

COMMISSION OF INQUIRY INTO  
AUGUST 2007 OUTBREAK OF EQUINE INFLUENZA

Before The Hon Ian Callinan AC

Held at Level 5, 55 Market Street, Sydney

On Tuesday, 13 November 2007, at 10am  
(Day 3)

1 MR MEAGHER: Mr Commissioner, before we call the first  
2 witness, I want to make clear how we propose to deal with  
3 items of evidence. In relation to documents which are  
4 shown to witnesses, they will be identified by electronic  
5 barcode numbers and a document shown to a witness will be  
6 taken to be in evidence. Other documents which are  
7 expressly tendered by reference to barcode numbers will be  
8 taken to be in evidence, so that if any parties wish to  
9 object to material being placed before the Commission or  
10 who seek to have some order as to confidentiality made,  
11 they should make an application at the time that the  
12 document is first shown to the witness or at the time it is  
13 expressly tendered.

14  
15 I accept that, in some cases, parties won't have had  
16 the opportunity to consider the document, in which case  
17 they may have to ask for that opportunity. Otherwise, we  
18 should be able, in the course of the day, to be able to  
19 deal with matters of confidentiality by way of direction,  
20 in the event that material is put on the screens before a  
21 party has an opportunity to protect its position.

22  
23 At the end of each day, and at least 48 hours after,  
24 e.law will provide, I am told, a list of the documents  
25 which are in evidence by reference to their electronic  
26 barcode numbers, and those documents will be available on  
27 the public website to those who wish to access them, and  
28 they will not be limited to parties.

29  
30 That is all I wish to say about that, Commissioner,  
31 subject to anything that you wish to raise. I then seek to  
32 call Dr Gilkerson.

33  
34 THE COMMISSIONER: Yes, go ahead.

35  
36 MR SKINNER: Before that happens, may I, on behalf of my  
37 client, the Australian Veterinary Association Limited  
38 announce my appearance as legal representative. On  
39 3 October you granted the association leave to appear  
40 through its president. My name is Skinner. I now appear  
41 as its counsel.

42  
43 THE COMMISSIONER: Thank you, Mr Skinner.

44  
45 MR CHARRINGTON: If it please the Commission, Mr Mullins  
46 appeared on Thursday and obtained a grant of leave to  
47 appear on behalf of the New South Wales Master Farriers

1 Association and five transport companies. I now appear  
2 with Mr Mullins on an alternating basis. My name is  
3 Charrington, initials BF.  
4  
5 MR DONALDSON: While we are attending to the formalities,  
6 my name is Donaldson. I appear for the Randwick Equine  
7 Centre or the vets associated with that practice.  
8  
9 THE COMMISSIONER: Thank you. Thanks, Mr Meagher.  
10  
11 MR MEAGHER: Before I call Dr Gilkerson, I just want to  
12 make sure that I have available to me an electronic copy of  
13 his statement so that it can be placed on the screens.  
14 I am not sure whether that is yet the position. We were  
15 also going to make available copies of the statement to the  
16 parties, because the version of the statement that they had  
17 received was a draft version provided yesterday or late on  
18 Friday.  
19  
20 THE COMMISSIONER: Is that available, Mr Meagher?  
21  
22 MR MEAGHER: I am just going to inquire. I have copies  
23 available with the electronic barcode reference so that  
24 I can proceed with the witness. Copies are being made for  
25 the parties, and they should be available within 15 or  
26 20 minutes.  
27  
28 What I propose to do is to lead evidence from the  
29 witness explaining various parts of the report, and there  
30 doesn't seem to me to be any reason why we can't proceed  
31 with that immediately.  
32  
33 THE COMMISSIONER: Yes, Mr Meagher, you go ahead.  
34  
35 MR MEAGHER: I call James Rudkin Gilkerson.  
36  
37 <JAMES RUDKIN GILKERSON, sworn: [10.03am]  
38  
39 <EXAMINATION BY MR MEAGHER:  
40  
41 MR MEAGHER: Q. Your full name is James Rudkin  
42 Gilkerson?  
43 A. That's right.  
44  
45 Q. You live at 116 Windsor Crescent, Surrey Hills in  
46 Victoria?  
47 A. Yes.

1  
2 Q. You are a senior lecturer in veterinary microbiology  
3 and head of the Equine Infectious Diseases Laboratory in  
4 the Faculty of Veterinary Science at the University of  
5 Melbourne?  
6 A. Mmm-hmm.  
7  
8 Q. You're also president of Equine Veterinarians  
9 Australia, which is a special interest group of the  
10 Australian Veterinary Association?  
11 A. I am.  
12  
13 Q. You have this morning signed a statement, which is  
14 dated today's date, 13 November. Do you have a copy of  
15 that?  
16 A. Yes.  
17  
18 Q. For the record, the document is WIT.INQ.001.0001. It  
19 should be on the screen. You have attached to your  
20 statement a copy of your CV and a copy of your report. Do  
21 you have that? Do you have a copy of that with you?  
22 A. I have a copy of the report, yes.  
23  
24 Q. To the extent that the report contains matters of  
25 opinion, are they opinions which you hold?  
26 A. Yes.  
27  
28 Q. And to the extent that it records matters of fact  
29 which you have assumed, do you believe the assumed matters  
30 to be true?  
31 A. I do.  
32  
33 MR MEAGHER: I tender that statement.  
34  
35 THE COMMISSIONER: Yes.  
36  
37 MR MEAGHER: Q. What I would propose to do,  
38 Dr Gilkerson, is to take you through various paragraphs of  
39 your report. In the first part of your report, you explain  
40 the difference between viruses and other microorganisms,  
41 such as bacteria. Could you explain what that difference,  
42 or the principal difference, is?  
43 A. I guess it's important to think about, if you think  
44 about bacteria and other infectious organisms, protozoa and  
45 those sorts of organisms, they're able to replicate outside  
46 of the host. The primary difference between bacteria and  
47 viruses is that viruses are obligate parasites; they need

1 to be inside a host cell to replicate.  
2  
3 Q. If you would go to paragraph 2 of your report, you  
4 refer to viruses being either enveloped or non-enveloped.  
5 A. Yes.  
6  
7 Q. Is the equine influenza virus enveloped or  
8 non-enveloped?  
9 A. It's an envelope virus, yes.  
10  
11 Q. What does that mean?  
12 A. I guess if you look at viruses as being - the  
13 non-envelope viruses are much more hardy in the  
14 environment, they are more robust, they survive outside the  
15 host for a little bit longer and then they're able to  
16 re-infect. Viruses like influenza that have an envelope -  
17 it's a very sort of fragile structure around the outside of  
18 the virus. It contains the various glycoproteins or  
19 antigens that are required for infection, and once that  
20 envelope is stripped off, the virus is non-infective.  
21  
22 Q. Could you go to paragraph 13 of your report. You have  
23 a diagram or drawing of the influenza virus. Is that  
24 right?  
25 A. That's right, yes.  
26  
27 Q. Could you just explain to us the principal parts of  
28 the virus?  
29 A. I think from what we were talking about just then, the  
30 lipid envelope is the structure that surrounds the virus,  
31 and you can see the tetramers and peplomers that it's  
32 sitting outside, so the virus spikes, the haemagglutinin -  
33 they are the red spikes on the diagram - and the  
34 neuraminidase are the major antigens of the virus. The  
35 haemagglutinin is essential for infecting the host cell and  
36 the neuraminidase is the protein that the virus uses to  
37 exit the infected cell.  
38  
39 Q. Could I just show you a different diagram for a  
40 moment, which is in a separate document. It is  
41 CI.0001.024.0016. Could that come up on the screen? By  
42 reference to this diagram, could you explain how the equine  
43 influenza virus infects a cell, reproduces itself and then  
44 exits the cell?  
45 A. Sure. I guess there are a number of different steps  
46 in the pathway of virus replication. The first is  
47 attaching to the cell, so the influenza viruses use the

1 haemagglutinin protein to attach to the cell that they are  
2 going to infect. They then get internalised inside the  
3 cell at which time they then need to - you can see the  
4 arrow where it says stage 1 to stage 2. The RNA, which is  
5 the nucleic acid that codes for the different proteins in  
6 the virus, needs to be exposed to the cell host machinery.  
7 So the RNA from the influenza virus is exposed to the host  
8 cell and it starts being transcribed and taking over the  
9 host machinery, if you like.

10  
11 In this instance, in this diagram here, that is  
12 happening in the nucleus. In the diagram it refers to  
13 transcription splicing, RNA replication. Essentially it's  
14 just RNA replication and expression. The translation is  
15 the production of proteins which will be assembled to form  
16 the progeny virions, and then they need to egress from the  
17 cell, so exit the infected host cell. At that stage 7  
18 there, they bud through the cell membrane, acquire their  
19 lipid envelope and then go off as progeny virions able to  
20 infect other cells.

21  
22 Q. Could you describe, in terms of survival of the cell,  
23 or of the virus, what the significance of the lipid  
24 envelope is?

25 A. Okay. In terms of survival of the host cell or in  
26 terms of survival of the virus outside the host?

27  
28 Q. Of the virus outside the host.

29 A. Okay. The envelope, although it's vital to the  
30 infectivity of this virus, once the integrity of the  
31 envelope is damaged at all the virus's infectivity is  
32 compromised. These envelopes are fragile, and I guess that  
33 goes to how easily these viruses are controlled by  
34 disinfection procedures. So it's a lipid envelope. Most  
35 disinfectants, indeed just soap and water, will disrupt the  
36 envelope and reduce the infectivity of this virus.

37  
38 Q. What about temperature conditions and humidity?

39 A. It's very sensitive to drying, very sensitive to  
40 changes in humidity, changes in pH. So acid conditions  
41 will disrupt the envelope, a whole range of common  
42 disinfectants will disrupt the envelope and therefore make  
43 these viruses non-infective.

44  
45 Q. Then if I could return to your report, and  
46 specifically to paragraph 14, you refer to the influenza A  
47 virus as being subdivided into subtypes. You refer in

1 paragraph 14 to the strain of the virus which is  
2 A/Equine/Miami/1/63 strain.  
3 A. Yes.  
4  
5 Q. Could you tell us what that strain of the virus is?  
6 A. Influenza A viruses infect a range of different host  
7 animals, from birds - particularly water birds - people,  
8 pigs, horses, et cetera. So the "A" refers to the fact  
9 that it's an influenza A virus and there are influenza A, B  
10 and C viruses as a subfamily. So A refers to the  
11 influenza A. "Equine" is obviously the host species, so  
12 the horse. "Miami" is the location where the virus was  
13 first isolated. "1" refers that it was the first isolate  
14 in Miami in the year 1963, and the strain is - it's H3N8,  
15 which refers to the different haemagglutinin and  
16 neuraminidase types.  
17  
18 Q. What is known about the strain of the virus which is  
19 the cause of the current outbreak in Australia?  
20 A. It's obviously an influenza A virus, affecting horses.  
21 I was at a World Association of Livestock Diagnosticians  
22 conference yesterday, and I think the virus will be named  
23 A/Equine/Sydney/20088/1/07, H3N8. So it's an influenza A  
24 virus, it's a H3N8 strain of influenza. Do you want me to  
25 go into the sequence and the phylogenetic analysis or will  
26 you do that?  
27  
28 Q. I was going to take you to paragraph 22 of your report  
29 and to the phylogenetic tree of the H3N8 group of viruses.  
30 If you could just scroll further down, what you have set  
31 out in paragraph 22 is what is described as a phylogenetic  
32 tree. Perhaps if you could explain it by reference to the  
33 strain which is Miami 63, which appears at the bottom of  
34 the tree.  
35 A. Okay. So, like I said, influenza viruses are commonly  
36 referred to in terms of the haemagglutinin type and the  
37 neuraminidase type. So these are H3N8 viruses that are  
38 infecting horses. The first H3N8 isolated from horses was  
39 the Miami virus in 1963, in that outbreak. So it's the  
40 prototype virus, if you like, of the H3N8 equine viruses.  
41  
42 This tree represents the antigenic drift that has  
43 subsequently occurred, so the slight change in antigenic  
44 relatedness, if you like, so this diagram is a pictorial  
45 representation of the degree of relatedness of these  
46 different virus isolates to the Miami 63 virus. You can  
47 see that in about the mid-80s/early 1990s, there was a

1 divergence and the American-like viruses and the  
2 European-like viruses became quite dissimilar  
3 antigenically.  
4

5 Q. If I could draw your attention to the lineage or  
6 sub-lineage which shows Florida 1993 and Kentucky 1997  
7 coming slightly off the one lineage and then branching in  
8 either of those directions - do you see that?

