carcass. Just for the transcript the reference is T34, page 131 to 133. Were you aware of that in or shortly after November 1990?</p> <p>MR LOWSON: Certainly not at the time.</p> <p>MR MATOVU: Did you become aware of that prior to leaving your post?</p> <p>MR LOWSON: I do not remember that, no.'</p>
105F	<p>[Insert new para 105F:] During the oral evidence of Mrs Brown, the following exchange took place about the general view regarding the risks from MRM at this time [insert new footnote 96F: T129 pp12-14]:</p> <p>'MR MATOVU: We will come to that in just a minute. Could I then ask you about your awareness of SEAC's views on slaughterhouse practices? You have mentioned this in a</p>

	<p>previous answer. How was it that you became aware when you joined the Meat Hygiene Division in September 1990 that SEAC had been considering these matters in May and June of that year?</p> <p>MRS BROWN: Almost certainly by talking to my colleagues. I mean when you start in a new post obviously you are very reliant on the people you are working with to tell you what are the live issues. I am sure that this would have come up in my early discussions with the Meat Hygiene Veterinary Section and with my own staff, the people who were reporting directly to me. Bronwen Jones in particular was the person who was responsible for this area.</p> <p>MR MATOVU: Would you have seen copies of the SEAC minutes for those meetings, can you recall?</p> <p>MRS BROWN: I cannot recall. I would not necessarily have seen them. You know, I would not necessarily have gone back and said, "Can I see the minutes?" I probably would have relied on discussion with my colleagues to give me a general idea of what the background was of what was obviously an ongoing issue at the time I joined the Division.</p> <p>MR MATOVU: You referred to your colleagues in the Meat Hygiene Division and Miss Jones in particular. Did you have discussions with Animal Health Division and Mr Lowson in particular?</p> <p>MRS BROWN: I am sure I did. And I recall that he addressed his minutes circulating the draft SEAC paper to me. I cannot now remember whether we actually spoke about it. It is quite possible that we did, although you know at that stage I would have probably said to him: "Yes, of course we will respond, but I will be passing it to colleagues who know more about it than I do" at that stage, to comment in detail on the draft.'</p>
106A	<p>[Insert new para 106A:] During the oral evidence of Mr Baker, the following exchange took place about the general view regarding the risks from MRM at this time [insert new footnote 97A: T107pp90-92]:</p> <p>'MR MATOVU: ... Could I ask you, Mr Baker: as you understand it, what was the general view on MRM?</p> <p>MR BAKER: I think the general view at the time was, after discussion, that it did not constitute a risk. I have indicated in my statement that I would have taken the advice of others and, with the fact that I was not involved in any of the research work, it would have been very difficult for me to second-guess other opinions on this matter.</p> <p>MR MATOVU: Yes. Who were the others from whom you would have taken advice?</p> <p>MR BAKER: I would have normally gone to somebody like Kevin Taylor, who probably in turn would have gone to somebody at Weybridge if he did not have the information himself. That would be the way in which I tried to keep informed.</p> <p>MR MATOVU: Yes. Could I show you a few documents emanating in 1990 which deal with MRM? You will find these in a bundle we have not yet been to, which is FAD 14.</p> <p>LORD PHILLIPS: Just before we do that, the general view that MRM did not constitute a risk might have existed for at least two reasons. One would be MRM is no risk because you are never going to find any trace of nervous tissue in MRM. The alternative explanation might have been, "Well yes, of course, occasionally you will get a bit of nervous tissue in MRM, but it will not be enough to matter". Can you comment on whether either of those was the general approach?</p> <p>MR BAKER: Yes, I would have thought the second one was more likely to apply, and if you look at some of the minutes, you will find the words "dilution factor". I think that was the one that probably applied at the time. One would be very silly, I think, to say that there was not the chance that something might be in there.</p> <p>PROFESSOR FERGUSON-SMITH: Because infectivity was known to be in the spinal cord, and of course the nerves in the spinal cord, the neurons, are connected through and extend through the mechanically recovered meat in the vertebral column to the dorsal root ganglia. They are all part of the same neural network, and so it would be expected that if the neurons in the spinal cord were ineffective, as it was known, then these other bits would be also; is that right?</p> <p>MR BAKER: I think the work on dorsal root ganglia was considerably later, so one might have speculated at the time --</p> <p>PROFESSOR FERGUSON-SMITH: But knowing about the anatomy, how the neural connections work, and that was known at that time, it would have been appreciated that these</p>

	<p>were the same nerves and they were also connected to other nerves in the ganglia, so one might assume that because of the connection, they would be infective.</p> <p>MR BAKER: Yes, I agree with you. It would be an assumption or a speculation, but it was not actually proved until much later.'</p>
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