9 A. Yes. It's a sub-lineage, if you like, of the  
10 American-like viruses, and, in terms of virology, they  
11 refer to it as a sub-lineage or a clade. This sub-lineage,  
12 Florida 1993/Kentucky 1997 are the two primary sort of  
13 clades that are circulating in North America at the moment  
14 and have been probably for the last five to ten years.  
15

16 Q. And if you look at the Florida 1993 sub-lineage, is it  
17 correct to say that you could now continue that line and it  
18 might then go in two different directions --

19 A. It will diverge.  
20

21 Q. -- a branch upwards, which might include viruses such  
22 as Newmarket 03?

23 A. Yes.  
24

25 Q. And a branch downwards, which includes viruses known  
26 as Wisconsin 03 and South Africa 03?

27 A. That's right.  
28

29 Q. Are you able to indicate from publicly available  
30 information where the Australian strain fits and where  
31 reported currently circulating strains in the

32 United Kingdom, Ireland, Japan and the United States fit?

33 A. Sure. The virus that has been isolated in Australia,  
34 the preliminary sequence data on the haemagglutinin 1 gene  
35 suggests that it fits closely into the Wisconsin 03 group  
36 of viruses, and there are currently circulating viruses in  
37 North America which also fit into that Wisconsin 03-like  
38 group.  
39

40 The viruses that have recently been isolated in  
41 Ireland and also in the United Kingdom from horses that  
42 have recently been in Ireland fit into the Newmarket 03  
43 clade there. So it's still in the Florida 93 sub-lineage,  
44 but in a slightly different antigenic group.  
45

46 The preliminary sequence data on the Japanese virus  
47 isolate suggests that it also will fall into the

1 Wisconsin 03 group.

2

3 Q. Could you explain in relation to Ireland and the  
4 United Kingdom, is equine influenza a notifiable disease,  
5 so that one could be confident that currently circulating  
6 strains have been analysed and reported?

7 A. It is in the United Kingdom, but it's not in the  
8 Republic of Ireland. So in the United Kingdom the Animal  
9 Health Trust at Newmarket does receive - I'm not sure if  
10 it's a legislated notifiable disease, but they have a  
11 surveillance network in place to record all isolates of  
12 influenza, and they've found that very helpful in their  
13 disease-management program.

14

15 But in Ireland, it's not a notifiable disease, so the  
16 fact that the laboratory hasn't detected any strains of a  
17 particular type does not necessarily mean that they are not  
18 circulating. It just means that they have not detected  
19 them.

20

21 Q. Is there any laboratory in Ireland equivalent to the  
22 Animal Health Trust which is a repository of information  
23 about currently circulating strains?

24 A. The Irish Equine Centre in Kildare would be the most  
25 closely similar lab, but the lab in Newmarket is an OIE  
26 reference lab for equine influenza.

27

28 Q. And OIE is?

29 A. It's the world organisation for animal health.

30

31 Q. And is there any similar laboratory in the United  
32 States which keeps such records?

33 A. Yes, the Gluck Centre for Equine Research at the  
34 University of Kentucky is the OIE reference lab in  
35 North America.

36

37 Q. You referred a moment ago to antigenic shift. Would  
38 you go to paragraphs 18 and 19 of your report. I think  
39 earlier you referred to "antigenic drift", not "antigenic  
40 shift".

41 A. That's right.

42

43 Q. Could you explain the difference between the two and  
44 explain which is relevant and which would result in the  
45 phylogenetic tree that we have just looked at?

46 A. With influenza viruses in general, there are two  
47 mechanisms that they use to vary the antigens that they are

1 expressing. Antigenic shift is the emergence, I guess, of  
2 a new subtype of viruses. It results when you have two  
3 different viruses, two influenza viruses, infecting the  
4 same animal, indeed infecting the same cell, and you get a  
5 re-assortment of the segmented genome, so if you have H1N1  
6 and H2N2, if they both infect the same cell, you can end up  
7 with a progeny virus that's a H1N2, so a combination of the  
8 two, or H2N1, depending on how you look at it.

9  
10 Antigenic shift is very important globally when you  
11 talk about human influenza, avian influenza and certainly  
12 the H5N1 avian influenza virus that's currently affecting  
13 birds and people around the globe is a direct result of an  
14 antigenic shift which led to the emergence of that sort of  
15 virus.

16  
17 In equine influenza, we have only had two different  
18 influenza subtypes - H7N7 and H3N8 - and I think although  
19 they've both emerged and been able to infect horses,  
20 antigenic shift, if you like, is not such a big feature of  
21 equine influenza epidemiology because we don't have H7N8  
22 viruses or those sorts of things. There tends to be only  
23 one subtype of virus affecting horses at the moment, and  
24 that's H3N8, and has been probably for 20, 25 years.

25  
26 The most important mechanism of antigenic variation in  
27 horses in equine influenza is antigenic drift, and it's an  
28 incremental change in the antigenic structure of the virus  
29 which leads to that sort of phylogenetic tree being created  
30 to show how the virus antigenically has changed over time,  
31 and it's the result of the way that RNA viruses replicate.  
32 The dependent RNA polymerase, the proofreading of that is  
33 different from the normal polymerase that mammals use, and  
34 bacteria, so there are sometimes occasional misreads, which  
35 get incorporated into the genome of the next progeny.

36  
37 So as these accumulate over time, they will change the  
38 amino acid sequence so that the RNA sequence will change,  
39 which in turn will inform the amino acid sequence, which  
40 will change the protein structure and lead to an antigenic  
41 differentiation. So that's antigenic drift.

42  
43 Q. So that it's clear, then, the phylogenetic tree which is  
44 shown as part of paragraph 22 of your report reflects  
45 antigenic drift?

46 A. That's right.

47

1 Q. And, second, is the H7N7 virus you referred  
2 to believed to be a currently existing virus or is it  
3 believed to be now extinct?  
4 A. I'm not sure I would go so far as to say it's extinct  
5 but the recommendations from the WHO OIE expert panel were  
6 to remove it from the current vaccine. So it hasn't been  
7 isolated from a horse for more than 25 years and it hasn't  
8 been reported. There is very vague evidence that it's  
9 actually still circulating in horses.  
10  
11 Q. Could I then take you forward to paragraph 23 of your  
12 report. You there deal with what might be described as the  
13 distribution of this virus throughout the world, and you  
14 also deal in the following paragraphs with recent  
15 epidemics. Could you summarise what the position is in  
16 relation to the existence of equine influenza throughout  
17 the world and then address, in relation to recent  
18 outbreaks, what is believed to have been the causes of  
19 those outbreaks?  
20 A. With the currently circulating H3N8 viruses, they  
21 first arose or they first came to the attention in the  
22 veterinary world in 1963 in Miami as a result of importing  
23 some horses from South America into the USA.  
24  
25 That virus pretty quickly spread throughout the  
26 United States and Canada over the next couple of years and  
27 was subsequently exported in racehorses that were due to  
28 compete in the United Kingdom.  
29  
30 It went through the United Kingdom and Europe, and as  
31 it has been infecting horses throughout the United Kingdom  
32 and Europe - sorry, it infected horses from the US, and  
33 then it went to Europe before it went to the UK. The UK,  
34 the first outbreak was in 1976, or something, so it had a  
35 couple of years head start in Europe before it got into the  
36 United Kingdom.  
37  
38 But from there, with various antigenic drifts, it  
39 became evident that there was then the divergence into the  
40 American-like strains and the European-like strains.  
41  
42 I think the way this virus was able to travel into  
43 North America and then from North America into Europe and  
44 from Europe into the United Kingdom and then around the  
45 world has been with the transportation of horses. So it  
46 has been shown to be associated with consignments of horses  
47 that have gone internationally, from an affected country to

1 another country

2

3 Q. That's carriage by air?

4 A. Yes. I guess South Africa has had two quite  
5 significant outbreaks in the past 20, 21 years. In  
6 South Africa in 1986 it was associated with breeding  
7 stallions coming in through the quarantine system. I guess  
8 there was pretty good evidence that the horses - I'm just  
9 trying to see - there were horses coughing and showing  
10 clinical signs of disease en route, anyway, certainly on  
11 the plane and certainly in the post-arrival quarantine  
12 station.

13

14 That virus was able to get out of the quarantine  
15 station because there were inadequate post-arrival  
16 quarantine procedures in place, and, in doing so, it was  
17 transmitted in horses from one end of the country to the  
18 other. Basically, within three days, the horses in the  
19 whole of South Africa except for Natal had been infected.  
20 So all of the different - I don't know whether they're  
21 states or provinces - provinces, I think.

22

23 Q. In relation to the more recent outbreak in  
24 South Africa in 2003, you deal with that in paragraph 26  
25 and say that that was essentially contained within the  
26 racehorse population.

27 A. Yes. I think having dealt with the outbreak in 1986  
28 they were much more aware of the clinical signs of equine  
29 influenza and they had the ability to respond a lot more  
30 quickly. There was vaccine available and they were able to  
31 vaccinate the animals in the racing stables, and they were  
32 able to contain it to the racing industry.

33

34 In the 1986 outbreak, because of the nature of how  
35 horses left the quarantine station, it wasn't an  
36 all-in/all-out batch system in the quarantine station.  
37 Horses were required to serve their period of quarantine,  
38 and then, when that was finished, they left regardless of  
39 whether another horse had just arrived. That's how it got  
40 out of their quarantine station in the first place.

41

42 That horse was then put onto a truck. Horses were put  
43 on and off the truck as it went all the way up through the  
44 country. In the 1986 outbreak, the unfortunate incident  
45 was that it infected some horses in the recreational horse  
46 sector at a local gymkhana and then those horses went  
47 everywhere, so the 1986 outbreak was not able to be

1 confined to a particular horse population, whereas the 2003  
2 one was.  
3  
4 Q. Is the position that member countries of the World  
5 Health Organisation for Animals or OIE, are currently  
6 required to report outbreaks of equine influenza?  
7 A. Yes, they are.  
8  
9 Q. How many currently reported outbreaks are there and  
10 where, or are you not able to answer that?  
11 A. Not off the top of my head, no.  
12  
13 Q. Are you aware that there has been an outbreak notified  
14 by Japan?  
15 A. Yes.  
16  
17 Q. In mid- August this year.  
18 A. Yes.  
19  
20 Q. And more recently an outbreak notified by China, or in  
21 China?  
22 A. Yes.  
23  
24 Q. As well as, obviously, the outbreak notified by this  
25 country?  
26 A. Yes.  
27  
28 Q. Are you aware of any other current outbreaks which  
29 have been notified to the OIE?  
30 A. I think in countries where equine influenza is  
31 endemic, they're classed by the OIE as being EI endemic and  
32 therefore they don't need to notify outbreaks because it is  
33 considered that there will be outbreaks on a regular basis.  
34 So places like the United States don't need to notify the  
35 OIE but as part of, I guess, an international surveillance  
36 obligation they will do that. So there are horses infected  
37 with influenza in the United States at the moment, and the  
38 virus strains from there are in that Wisconsin 03-like  
39 clade.  
40  
41 Q. Could I turn to the subject of the epidemiology of  
42 equine influenza. You start dealing with this in  
43 paragraphs 28 and following of your report. Could you  
44 first explain or summarise how equine influenza is spread?  
45 A. Equine influenza is spread by a respiratory route of  
46 transmission, so it's a respiratory pathogen, it's inhaled  
47 by the infected horse, it replicates in the respiratory

1 tract and then it's coughed back out of the horse. The  
2 influenza virus is present in all respiratory secretions  
3 and excretions, when the horse coughs and sneezes, out  
4 comes the virus and it is spread in an aerosolised form,  
5 which is then inhaled by other horses.  
6

7 As with all influenza viruses, it's a very contagious  
8 disease, which means it spreads easily from animal to  
9 animal. I guess the differentiation between "infectious"  
10 and "contagious" - "contagious" is a term that refers to  
11 the ability of the pathogen to spread from animal to animal  
12 or person to person.  
13

14 Q. When a horse is infected and releasing the virus, it  
15 is described as "shedding" the virus.

16 A. That's right.  
17

18 Q. Is it correct that the shedding occurs either in the  
19 form of nasal discharge or aerosolised droplets containing  
20 the virus being projected into the atmosphere?

21 A. That's right, usually after coughing.  
22

23 Q. That's by coughing?

24 A. Yes.  
25

26 Q. And each of those things - that is, the nasal  
27 discharge and the coughing - are recognised clinical signs  
28 of the virus?

29 A. Yes, they're non-specific clinical signs, so horses  
30 will cough for other reasons and horses will have nasal  
31 discharge for other reasons, but after infection with  
32 influenza, one of the characteristics of the disease is  
33 coughing horses, which progress to have nasal discharge,  
34 high fever.  
35

36 Q. Is there a difference between vaccinated and  
37 non-vaccinated horses with respect to the amount of virus  
38 that they shed and the way in which they might shed it?

39 A. Yes. Vaccinated horses in general will exhibit less  
40 severe clinical signs for a shorter duration of time. They  
41 will shed less virus for a shorter period of time, if,  
42 indeed, they show any clinical signs and shed any virus.  
43 Some animals respond very well to the vaccine and show no  
44 clinical signs of disease and actually show no evidence of  
45 actually being infected. So it's a bit of a spectrum, if  
46 you like.  
47

1 Q. Is the position, then, that at one end of the spectrum  
2 you could have a horse which is vaccinated which is in fact  
3 infected and shedding the disease but showing no clinical  
4 signs?

5 A. Yes, that's right.

6

7 THE COMMISSIONER: Q. Dr Gilkerson, if I can clarify  
8 something, does that mean that vaccination isn't always  
9 effective?

10 A. I think it comes back to what the aim of vaccination  
11 is. The aim of vaccination is to protect them against the  
12 disease rather than to prevent infection. There are very  
13 few vaccines that claim to be able to prevent infection in  
14 all vaccinated animals.

15

16 Q. It just either means that there are no symptoms or --

17 A. Or they get over it a lot quicker.

18

19 Q. So there's no way of absolutely preventing infection?

20 A. Not in this instance, no.

21

22 MR MEAGHER: Q. What if the position was that the  
23 challenge strain or virus which is the one which the horse  
24 has to deal with is identical with the strain or virus  
25 against which the horse has been vaccinated, because that  
26 virus is contained within the vaccine - is it still  
27 possible in those circumstances for the horse to get  
28 infected?

29 A. I guess the best level of protection you're going to  
30 get in a vaccinated animal is if the strains containing the  
31 vaccine are very closely related to the strains that are  
32 challenging the horse. That being said, these animals can  
33 still become infected and they can still show clinical  
34 signs, but they're less likely.

35

36 THE COMMISSIONER: Q. And still shed some of the virus?

37 A. Yes. Most of the studies that have given that sort of  
38 evidence are experimental challenge trials, and the  
39 infective dose, the challenge dose, of virus that's given  
40 in those trials is quite large compared to what you might  
41 expect to see in just a natural field outbreak, so there  
42 has been evidence from the Animal Health Trust group,  
43 Richard Newton and the workers at the Animal Health Trust  
44 have shown that when the virus that is challenging the  
45 horse in the field is closely related to the virus in the  
46 vaccine, then they can describe a protective level of  
47 antibody. The test that they use is 150mm squared in the

1 radial single rate of haemolysis assay. Horses that had  
2 antibody above that level were protected, whereas in a  
3 different outbreak in the field, with a virus that was very  
4 different from what was in the vaccine, the level of  
5 protection wasn't as clear-cut and horses with high levels  
6 of antibody were still showing signs of disease because it  
7 was a slightly different virus. That's, I guess, the  
8 clinical importance of antigenic drift.

9  
10 MR MEAGHER: Q. I should have asked you this earlier:  
11 are you aware as to whether any testing of the Australian  
12 virus has indicated that antigenic drift has already taken  
13 place?

14 A. Do you mean antigenic drift in terms of between virus  
15 strains that have been isolated during the current outbreak  
16 in Australia?

17  
18 Q. Yes.

19 A. Yes, I think there are some base differences in the H1  
20 sequence between different virus strains in the current  
21 outbreak. That would be expected as well. That's how  
22 these viruses slowly change over time.

23  
24 Q. Then returning to the way in which the virus is  
25 spread, in horses which are not vaccinated or otherwise  
26 immune, which are described as "naive horses", is it  
27 possible for them to project the virus by coughing for  
28 distances of up to 25 or 30 metres?

29 A. Yes. Anecdotally, people have reported even slightly  
30 larger, but that's the figure that has come from  
31 AUSVETPLAN, 35 metres.

32  
33 Q. And what about the spread of the virus by air - what  
34 is the reported evidence as to that?

35 A. There have been some anecdotal reports from the South  
36 African outbreak in 2003, I think, that the virus was  
37 transmitted as a wind-borne transmission of up to  
38 8 kilometres. Wind-borne transmission is one of those  
39 things that are very difficult to prove, so the level of  
40 evidence for that is that there was a known infected  
41 premises and a property that became infected with an  
42 8 kilometre distance between them and no known traceable  
43 contact between the infected premises and the subsequently  
44 infected premises, so they've assumed that that's  
45 wind-borne transmission because they can't demonstrate a  
46 direct contact between the two premises.

1 Q. What are the factors which are likely to influence the  
2 efficacy of wind-borne transmission?  
3 A. I think the prevailing climatic conditions, so the  
4 temperature, the relative humidity, the wind direction,  
5 obviously.  
6  
7 Q. And the volume of the virus which is projected?  
8 A. From the infected premises, yes. If you have one  
9 horse on an infected premises and only one horse on the  
10 subsequent premises, you are unlikely to have sufficient  
11 virus; if you have a thousand horses on the first one,  
12 you're likely to have a viral plume, if you like.  
13  
14 Q. In paragraphs 31 and 32, you deal with some  
15 conclusions which have been reached in various studies as  
16 to how long the virus can survive in certain light and  
17 weather conditions. In terms of humidity, what is the  
18 level of humidity below which or above which the virus is  
19 not likely to survive?  
20 A. I don't think this virus survives for particularly  
21 long periods in conditions of high humidity.  
22  
23 Q. What about sunlight?  
24 A. No, sunlight - so exposure to sunlight, 15 minutes at  
25 15 degrees has been shown to inactivate the virus.  
26 Exposure to ultraviolet light for 30 minutes, heating  
27 50 degrees for 30 minutes - these are the data from the  
28 AUSVETPLAN and that data was derived by some studies from a  
29 group in India after the 1987 Indian outbreak.  
30  
31 Q. Could you describe for me the incubation and virus  
32 excretion periods as reported or accepted in the  
33 literature?  
34 A. I guess there's a range of incubation periods, and  
35 that's mainly due to the fact that there has been a number  
36 of different experimental challenges looking at how long  
37 horses will excrete these viruses for. So when AUSVETPLAN  
38 was written, they've looked at that data and suggested that  
39 there's a range of incubation period between one and  
40 five days after infection. An incubation period is the  
41 time between when an animal becomes infected and when it  
42 starts to show clinical signs of disease. So the  
43 incubation period is between one and five days. That is  
44 accepted incubation period from the OIE Terrestrial Animal  
45 Health Code. I've forgotten the last part of the question.  
46  
47 Q. The infective period, that is, the period during which

1 the horse will shed?

2 A. In the Terrestrial Animal Health Code they refer to a  
3 period up to 14 days when the animal is potentially  
4 infectious.

5  
6 Q. And could you just describe the clinical signs that  
7 you referred to, the classic clinical signs?

8 A. I guess just on the subject of incubation period, one  
9 of the reasons the incubation period will vary is because  
10 it is related to the infective dose of virus that the  
11 animal was exposed to at the beginning. So if they have a  
12 low or small infective dose of the virus, the incubation  
13 period will be longer as it has to undergo more cycles of  
14 replication. If you can imagine one virus infecting one  
15 cell, it then needs to undergo a round of replication to  
16 produce more progeny virions to infect more cells to get to  
17 a certain point where it starts to infect enough cells to  
18 cause disease and the clinical signs of disease. So that  
19 clinical incubation period will be longer.

20  
21 During an outbreak when horses are producing large  
22 amounts of the virus, the infective dose for the horse is  
23 large. A large number of cells are infected in the first  
24 exposure, therefore that cell damage occurs, the horse  
25 starts to show clinical signs of disease earlier in the  
26 period. That's why during outbreaks they say that the  
27 incubation period is significantly shorter.

28  
29 So the clinical signs that you would see - I guess the  
30 characteristic clinical signs of equine influenza are  
31 fever, coughing and nasal discharge. The outbreaks of  
32 paroxysmal harsh coughing is the major clinical indicator  
33 of equine influenza, although the severity of the clinical  
34 signs will vary. Some strains of these viruses are much  
35 more virulent, they cause more severe disease, than other  
36 strains.

37  
38 Q. Could I ask you a question on a slightly different  
39 subject, and that is if you consider horses which have been  
40 carried by air for periods of time in excess of 10 or  
41 15 hours, is it common for those horses to arrive and  
42 experience what is described as travel sickness?

43 A. It's the disease that would most commonly affect those  
44 horses. Most of them wouldn't be affected, but a  
45 reasonable proportion of horses that have travelled long  
46 distance in confined transport, particularly with their  
47 heads in an elevated position, will experience travel

1 sickness. It's a respiratory infection and may go on to  
2 progress to become pleuropneumonia.

3  
4 Q. What are the accepted symptoms of travel sickness.

5 A. The first clinical signs of travel sickness would be  
6 fever, coughing, nasal discharge subsequently, so very  
7 similar to what you would see in the early stages of equine  
8 flu.

9  
10 Q. Could you just explain in relation to incubation and  
11 virus excretion the likely differences between the reaction  
12 of a naive horse and one which is vaccinated?

13 A. I guess the classic clinical signs, the high fever,  
14 the duration of coughing, the duration of the nasal  
15 discharge, in the naive horse those things will be more  
16 pronounced. In the vaccinated horse, depending on the  
17 relatedness of the vaccine strain to the challenge strain -  
18 in the vaccinated horse in general you will see  
19 significantly reduced clinical signs or no clinical signs  
20 of disease. You will see significantly reduced virus  
21 shedding, or no virus shedding, and the amount of virus  
22 that those vaccinated horses will shed will generally be  
23 less than unvaccinated horses.

24  
25 Q. You say that the disease is one of high morbidity and  
26 low mortality. Could just explain that shortly?

27 A. "Morbidity" refers to the proportion of the animal  
28 population affected by the disease, and "mortality"  
29 obviously is the proportion of animals that die as a result  
30 of the disease. So influenza is highly contagious and  
31 spreads rapidly throughout a susceptible population, so the  
32 morbidity for equine influenza is high, and I think you  
33 only need to look at the current outbreak in Australia to  
34 see how contagious this virus is.

35  
36 Fortunately, I think when we're looking at equine flu,  
37 it doesn't kill a lot of horses. Most horses will go on to  
38 mount an effective immune response and recover  
39 uneventfully.

40  
41 Q. You say in paragraph 36, if we can go to that, that  
42 there is no evidence of a long-term carriage state --

43 A. No.

44  
45 Q. -- in relation to the disease. Explain what that  
46 means?

47 A. Some viruses, like herpesviruses, establish life-long

1 latent infections and have periods of recrudescence and are  
2 able to cause disease intermittently throughout the  
3 animal's life. Viruses like influenza are acute virus  
4 infections. The animal resolves the infection and  
5 recovers, in the case of horses, uneventfully. These don't  
6 go on to have any ongoing carrier state. They will mount  
7 an effective immune response, get over it and get on with  
8 life.

9  
10 Q. Now could I turn to the question of diagnosing the  
11 presence of equine influenza. You say in paragraph 38 that  
12 clinical diagnosis is more difficult.

13 A. Particularly in vaccinated animals, because the  
14 clinical signs may be less severe. If you think about  
15 respiratory disease, coughing, nasal discharge and fever,  
16 they are very non-specific signs. There are a number of  
17 diseases that will give you those clinical signs in an  
18 affected animal. So in vaccinated animals where they're  
19 not showing very severe levels of a respiratory disease,  
20 the occasional cough, and the duration of these sorts of  
21 clinical manifestations is shorter, then you can see how  
22 that could be confused just clinically with other diseases.  
23 I think that's why it's important to take appropriate  
24 samples.

25  
26 Q. Then in paragraph 39 you say that diagnosis is  
27 achieved either by detecting the virus in clinical samples  
28 or by demonstrating an increase in the amount of antibodies  
29 to equine influenza in the horse's blood?

30 A. That's right.

31  
32 Q. Just dealing with the first way of detecting it, that  
33 is, detecting the virus in clinical samples, if we could go  
34 back to paragraph 13 and the diagram of the virus, would  
35 you explain shortly what parts of the virus the recognised  
36 tests seek to detect?

37 A. I guess the conventional test that we've used to  
38 detect the presence of influenza viruses has been virus  
39 culture, either in embryonated hen eggs or in cell culture,  
40 tissue culture systems.

41  
42 In the other tests that are available, we can either  
43 grow the virus, we can use polymerase chain reaction, PCR,  
44 tests to detect the presence of viral nucleic acid, in this  
45 case viral RNA, and you can see that, that's in the nuclear  
46 protein there, the RNA, in the nuclear capsid in the centre  
47 of the virus. So we can grow the virus, we can do PCR, or

1 we can use various immuno-based tests which will detect the  
2 presence, in this case, of the haemagglutinin protein on  
3 the outside of the virus envelope and that would be the  
4 Antigen Capture ELISA test or the Directigen-type of kit  
5 tests. Sorry, that's wrong. It's not the haemagglutinin;  
6 it's the nuclear protein they're detecting. Sorry.

7  
8 Q. Just so that that is clear --

9 A. Both the Directigen and the antigen capture ELISA  
10 detect the presence of the nuclear protein.

11  
12 Q. Which is shown in the centre of the structure there?

13 A. Yes.

14  
15 Q. In paragraph 13.

16 A. So it's the protein that surrounds the viral RNA.

17  
18 Q. Then the second way of detecting the presence of the  
19 influenza is to take blood samples.

20 A. That's right.

21  
22 Q. Is the position that you have to take blood samples  
23 from the same horse at different periods of time and then  
24 compare what are described as titre levels in the blood  
25 samples?

26 A. That's right. In general if you just take one sample  
27 from an animal at a particular point in time it will tell  
28 you whether the animal does or does not have antibody to  
29 that various, but it doesn't give you an indication as to  
30 when the animal might have been infected. So I guess  
31 12 months ago in Australia that would have been fine; you  
32 would have expected the serum to be negative, there would  
33 have been no antibody, and the presence of antibody would  
34 have been an indication of some sort of irregularity.

35  
36 But during an outbreak situation you want to know is  
37 this a recent infection or has the animal perhaps been  
38 vaccinated or has it had previous exposure. So you need  
39 that acute and convalescent serum, usually taken about  
40 14 days apart. You do a titration of the amount of  
41 antibodies, so that's where the word "titre" come from, so  
42 you serially dilute the sample to dilute the amount of  
43 antibody, you test it against the known amount of virus,  
44 and in the case of, say, the haemagglutination inhibition  
45 test, the titre is referred to as the reciprocal of the  
46 virus - the serum dilution that will inhibit the  
47 agglutination of red cells, which is the haemagglutination

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assay.

In the case of some of the other tests, say the single radial haemolysis assay, seroconversion, which is where animals are showing an increased amount of antibody between the acute and convalescent serum, the defined seroconversion there is an increase in the diameter of haemolysis of greater than 25mm squared or an increase of more than 50 per cent.

Q. If I could take you to paragraph 47 and following of your report --

THE COMMISSIONER: Mr Meagher, excuse me for interrupting. I just want to ask some questions about the Directigen.

MR MEAGHER: I was going to come to that, Commissioner, I was going to come back to that and deal with that subject.

THE COMMISSIONER: I might just take it up at the moment and you can expand on it, if necessary.

MR MEAGHER: All right. Perhaps for those following, that is dealt with in paragraphs 44 and 45 of the report.

THE COMMISSIONER: Q. I just want to be clear about the Directigen test, Doctor. It's something that can be done in the field, as it were?

A. That's right.

Q. Anywhere; is that right?

A. Yes, yes.

Q. And does that involve taking a nasal swab?

A. Yes.

Q. Are there any difficulties associated with that?

A. It depends on how cooperative the horse wants to be. The Directigen test comes as a kit. It's probably about the size of a mobile phone. You take the nasal swab. It comes with a small bottle of diluent. You put the swab in the kit, you put a couple of drops on the swab, and it's a membrane assay, so it's a membrane immunoassay, so it's looking for the presence of the nuclear protein in the sample.

1 Q. So you get a virtually instantaneous result once you  
2 have the sample; is that correct?  
3 A. Yes, within about 10 to 15 minutes, yes.  
4  
5 Q. Does the swab have to be inserted very far into the  
6 horse's nostrils?  
7 A. I guess there are two different types of diagnostic  
8 swabs that are used in diagnostic virology in horses. One  
9 is just a normal nasal swab. They're about, I guess, 15cm  
10 long. The others are nasopharyngeal swabs. So the nasal  
11 swab will go about that far into the horse's nostrils  
12 (indicating) and take the sample from there. The  
13 nasopharyngeal swabs are about 50cm long and take a sample  
14 from the back of the horse's throat.  
15  
16 Q. How long is a horse's nostril approximately?  
17 A. A bit longer than 15cm.  
18  
19 Q. So I take it that horses can sometimes be educated to  
20 receive this or perhaps educated to resist it?  
21 A. I think they usually are just restrained while you  
22 collect the sample, so you can twitch them.  
23  
24 Q. A reasonably experienced person could take the sample  
25 that requires 10 or 15cm insertion?  
26 A. Yes, very quickly.  
27  
28 Q. Then you can get a result immediately?  
29 A. That's right.  
30  
31 Q. That test wasn't being used in Australia --  
32 A. No.  
33  
34 Q. -- this year?  
35 A. No.  
36  
37 Q. Now, I had some information from some source that that  
38 test was developed at Newmarket, was it not?  
39 A. The Directigen test, I think, is an adaptation of a  
40 human influenza A test. I think it was validated in the  
41 USA at the Gluck Centre, Tom Chambers and the people in his  
42 group.  
43  
44 Q. Was that test --  
45 A. The assay that they used in Newmarket is an antigen  
46 capture ELISA that Georgia Livesay developed--  
47

1 Q. In any event, the Directigen test is the simplest of  
2 all the tests?  
3 A. That's right.  
4  
5 Q. How accurate is it?  
6 A. From memory, the sensitivity and specificity - the  
7 sensitivity I think is 79 per cent and the specificity is  
8 83 per cent. But I probably should look that up.  
9  
10 Q. At any rate, it's of that order?  
11 A. It's reasonably sensitive and reasonably specific, but  
12 you will get false negatives and false positives with it if  
13 you test enough animals.  
14  
15 Q. It is used, according to your statement, in Hong Kong;  
16 is that right?  
17 A. That's right, on a routine basis, yes.  
18  
19 Q. Pre- and post-embarkation or?  
20 A. I think on arrival into Hong Kong they do Directigen  
21 tests. I'm not altogether sure how many they do during the  
22 post-arrival quarantine period.  
23  
24 Q. Was that Directigen available to be used during the  
25 Olympic Games in Sydney?  
26 A. Yes, it was.  
27  
28 Q. Do you know whether it was used?  
29 A. No, I don't. I don't know. The first use of the  
30 Directigen test in an outbreak situation was described by  
31 David Powell in the Hong Kong 1992 outbreak, and they used  
32 it quite successfully.  
33  
34 Q. Is it expensive?  
35 A. I don't know. Not having --  
36  
37 Q. I suppose it is not expensive if you're talking about  
38 very valuable horses?  
39 A. I haven't done any of the diagnostic work so I don't  
40 know the cost of it.  
41  
42 Q. Do you need to be a veterinary surgeon to take it  
43 obtain?  
44 A. I wouldn't think so, no.  
45  
46 Q. Do you know why, for example, it isn't used in  
47 Australia?

1 A. I think during this outbreak it wasn't used because  
2 the throughput, if you like, the number of samples you  
3 could test with this compared to the PCR assays that  
4 they're using, the real-time PCR assays - the PCR is  
5 substantially faster and able to do a much larger number of  
6 samples. So the Directigen test in itself is only  
7 15 minutes, but you have to collect the sample, put it on,  
8 put the diluent on and wait 15 minutes --  
9

10 Q. But if you are receiving a consignment of only a dozen  
11 horses or something --  
12 A. That's right. Sorry, I thought you meant why it  
13 wasn't being used during the outbreak situation.  
14

15 Q. No, I meant why it hasn't been used in Australia on  
16 the immediate reception of a horse or importation of a  
17 horse into Australia, before it gets off the aeroplane or  
18 even immediately after it comes off the aeroplane?  
19 A. I can't see any reason why it wouldn't be used, but  
20 I don't make the --  
21

22 Q. No, I know it's not your field. Of course, if you  
23 used that test and it showed a positive, then you would be  
24 in an immediate position to segregate that particular horse  
25 and any others with which it had been associated on the  
26 flight; those horses could go into immediate separate  
27 quarantine to ensure that they don't infect any other  
28 horses.  
29 A. Yes, that's right. I don't have the information to  
30 hand but you would have to look at the positive and  
31 negative predictive values of the test.  
32

33 Q. But even if you are wrong one in five times, there's  
34 no harm done really, is there, and you are might avert a  
35 catastrophe?  
36 A. A disaster, mmm.  
37

38 Q. I know you weren't fully prepared about all of that,  
39 but it's a matter I'm interested in. At some stage -  
40 I know you are under pressure to be here today, and we  
41 appreciate that - I might ask for you to explore that a  
42 little further, because you will give evidence again,  
43 I think, Dr Gilkerson. Thank you for that.  
44 A. No problem.  
45

46 MR MEAGHER: Q. Doctor, just one matter. I will deal  
47 with this subject now. In relation to the Directigen test,

1 you have said that you may obtain false positives or false  
2 negatives. Is there a way of dealing with that using that  
3 test?  
4 A. I think it's important to understand that all tests  
5 will give you a rate of false positives and false  
6 negatives. That is why, when you look at diagnostic tests,  
7 they will describe the sensitivity and specificity. So  
8 sensitivity is a reflection of the rate of true positives  
9 and specificity is a reflection of the rate of true  
10 negatives. So all diagnostic tests should have some data  
11 on sensitivity and specificity as well as their predictive  
12 positive and negative values as well.  
13  
14 Q. Can you repeat this test in order to get some greater  
15 assurance or confidence as to its accuracy?  
16 A. Yes. I think the sensitivity and specificity are  
17 properties of the test, so what you're talking about is the  
18 precision and accuracy of the test, as to would you get the  
19 same result if you repeated it.  
20  
21 Q. Yes.  
22 A. I think if you are pulling out a false positive, then  
23 if you took another sample from the same horse and repeated  
24 the test, you may get a true negative.  
25  
26 Q. So that if you got a positive and you wanted to be  
27 more confident about the positive --  
28 A. I think you would use a different test to confirm.  
29  
30 Q. You would use a different test?  
31 A. That's right. So if you used the Directigen test as a  
32 screening test and if you got a positive, you would  
33 potentially then look for virus isolation in PCR.  
34  
35 Q. Can we then go back to paragraph 44 where you deal  
36 with what is described as the Antigen Capture ELISA test.  
37 That is the one that was developed at the Animal Health  
38 Trust?  
39 A. That's right.  
40  
41 Q. It works in a similar way, as I understand it, in the  
42 sense that you take something described as a "monoclonal  
43 antibody", which means it will only latch on to a  
44 particular antigen?  
45 A. That's right.  
46  
47 Q. These monoclonal antibodies latch on to particular

1 antigens which are part of this virus?  
2 A. That's right.  
3  
4 Q. So that if it latches on, then you know that the virus  
5 is present?  
6 A. So the nucleoprotein.  
7  
8 Q. This test has to be conducted in a laboratory; is that  
9 right?  
10 A. Yes.  
11  
12 Q. Although it is the same sampling process as the  
13 Directigen test that you have described to the  
14 Commissioner?  
15 A. Yes, it's the same sampling process and the same,  
16 I guess, technological basis but the Directigen has been  
17 formulated into a kit specifically so you can take it with  
18 you.  
19  
20 THE COMMISSIONER: Q. The swab has to be inserted much  
21 further, doesn't it?  
22 A. For the Antigen Capture ELISA - they can use nasal  
23 swabs as well.  
24  
25 Q. They are still 10 to 15cm long?  
26 A. Yes.  
27  
28 MR MEAGHER: Q. Then if you go back to paragraphs 42 and  
29 43, you there describe the test which has been used in the  
30 current outbreak in Australia to detect the influenza; is  
31 that correct?  
32 A. Yes.  
33  
34 Q. It's described as a Real Time PCR test.  
35 A. That's right, real-time polymerased chain reaction.  
36  
37 Q. Does that test, the sample having been taken, have to  
38 be conducted in a laboratory?  
39 A. Yes, absolutely.  
40  
41 Q. What is the turnaround time?  
42 A. Peter Kirkland, who is the director of the virology  
43 lab at Elizabeth Macarthur Agricultural Institute,  
44 mentioned at the conference yesterday that with the PCR  
45 they can turn that around in about three hours. Mind you,  
46 they've tested 22,000 samples in the last 10 weeks, so  
47 they're getting pretty good at it.

1  
2 Q. I had been asking you some questions about the  
3 detection of antibodies in blood sera.  
4 A. Yes.  
5  
6 Q. Could I take you to paragraph 48. You have set out  
7 below that paragraph what is described as a  
8 haemagglutination inhibition plate. The reason I take you  
9 to this is that you are aware that blood serum samples were  
10 taken from the horses that came in in early August as a  
11 matter of course a day or so after they arrived, and then  
12 blood samples were taken from the horses after some of them  
13 were exhibiting clinical signs of equine influenza.  
14 A. That's right.  
15  
16 Q. So that these tests were done to compare titre levels.  
17 A. Mmm-hmm.  
18  
19 Q. As I understand it, these tests seek to measure the  
20 level of antibodies in the blood sera and to compare it  
21 between the two samples.  
22 A. That's right.  
23  
24 Q. Perhaps you could describe how it's measured. You  
25 will see if the example of the inhibition plate in  
26 paragraph 48, on the left-hand side, faintly, letters A, B,  
27 C, D, E, F. As I understand it, the letters A and B  
28 describe a pair of blood serum - one taken before and one  
29 later; is that right?  
30 A. No, the tests will be done in duplicate, so they will  
31 be the same sera.  
32  
33 Q. So that A and B are the same sera, and D and E are  
34 later sera?  
35 A. That's right.  
36  
37 Q. Then could you explain what that test shown on that  
38 plate indicates?  
39 A. The way the test works, or the basis of the test, is  
40 that viruses like influenza viruses will bind red blood  
41 cells. If you look in the wells towards the right of the  
42 plate, you can see they bind them up and form like a mat,  
43 whereas in the ones on the left-hand side of the plate, the  
44 virus hasn't been able to bind those cells and those red  
45 cells have just sort of sunk to the bottom and formed a  
46 little button down the bottom of the well, they are short  
47 of U-shaped wells, if you look at them on the side.

1  
2           So the way the test works is that you get enough virus  
3 in there, so four haemagglutinating units of virus, which  
4 will be enough to agglutinate all the red cells in the test  
5 well. Then you titrate the amount of antibody in the  
6 serum. So the first dilution of antibody is 1 in 8, and  
7 then you do doubling dilutions down the plate, so 1 in 8  
8 becomes 1 in 16 in the second row, 1 in 32, 64, et cetera.  
9  
10          Q.    So if you are looking at the early sample, which is  
11 shown in A and B, the titre level of that horse would be  
12 described as 64, would it?  
13          A.    That's right.  
14  
15          Q.    And for the second, it would be --  
16          A.    No, sorry, it's 32.  
17  
18          Q.    I'm sorry, 32, and the second, it would be described  
19 as 128?  
20          A.    That's right.  
21  
22          Q.    Is that increase a four-fold increase?  
23          A.    That's right.  
24  
25          Q.    Does a four-fold increase indicate seroconversion?  
26          A.    That's right, recent infection or recent exposure.  
27  
28          Q.    What that means, in lay terms, is that the difference  
29 between a blood titre of 32 and one of 128 is sufficiently  
30 large in terms of the antibodies present to indicate that  
31 the animal has been exposed to a virus and reacted by  
32 producing antibodies?  
33          A.    That's right. You can use this test to see whether an  
34 animal has been recently infected or has mounted an  
35 antibody to vaccination.  
36  
37          Q.    That test is called an HI assay?  
38          A.    That's right, "haemagglutination inhibition".  
39  
40          Q.    I don't want to go into much detail about the other  
41 test, but you've described that in paragraph 50 as a single  
42 radial haemolysis test.  
43          A.    Yes.  
44  
45          Q.    That's another way of measuring whether seroconversion  
46 has occurred in the animal?  
47          A.    That's right. It is the test routinely done at the

1 Animal Health Trust in Newmarket, and it is included in the  
2 report mainly because a lot of the challenge trials were  
3 done at the Health Trust, and so they were talking about  
4 protective levels of antibody after vaccination or they  
5 referred to the results of the SRH test, so I have included  
6 it here, but it wasn't done in the current Australian  
7 outbreak and it's not routinely done anywhere else other  
8 than the Health Trust.

9  
10 Q. You then deal in paragraphs 53 and following with the  
11 subject of phylogenetic analysis, which we've already dealt  
12 with when we were dealing with the tree earlier on. Could  
13 I then address the subject of vaccination. In general  
14 terms, you can vaccinate actively using what is described  
15 as a "killed virus", which is an inactivated virus, or a  
16 living or activated virus; is that right?

17 A. Yes.

18  
19 Q. In terms of equine influenza vaccines which are  
20 currently used, do they tend to be killed viruses or  
21 active, live viruses, or both?

22 A. If we leave Australia out of the equation at the  
23 moment, because we just have the one with the emergency  
24 approval, in vaccines that are available overseas - there  
25 are both inactivated vaccines available and live attenuated  
26 or live virus vaccines available.

27  
28 The inactivated ones are, as you say, killed vaccines  
29 with adjuvants in them. Of the live ones, there are two  
30 different types really, there's the intranasal vaccine  
31 available in North America, but only in North America, and  
32 there's the canarypox recombinant vaccine

33  
34 Q. The one used in Australia at the moment - where does  
35 that fall to be described?

36 A. It's classified as a live virus vaccine. It's the  
37 canarypox recombinant vaccine. It's a live canarypox that  
38 undergoes a round of abortive replication in mammals. It's  
39 a bird virus, and inside that virus genome is inserted the  
40 gene of the haemagglutinin of the influenza virus, so it  
41 expresses the haemagglutinin gene, it doesn't quite finish  
42 its replication cycle, and then that's how the animal gets  
43 the antigen to amount the immune response.

44  
45 Q. What is the relationship between the virus vaccines  
46 currently used and the currently circulating strains of the  
47 H3N8 virus?

1 A. The recommendation from the expert panel was to  
2 include representatives from that Florida sub-lineage of  
3 the American lineage of equine flu, specifically the  
4 Wisconsin 03 type of viruses. I'm not sure commercially  
5 that that has been taken on yet, but that was certainly the  
6 most recent recommendation from the expert panel. They  
7 have also recommended that H7N7 be removed from the current  
8 vaccines as there has been no evidence of it circulating in  
9 recent years and that Suffolk 89, I think, was one of the  
10 virus strains that they recommended be included in current  
11 vaccines. That was in 1995 that they recommended that as  
12 well.

13  
14 Q. When you talk about the expert panel, could you be  
15 more specific about what you are referring to?

16 A. It's the OIE WHO expert panel on equine influenza  
17 surveillance.

18  
19 Q. When did it report in the way that you described?

20 A. The Suffolk 89 recommendation was made in 1995 and the  
21 most recent recommendation to remove H7N7 and to  
22 incorporate some of these new Florida lineages, I think,  
23 went in this year.

24  
25 Q. Could you then describe the matters which affect the  
26 efficacy of a vaccine in relation to a particular horse?

27 A. In terms of?

28  
29 Q. When challenged by a particular strain of the virus,  
30 such as the Australian strain.

31 A. I think there's a number of things that will affect  
32 how effective or how efficacious the vaccine is at  
33 providing protection. One is how closely related the  
34 vaccines are to the challenge strain, so if the vaccine  
35 strain is not sufficiently closely related and the  
36 challenge strain, as a result of antigenic drift, has  
37 become significantly different from the strains that are in  
38 the vaccine, then those vaccines will be less effective in  
39 protecting the horses.

40  
41 The titre of antibody, particularly with inactivated  
42 vaccines - the amount of antibody that the horse has  
43 circulating in its blood has been shown to be directly  
44 correlated with the level of protection that you can expect  
45 after challenge with a similar strain.

46  
47 So recent studies through the Health Trust have shown

1 that horses with greater than 150mm squared in this SRH,  
2 single radial haemolysis, assay were more significantly  
3 protected against challenge with a field strain than horses  
4 that had less amounts of antibody.

5  
6 The amount of antibody I think is also pretty well  
7 associated with the time that has elapsed since the horse  
8 was vaccinated.

9  
10 Q. Is it possible that a horse which has been vaccinated  
11 can subsequently show, in a blood serum test, a nil  
12 antibody level?

13 A. It's possible, but it's very unlikely. Obviously, in  
14 all populations, there are animals that won't respond to a  
15 vaccine, so the non-responder rate, but it's pretty  
16 uncommon that a horse that would have received multiple  
17 vaccinations - sorry the recommended course for influenza  
18 where they've got an initial vaccine with a series of  
19 boosters after that - it would be very uncommon that that  
20 horse would not respond, particularly as the inactivated  
21 vaccines have a number of different viruses in them.

22  
23 Q. So one would expect, in relation to a horse which has  
24 been vaccinated over a number of years, that it would have  
25 a titre level at any time?

26 A. Yes, that's right.

27  
28 Q. And is a possible explanation for a test result which  
29 indicated otherwise that the test result itself was  
30 suspect?

31 A. I certainly would like to repeat that, yes.

32  
33 Q. Is another possible explanation that the horse hadn't  
34 been vaccinated at all?

35 A. Yes.

36  
37 Q. And is a third possible explanation that an attempt  
38 had been made to vaccinate the horse but the attempt hadn't  
39 been effective, in the sense that the vaccine hadn't been  
40 properly administered?

41 A. Yes.

42  
43 Q. I want to turn now to some overview scenarios which  
44 you start dealing with in paragraph 78 of your report.  
45 This part of the report hadn't been made available in the  
46 draft to any of the parties.

1           What we asked you to do, and what we hope that you  
2 will do over time when more material is available and in  
3 evidence, is to address two questions. The first is how  
4 did the virus infect horses inside Eastern Creek Quarantine  
5 Station? And the second is how did the virus infect horses  
6 in the general Australian horse population?  
7

8           Now, as you point out, the answers to those questions  
9 depend upon consideration of a number of matters as well as  
10 the analysis of blood samples and a consideration of the  
11 phylogenetic relationship between various strains.  
12

13           But you have nevertheless, in paragraph 79, looked at  
14 four possible ways in which the virus infected horses  
15 inside Eastern Creek Quarantine Station, and you have set  
16 those out in paragraph 79.  
17

18           You say in paragraph 80 that the first of those, that  
19 is, that a subclinically infected horse carrying the virus  
20 entered Eastern Creek and infected other horses within  
21 Eastern Creek, is the most likely. Could you explain in  
22 a little bit more detail why you think that's the most  
23 likely scenario which we should test and why the other  
24 three that you identify there are less likely?

25           A. I think it comes back to the fragile nature of this  
26 virus outside of the horse. It's an envelope virus. Once  
27 you interfere with that lipid envelope, the infectivity of  
28 the virus is severely compromised.  
29

30           For the timelines that were looked into as to when  
31 horses first started showing signs of influenza at Eastern  
32 Creek, I think this is the scenario that fits best with the  
33 timelines. This virus has been shown repeatedly to travel  
34 best inside the host, being the horse, and if you are  
35 thinking about, when you look at the data on how long it  
36 survives on equipment, on material, you're looking at, at  
37 best, around 12 hours, that sort of time frame, whereas  
38 inside a horse, the horse can be infectious for a number  
39 of days.  
40

41           If that horse were to be shedding low levels of virus,  
42 then when we spoke about incubation period, if it has  
43 passed that infection on to another horse at a low level,  
44 then it will have a lot longer incubation period, and that  
45 seems to fit best with the timelines that we have available  
46 on the data to date.  
47

1 Q. If you assume that the relevant consignments came in  
2 between 3 and 8 August, so that all of the horses were in  
3 Eastern Creek on 8 August, and that the first horse which  
4 showed recognised clinical signs did so on 17 August, could  
5 you describe possible scenarios which would permit that  
6 period of time to pass before one of the horses showed  
7 clinical signs?

8 A. Yes, I think if you think about the fact that we  
9 potentially have imported a subclinically infected horse,  
10 it's shedding virus, that virus can then be transmitted to  
11 other horses within Eastern Creek either by direct  
12 transmission, so through inhalation of an aerosolised virus  
13 from that horse - but if you think that it may be having a  
14 low amount of virus or a small amount of virus being shed  
15 in its respiratory secretions, then it has the potential  
16 for that virus to be spread indirectly, so via human  
17 contact from one horse to another. If that's at a low  
18 level, then you may have a number of days between when the  
19 horse is contaminated, an item which is then used on  
20 another horse gets infected at a low level, takes a number  
21 of days again for the incubation period before it starts to  
22 show clinical signs, that would get you through the  
23 nine-day period, I would think.  
24

25 Q. Is it possible that one vaccinated horse subclinically  
26 infected could pass the virus to another, which then passes  
27 it to another before that third horse exhibits clinical  
28 signs --

29 A. Yes.  
30

31 Q. -- because it may be more susceptible or because of  
32 the vaccines that have been used?

33 A. That's right. It may be more susceptible because it  
34 has been vaccinated with a different preparation, a  
35 different vaccine preparation that may be less related to  
36 this particular challenge strain.  
37

38 Q. The second question you address is how did the virus  
39 or how might the virus have entered the general Australian  
40 horse population? You identify a number of possible  
41 scenarios in paragraph 82. The first is that one of the  
42 horses carried by air was infected and the virus was  
43 transmitted to the general population by means of people or  
44 equipment or materials associated with the air journey, or  
45 the unloading or transporting of the horses to Eastern  
46 Creek; in other words, someone comes in contact with the  
47 horse at the airport, for example, and then has contact

1 with a horse in the general population.  
2 A. That's right.  
3  
4 Q. Or equipment comes in contact with a horse and then  
5 comes in contact with a horse in the general population, or  
6 the transport vehicles which are used to carry these horses  
7 come in contact with horses from the general population  
8 without being properly cleaned or disinfected. They are  
9 all possibilities within this first scenario?  
10 A. That's right.  
11  
12 Q. Then the second that you look at is that one or more  
13 of the horses in Eastern Creek was infected and the virus  
14 was then transmitted out of Eastern Creek by means of  
15 people, equipment or materials associated with managing the  
16 horses in Eastern Creek.  
17 A. Mmm-hmm.  
18  
19 Q. So that, for example, vets or farriers or grooms or  
20 officers working for AQIS within Eastern Creek could have  
21 come in contact with the horses, or equipment could have  
22 come in contact with the horses and then left Eastern Creek  
23 and come into contact with a horse from the general  
24 population?  
25 A. That's right.  
26  
27 Q. They are the first two, and I think you say in  
28 paragraph 83 that you regard those as the most likely  
29 scenarios which we have to consider.  
30 A. That's right. I think, given the nature of the  
31 outbreak, where it was first recognised, how it  
32 subsequently spread, the wind-borne transmission from an  
33 infected horse inside the Eastern Creek Quarantine Station  
34 to horses outside the quarantine station seems very  
35 unlikely. The meteorological data doesn't hold up with  
36 that likely scenario.  
37  
38 I think that you would have expected, if that were the  
39 case, that the index cases outside in the general horse  
40 population would have been in horses in and around  
41 Eastern Creek, and that wasn't the case.  
42  
43 I think that scenario (d), where virus may be  
44 introduced by a traveller coming in from overseas, given  
45 the duration of time that would have elapsed, just by the  
46 virtue of the length of time of the flight, from when the  
47 person potentially contacted their last infected horse, the

1 time you have to be at the airport before your flight  
2 embarks, the time for arriving in Australia, clearing  
3 customs and then going and touching a horse in the general  
4 population and still having sufficient viral load on you to  
5 transmit that infection to the general population - it's  
6 not impossible, but I think it's improbable.

7  
8 Scenario (e), where the virus was present in Eastern  
9 Creek as a result of a previous shipment - I still think  
10 that would just result in horses in Eastern Creek being  
11 infected. It still doesn't explain how the virus would get  
12 out of Eastern Creek.

13  
14 And scenario (f), where the virus may already be  
15 present in Australia as potentially a non-pathogenic  
16 strain - I think that virologically that is so improbable  
17 as to be almost impossible. Every time we've looked - we  
18 have to take blood samples from horses before export, we  
19 have done serological surveys of horses in Australia to  
20 look for antibody to influenza in horses that have not been  
21 vaccinated, and we have always found them to be negative.

22  
23 So you only have to look at the wide spread and the  
24 speed of the spread of the current outbreak in Australia -  
25 viruses like Wisconsin 03 and the Sydney virus isolate are  
26 reasonably low pathogenic viruses anyway, they don't cause  
27 those very severe clinical signs like the Suffolk 89 virus  
28 or the Newmarket 98 virus. They tend to cause very severe  
29 disease, whereas the virus we have doesn't seem to cause as  
30 severe a disease, yet it still managed to infect more than  
31 40,000 horses in New South Wales in nine weeks.

32  
33 So I think if we had, in the naive susceptible  
34 population that we had in Australia prior to this outbreak,  
35 even a low pathogenic equine flu strain circulating, we  
36 would certainly know about it, which then leaves only  
37 really the first couple.

38  
39 Q. You referred earlier in your answer to the index  
40 cases. Would you describe what that refers to?

41 A. Epidemiologically, when you talk about describing an  
42 outbreak of disease in a population, the first reported  
43 case of the disease is referred to as the index case.

44  
45 Q. So in relation to Eastern Creek Quarantine Station, it  
46 would be correct to describe Encosta de Lago as the index  
47 case?

1 A. That's right. It's not necessarily to say that that's  
2 the horse that was first infected; it's just the horse that  
3 was first recognised as being infected.  
4  
5 Q. So if the virus came in with one of the consignments,  
6 any horse which was infected was not relevantly the index  
7 case?  
8 A. No, that's right, and in fact it's highly likely that  
9 Encosta de Lago was not the first horse infected; he was  
10 the first horse to show clinical signs of disease.  
11  
12 Q. Why do you say that it is highly likely that he wasn't  
13 the first horse infected?  
14 A. Well, I don't have all of that information in front of  
15 me, but the serology data from that horse, the serum bank  
16 sample collected on 8 August, the antibody levels were  
17 very, very low. In fact, the antibody levels were  
18 negative. So if he were the horse that were infected and  
19 brought it over, you would have expected that there would  
20 have been some antibody response by the time he was tested  
21 on 8 August.  
22  
23 Q. You have made certain assumptions in giving some of  
24 these answers as to the way in which you understand the  
25 virus spread, in the sense of infection spread, which will  
26 have to be the subject of evidence, but could you identify  
27 what you have assumed as to the sequence of events in  
28 answering the questions that you have just answered?  
29 A. Sorry?  
30  
31 Q. That is, the sequence of events outside Eastern Creek  
32 as to the development of infection in the general horse  
33 population.  
34 A. Okay, the things that I have assumed in that were that  
35 the first identified cases outside of Eastern Creek were at  
36 Centennial Park, and that the trace-back protocols that  
37 were in place identified that there was an event at  
38 Maitland preceding those horses being identified as being  
39 the first - I guess, the source of the infection was the  
40 event at Maitland that infected these horses at Centennial  
41 Park. I think if it was a wind-borne spread out of Eastern  
42 Creek, you would have seen Eastern Creek being the nidus of  
43 infection, if you like, and the virus centrifugally  
44 spreading from there, and that was not, epidemiologically,  
45 what we saw.  
46  
47 Q. Is there anything that you have assumed as to the

1 spread of infection at or following the Maitland event  
2 which gives a clue as to how the infection was spread?  
3 A. Was spread to Maitland?  
4  
5 Q. Yes.  
6 A. No, that I am aware of, there is no evidence that  
7 links the Maitland event with the quarantine station.  
8  
9 MR MEAGHER: Commissioner, that is all I would wish to  
10 lead from Dr Gilkerson today. Obviously, he will have to  
11 return to give opinion evidence based on the factual  
12 material which is led before the Commission which otherwise  
13 emerges, and also after further blood analyses have been  
14 undertaken of the horses in the consignments and also after  
15 we have the benefit of further material on the strains of  
16 the virus circulating elsewhere in the world.  
17  
18 THE COMMISSIONER: Mr Meagher, it would be desirable,  
19 then, to confine cross-examination to the matter that has  
20 been the subject of his evidence so far.  
21  
22 MR MEAGHER: Yes. We are certainly content with that,  
23 Commissioner.  
24  
25 THE COMMISSIONER: We will adjourn for a quarter of an  
26 hour. People at the Bar table, you might care to give some  
27 thought to the order of cross-examination. My inclination  
28 would be perhaps to invite counsel for the Commonwealth and  
29 then counsel for the States to go first. Perhaps the other  
30 people at the Bar can see if they can agree upon an order  
31 of cross-examination.  
32  
33 We will resume in a quarter of an hour.  
34  
35 SHORT ADJOURNMENT  
36  
37 THE COMMISSIONER: Are you ready to proceed, Mr Robertson?  
38  
39 MR ROBERTSON: Yes, Commissioner. I had a brief word to  
40 counsel for New South Wales and Queensland, and the order  
41 that has been suggested by you, Commissioner, seems  
42 sensible from our perspective. My solicitors, I think by  
43 letter, had sought leave to cross-examine on two or three  
44 specific topics, and perhaps I can take it from what you  
45 said, Commissioner, that that leave is granted?  
46  
47 THE COMMISSIONER: Yes. Would you mind speaking up a

1 little. Apparently it's necessary to address the  
2 microphone very directly; otherwise, you can't be heard and  
3 there can't be any transcript.  
4  
5 MR ROBERTSON: I will do my best, Commissioner. The other  
6 thing I might say is that given the newness of some of the  
7 material in the sworn statement, it would be most  
8 efficient, in my submission, Commissioner, if I left to one  
9 side that new material so that, if it is contentious, we  
10 can revisit it at some other point in time.  
11  
12 THE COMMISSIONER: Yes.  
13  
14 MR ROBERTSON: By saying that, I mean in particular the  
15 hypotheses in paragraphs 79 through to 85, which  
16 I understand are a work in progress, in a sense. But also  
17 I would include in that, Commissioner, the matter you asked  
18 Dr Gilkerson some particular questions about, which centres  
19 on paragraph 45 and that test, because there is some new  
20 material there as well and it is obviously a matter of some  
21 complexity. I wouldn't wish to waste the time of the  
22 Commission with exploring that --  
23  
24 THE COMMISSIONER: Yes, that is complex, and I might say  
25 that I am particularly interested in that area, as you  
26 might have inferred.  
27  
28 MR ROBERTSON: Yes, I did.  
29  
30 <EXAMINATION BY MR ROBERTSON:  
31  
32 MR ROBERTSON: Q. Dr Gilkerson, it is your evidence that  
33 the vaccination of horses reduces the clinical signs of  
34 equine influenza?  
35 A. In general, yes.  
36  
37 Q. And as a consequence, it makes it more difficult to  
38 recognise horses with equine influenza?  
39 A. Yes, it does.  
40  
41 Q. Could I ask you a question or two about your  
42 paragraph 24, if you have your final statement or report  
43 there. If you would read to yourself, Dr Gilkerson, the  
44 last sentence of paragraph 24, the one beginning, "In  
45 addition", then I want to ask you a couple of questions  
46 about it.  
47

1           What I want to ask you first is whether you are  
2 suggesting there that there should not be insistence on  
3 vaccination of imported horses?  
4       A.   No, I think there should be vaccination of imported  
5 horses, but I think you need to recognise that those  
6 horses - if they have influenza - sorry, if they are  
7 vaccinated, they may still be infected, they may still be  
8 subclinically carrying the infection, but because they're  
9 vaccinated, they will show less severe clinical signs and  
10 it won't be as immediately obvious. So it's the corollary  
11 to when they're vaccinated.  
12  
13       Q.   So you accept, do you, that requiring pre-entry  
14 vaccination is part of managing the risk to the Australian  
15 horse population from allowing the importation of horses in  
16 the first place?  
17       A.   Yes, that's right.  
18  
19       Q.   And do I take it that you accept that requiring the  
20 vaccination of horses to be imported reduces the risk of  
21 importing disease with those horses?  
22       A.   Influenza disease?  
23  
24       Q.   Yes.  
25       A.   Yes.  
26  
27       Q.   This is in part, is it not, because less virus is shed  
28 by the horse either in transit or on arrival?  
29       A.   Yes.  
30  
31       Q.   And in fact I think you said in your evidence this  
32 morning that maybe no virus is shed by a vaccinated horse.  
33 Did I understand that correctly?  
34       A.   Yes. In the immune response to vaccination, you end  
35 up with a spectrum of response, if you like, so there are  
36 the horses that are completely protected and the horses  
37 that aren't as well protected.  
38  
39       Q.   And the effect of less virus or no virus being shed is  
40 that fewer subsequent horses are likely to be infected?  
41       A.   Yes, that's right.  
42  
43       Q.   And I think you touch on this, if you have a look at  
44 it, in paragraph 68 of your final report, in particular, if  
45 your pagination is the same as mine, at the bottom of  
46 page 32 and the top of page 33.  
47       A.   Yes.

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Q. If you would go back a paragraph, that is to paragraph 67 on page 32, you write in the last two or three sentences about immunity to equine influenza being short-lived after vaccination. What sort of time frame are you speaking of there?

A. When vaccination was first introduced in the UK, there was a recommendation for annual boosters, and they found that horses who were coming up to being due for their annual boosters were starting to get infected and starting to show signs of disease. So they've recommended six-monthly boosters and, indeed, in some racing jurisdictions around the world they vaccinate even more frequently than that.

So depending on the vaccine and how closely related the strains in the vaccine are to the strains that are currently circulating in the field, you may be fortunate enough to get a 12-month duration of immunity before you need a booster vaccination; it may be less. The recommendations in the UK for racing horses are every six months.

Q. One of the aspects, then, of effective vaccination or effective immunity is the currency of the vaccine; that is, how long ago it happened?

A. That's right.

Q. Another aspect which I think you touched on in your evidence this morning was whether or not the process of vaccination was effective, in the sense that it was done properly?

A. Administered correctly, yes.

Q. Can I take you back in your report to around paragraph 24 where you describe the major outbreaks and epidemics in the past 25 years; that's on page 13. Do you have that?

A. Yes.

Q. You write in particular about two epidemics in South Africa, that is, 1986 and 2003, you also refer in paragraph 27 to the 1992 epidemic in Hong Kong, and you mention right at the end of paragraph 27 an outbreak in Dubai in 1995.

With paragraph 25, you have at the end a couple of

1 references, 32 and 39. Now, those are references to  
2 articles or texts that you read about that South African  
3 outbreak; is that right?  
4 A. That's right.  
5  
6 Q. Is it right to say that you were not, on either the  
7 1986 occasion or the 2003 occasion in South Africa,  
8 personally involved in --  
9 A. That's right.  
10  
11 Q. So you are giving the Commission the benefit of a  
12 short statement of what you get from the reports and other  
13 writings to which you have referred?  
14 A. That's right.  
15  
16 Q. The same applies, does it, in paragraph 27 to  
17 Hong Kong where you have a cross-reference 38?  
18 A. Yes, that's right.  
19  
20 Q. So you didn't have personal involvement in that?  
21 A. No.  
22  
23 Q. And Dubai similarly?  
24 A. That's right.  
25  
26 Q. I think that means that you don't refer to particular  
27 reports - correct me if I am wrong - about either India or  
28 the Philippines?  
29 A. That's right.  
30  
31 Q. Did you rely on particular reports or articles about  
32 India and the Philippines?  
33 A. Only that they were reported in those years that  
34 I have included in the statement, but there was no  
35 published report outlining in any sort of detail the  
36 epidemiology of how those outbreaks occurred.  
37  
38 Q. So would it follow, Dr Gilkerson, that what you say,  
39 for example, in paragraph 24 on line 3, that all of these  
40 epidemics have been associated with various things, is your  
41 summary of what you have read?  
42 A. Yes, and it is reflected in the AUSVETPLAN summary as  
43 well.  
44  
45 Q. So when you speak of what is adequate or what is  
46 inadequate - for example, in line 4 or 5 of paragraph 24  
47 where you talk about inadequate post-arrival quarantine

1 procedures - is that a description that you have taken from  
2 the source material or is that your description of what you  
3 have read?  
4 A. I think if there were adequate post-arrival quarantine  
5 procedures in place, the outbreaks wouldn't have occurred,  
6 would they?  
7  
8 Q. So you are, in a sense, giving content to adequacy by  
9 reference to what thereafter happened?  
10 A. It sort of follows, doesn't it, by definition? If  
11 there were adequate procedures in place in the post-arrival  
12 quarantine, then the virus would have stayed in the  
13 quarantine stations and not entered the general populations  
14 in these countries.  
15  
16 Q. And that's how you've used that word?  
17 A. That's right. Well, it's obviously inadequate.  
18  
19 Q. Well, that might be one of the questions for the  
20 Commission, as to what precisely the content of adequacy or  
21 inadequacy is in terms of the stringency or otherwise of  
22 the measures.  
23 A. It seems illogical that you would have a series of  
24 procedures and protocols in place that are designed to  
25 maybe keep influenza at bay as a quarantine. If you're  
26 aiming to quarantine horses, to reduce the risk of those  
27 horses spreading influenza into the general population in  
28 the country and that's the aim of your quarantine station,  
29 your quarantine protocols, I can't see there's much debate  
30 about the word "adequate". It either prevents it or it  
31 doesn't prevent it. If it doesn't prevent it, then it's  
32 inadequate. If it does prevent it, then it's adequate.  
33  
34 Q. I want to get clear that that's the sense in which  
35 you've used that word?  
36 A. That's the way I've used that word.  
37  
38 MR ROBERTSON: Thank you, Mr Commissioner.  
39  
40 THE COMMISSIONER: Mr Agius, are you going to go next?  
41  
42 MR AGIUS: Mr Commissioner, if it pleases, we would wish  
43 to reserve most of our examination of Dr Gilkerson on the  
44 basis that it may become shorter once we have more  
45 information. There is just one matter that I would want to  
46 ask some questions upon, and that is about travel sickness  
47 in horses and the symptomology displayed by horses

1 suffering from travel sickness.  
2  
3 <EXAMINATION BY MR AGIUS:  
4  
5 MR AGIUS: Q. At page 52 line 4 you were asked this  
6 question:  
7  
8 Q. What are the accepted symptoms of  
9 travel sickness?  
10 A. The first clinical signs of travel  
11 sickness would be fever, coughing, nasal  
12 discharge subsequently, so very similar to  
13 what you would see in the early stages of  
14 equine flu.  
15  
16 Is that the order in which you would expect to see the  
17 symptoms with travel sickness - fever first, then coughing,  
18 then nasal discharge?  
19 A. Yes.  
20  
21 Q. What about with equine influenza?  
22 A. Similar.  
23  
24 Q. In the same order?  
25 A. Similar, yes. I think all horses are slightly  
26 different in disease manifestation. There is some  
27 individual variation, but I think you would see - I mean,  
28 fever would be the first thing. In the experimental  
29 challenge studies, fever is the first thing you start to  
30 see.  
31  
32 Q. With equine influenza?  
33 A. In equine flu, coughing, nasal discharge, yes.  
34  
35 Q. Can I break those down, then. Can we take the fever.  
36 In relation to equine influenza, would you expect  
37 temperature to be higher than you would with travel  
38 sickness?  
39 A. Possibly. I sound like I'm prevaricating, but  
40 possibly. I think there's no doubt, though, that horses  
41 can get very sick with pleuropneumonia, but I would expect  
42 the level of fever in the acute stages of influenza to be  
43 higher.  
44  
45 Q. And coughing - would it be accurate to describe the  
46 sort of coughing one sees with equine influenza as  
47 paroxysmal?

1 A. Yes.  
2  
3 Q. I have seen videos of this. The horse appears to  
4 convulse from the chest right up through the head.  
5 A. That's right.  
6  
7 Q. Would you expect that kind of coughing with travel  
8 sickness?  
9 A. No, but I think anecdotally, from what I've been told  
10 during this current outbreak, some horses show this  
11 characteristic cough that you describe, whereas other  
12 horses that have also been infected and shown to be  
13 infected haven't had that sort of cough, or if they've had  
14 a cough, it has been less severe.  
15  
16 I think the problem we have, in looking at video,  
17 reading textbooks and reading about these things, is that  
18 the most explicit examples, if you like, are often used,  
19 and we think that must be the normal, so unless a horse is  
20 exhibiting that sort of paroxysmal cough, they might not  
21 have influenza. Some of the horses in this outbreak  
22 certainly didn't cough at all.  
23  
24 Q. What about the nasal discharge - is there a similar  
25 sort of nasal discharge with travel sickness and equine  
26 influenza?  
27 A. I would expect the nasal discharge with flu to be more  
28 of a consistent sign. Horses can end up with travel  
29 sickness with or without the nasal discharge.  
30  
31 Q. That would seem to make it all the more imperative  
32 that some system be in place to confirm the presence of  
33 equine influenza as early as possible.  
34 A. Yes, I wouldn't have any problem with that.  
35  
36 Q. And that system would include, in your analysis,  
37 testing of blood serums?  
38 A. Testing of blood serum is only going to tell you what  
39 has happened, not what is happening now, in that you need  
40 those two samples to show a rise in antibody titre, so the  
41 acute and the convalescent serum. If you wanted to find  
42 out what was happening in the horse today, you would take a  
43 clinical sample, say a nasal swab or nasopharyngeal swab,  
44 and look for the presence of virus or viral nucleic acid.  
45  
46 Q. I take it also the similarity of those symptoms -  
47 travel sickness and equine influenza - ought to clearly

1 focus attention upon what arrangements are in place to  
2 ensure that the virus isn't carried out of any quarantine  
3 area.  
4 A. That's right.  
5  
6 Q. So vaccination is not there to prevent infection?  
7 A. No, vaccination would be one strategy that you would  
8 employ to reduce the risk of, firstly, importing a horse  
9 with influenza and, secondly, of that horse then  
10 subsequently spreading it within the quarantine station.  
11  
12 Q. So if one were running a quarantine station, one would  
13 have in mind the possibility that vaccinated horses coming  
14 into the quarantine station could be carrying equine  
15 influenza, but it may be masked either by the vaccination  
16 or by an apparent bout of travel sickness, or this horse  
17 might be a silent carrier?  
18 A. The silent carrier - it may be asymptomatic and  
19 shedding because it has been a vaccinated horse. The term  
20 "silent carrier" has other connotations in virology that --  
21  
22 Q. But if you were in the business of running  
23 quarantine --  
24 A. Certainly I agree with everything else you said.  
25  
26 Q. Sorry?  
27 A. Certainly I agree with everything else you said.  
28  
29 Q. You would expect to know about those possibilities?  
30 A. That's right. They're clearly identified in the  
31 AUSVETPLAN. They've been clearly identified in a number of  
32 other documents as well.  
33  
34 Q. And if you tried to deal with that risk, you have to  
35 build in strategies --  
36 A. That's right.  
37  
38 Q. -- to cope with the likelihood - is it as high as a  
39 likelihood - that the EI might be being masked?  
40 A. Oh, yes, all of the experimental studies, the  
41 experimental challenge studies, show that vaccinated  
42 horses, particularly with the commercially available  
43 vaccines, have less severe signs of disease, if they show  
44 any signs of disease at all; they shed less virus, if they  
45 shed virus at all. So it's very, very well documented.  
46 That's why they're commercially available vaccines.  
47

1 MR MacSPORRAN: With the same reservations that Mr Agius  
2 expressed, I will ask a brief few questions at this stage.

3  
4 <EXAMINATION BY MR MacSPORRAN:

5  
6 MR MacSPORRAN: Q. Doctor, if I could take you back to  
7 paragraph 24 of your statement, you deal there with the  
8 question of major outbreaks in those countries you nominate  
9 and you talk about the inadequacy of quarantine procedures  
10 which have resulted in the outbreaks. I take it that you  
11 are referring to those countries in particular in that  
12 paragraph

13 A. Yes.

14  
15 Q. I know this is an early stage of this inquiry, but  
16 were you, for the purposes of coming today and producing  
17 your statement, made aware of the detailed procedures that  
18 apply at Eastern Creek, for instance?

19 A. Not the - like standard operating protocols and?

20  
21 Q. Yes.

22 A. No.

23  
24 Q. You are not in a position, therefore, to comment upon  
25 the adequacy of Eastern Creek procedures in terms of  
26 containing a virus such as this?

27 A. No.

28  
29 Q. Are you able to say generally, because of the outbreak  
30 of the virus, that they must have been inadequate, clearly?

31 A. I think as far as I'm aware - I'm aware, say, of the  
32 duration of the post-arrival quarantine and the  
33 pre-embarkation quarantine periods, those sorts of things,  
34 in very general terms, about the requirements for health  
35 certificates and stuff like that. But, yes, by definition,  
36 we had horses with influenza in the quarantine station. In  
37 theory, the protocols were designed to prevent that from  
38 happening.

39  
40 Q. In theory. Is it proposed that you will, when you  
41 return, be able to be in a position hopefully to comment  
42 upon the adequacy of the protocols and the way they were  
43 managed?

44 A. Yes, I think so.

45  
46 MR MacSPORRAN: Thank you.

47

1 MR CHARRINGTON: May it please the Commission, we also  
2 will reserve, especially in light of the last few answers,  
3 the right to cross-examine further on those issues. I have  
4 two questions.

5  
6 <CROSS-EXAMINATION BY MR CHARRINGTON:  
7

8 MR CHARRINGTON: Q. Dr Gilkerson, you mentioned the use  
9 of soap or disinfectants as adverse factors to the survival  
10 of the virus. For those involved with the transportation  
11 of horses that are infected or otherwise physically dealing  
12 with them, do those products merely reduce the risk or the  
13 chance that the virus will survive, or do they ensure its  
14 destruction?

15 A. Sorry, when you say "for those people dealing with the  
16 transportation", you mean grooms on the plane or?  
17

18 Q. Transport companies, farriers dealing with infected  
19 horses - if they have physical contact with an infected  
20 horse and they then utilise a procedure involving soap or  
21 disinfectants, will that ensure and guarantee the  
22 eradication?

23 A. I think if you look at the procedures and protocols  
24 that the Department of Primary Industries has recommended  
25 since this outbreak occurred, they state that if you are  
26 dealing with animals that are known infected animals, you  
27 need to shower and change clothes. Veterinarians, for  
28 instance, they recommend not seeing another horse for a  
29 period of time. I would have to look up what the period of  
30 time was, but I'm pretty sure it's 24 hours. I'd have to  
31 look that up. There was a recommendation from the  
32 Department of Primary Industries, and that was in one of  
33 the efforts to control the outbreak, to prevent people  
34 inadvertently spreading the virus.  
35

36 But, yes, showering, changing your clothes, washing  
37 your clothes and making sure they're thoroughly dry before  
38 you wear them again, yes. It's quite a fragile virus.  
39 Those sorts of procedures would certainly minimise the  
40 chances  
41

42 Q. So minimise but not ensure destruction of the virus?

43 A. Depending on what disinfectant you were going to use,  
44 then some of those disinfectants are certainly very  
45 effective and would ensure the destruction of the virus.  
46

47 If you're talking about on people's persons, then you

1 are limited in the type of disinfectant that you can use,  
2 so you can't go spraying people with some of these  
3 disinfectants because they're poisonous. But, in general,  
4 having a shower, changing clothes, making sure your  
5 equipment is disinfected - they're the principles behind  
6 reducing the risk.

7  
8 Q. But on a vehicle, for example, that an infected horse  
9 had been transported in, you could use the type of  
10 disinfectant that would ensure destruction of the virus?

11 A. That's right, and as well, the envelope makes the  
12 virus very labile, so changes in temperature, so steam  
13 cleaning, for instance, would certainly be effective as  
14 well, so a combination of high temperature, high pressure  
15 cleaning and disinfectants would be very effective, yes.

16  
17 Q. Dr Gilkerson, one other question. You were addressing  
18 the issue of false positives in the various testing methods  
19 that are used to identify equine influenza. Of the methods  
20 that you referred to, is there any combination of testing  
21 methods that could be used to ensure complete accuracy?

22 A. I think the sensitivity and the specificity of an  
23 individual diagnostic test is a property of the test. They  
24 will routinely turn up a false positive at one in however  
25 many, depending on the sensitivity and specificity. So on  
26 the sensitivity they will turn up a false negative in one  
27 in however many samples. Certainly, combinations of  
28 different diagnostic tests will improve the sensitivity and  
29 specificity, but as to what combination of different  
30 diagnostic tests will provide you with 100 per cent  
31 sensitivity and 100 per cent specificity, I don't think  
32 anyone knows that.

33  
34 MR CHARRINGTON: Thank you, Doctor. Thank you,  
35 Mr Commissioner.

36  
37 MR RYAN: Commissioner, in the back row, I have spoken to  
38 all my learned friends, apart from Mr Skinner, and subject  
39 to his convenience it was thought I might go first for  
40 Coolmore.

41  
42 THE COMMISSIONER: Yes, Mr Ryan.

43  
44 <EXAMINATION BY MR RYAN:

45  
46 MR RYAN: Q. Can I ask you a couple of questions first  
47 about the incubation period for this virus.

1 A. Yes.  
2  
3 Q. You have told us in your report and in answer to  
4 questions from Mr Meagher this morning that the received  
5 view is that the incubation period is between one and  
6 five days; that's correct?  
7 A. That's right.  
8  
9 Q. And in relation to the incubation period of that  
10 virus, that's a relatively short period for a virus, isn't  
11 it?  
12 A. Yes.  
13  
14 Q. For an equine virus?  
15 A. It's a reasonably consistent incubation period for an  
16 influenza virus, yes.  
17  
18 Q. And during the incubation period, you told us that the  
19 horses begin to excrete the virus.  
20 A. Yes.  
21  
22 Q. Is it correct that the maximum or peak virus shedding  
23 occurs within the first 24 to 48 hours of fever being  
24 present?  
25 A. In experimental challenge studies, yes.  
26  
27 Q. And is it also correct that the excretion of viruses  
28 by an infected horse usually lasts for about four to  
29 five days after clinical signs appear?  
30 A. Yes.  
31  
32 Q. Can I take you to the question of the classification  
33 of strains, that is, the two lineages of this virus - the  
34 European and American lineages. Is that a correct  
35 description generally?  
36 A. Yes.  
37  
38 Q. You have taken the Commission this morning to the  
39 pathogenic tree and discussed the split between the two  
40 types of virus.  
41 A. Yes, the phylogenetic tree.  
42  
43 Q. In your draft report on Friday you didn't say anything  
44 about the strain or isolate that was likely to be found in  
45 the Australian outbreak.  
46 A. Yes.  
47

1 Q. That's correct?  
2 A. That's right.  
3  
4 Q. But you have told the Commissioner this morning and in  
5 your final report that it appears to be the Wisconsin 2003  
6 strain.  
7 A. That's right.  
8  
9 Q. You know, don't you, that the OIE has said that the  
10 Australian strain has a 99.6 per cent similarity at the  
11 amino acid level to the Wisconsin 2003 strain.  
12 A. That's right.  
13  
14 Q. So it's highly likely, isn't it, that this is the  
15 Wisconsin strain that we're trying to cope with in  
16 Australia?  
17 A. It's certainly a virus that's antigenically and  
18 phylogenically closely related to Wisconsin 03, that's  
19 right.  
20  
21 Q. There's nothing to suggest, is there, that this virus  
22 that we are facing in this country has gone through the  
23 sort of viral or RNA re-assortment process that you spoke  
24 of earlier today?  
25 A. Re-assortment process? You mean antigenic shift?  
26  
27 Q. Yes, where there's a dramatic shift due to the  
28 combination of the RNA of two different strains of the  
29 virus  
30 A. No, there's categoric evidence that that has not  
31 happened.  
32  
33 Q. You are aware that, according to the reports in  
34 academic writing and, indeed, in the media generally, there  
35 has never been a report of an outbreak of the Wisconsin  
36 strain of this virus in the Republic of Ireland?  
37 A. It's my understanding that in Ireland it's not  
38 obligatory for people to report cases of influenza and,  
39 therefore, the fact that the Irish Equine Centre has not  
40 detected the virus is not the same as saying that it has  
41 never happened.  
42  
43 Q. Yes, you gave that evidence this morning, but I've  
44 asked you a slightly different question.  
45 A. Oh, sorry.  
46  
47 Q. It is the case, isn't it, that there is no academic

1 writing that one can find, of which you are aware, that  
2 says there has ever been an outbreak of the Wisconsin  
3 strain in Ireland, both the Republic and Northern Ireland?  
4 A. That's right, to my understanding.  
5  
6 Q. And you are not aware of any media statements to that  
7 effect, are you, that there has been such an outbreak?  
8 A. No, that's right  
9  
10 Q. You are aware, are you not, that equine virologists in  
11 Ireland have made public statements that the Wisconsin  
12 strain has never been found in Ireland?  
13 A. Once again, if you don't look for something, it's not  
14 surprising if you don't find it.  
15  
16 Q. You told the Commission this morning that the  
17 introduction of this virus in New South Wales infected  
18 40,000 horses within nine weeks. Do you think that if the  
19 virus was present in Ireland, one might have some reports  
20 of outbreak of equine influenza of the Wisconsin strain?  
21 A. As I said, you don't have to mandatorily report  
22 influenza in Ireland. I see what you're saying, it's  
23 unlikely, but --  
24  
25 Q. It's more than - I am sorry, I cut you off.  
26 A. It's not impossible. To make the statement that it  
27 has never happened is a very strong statement. To make the  
28 statement "I have never detected" is a much more accurate  
29 statement to make. So that I'm happy to say that I've not  
30 read reports that it has been detected, and I'm happy for  
31 other people to make the statement that it has never  
32 happened, but I would question the evidence upon which they  
33 make that statement. So to say that I have never seen  
34 something is not the same as to say that it has never  
35 occurred.  
36  
37 Q. But would you accept as a matter of likelihood or  
38 probability that if there has not been an outbreak  
39 involving a large number of horses in Ireland with this  
40 virus that has been reported, such a thing has not  
41 occurred?  
42 A. I think if you take a step back and look at the type  
43 of clinical disease caused by viruses in that Wisconsin 03  
44 clade, it's a very mild strain of virus compared to, say,  
45 with Suffolk 89 or those other viruses. So in the grand  
46 scheme of equine influenza it causes a mild disease  
47 compared to some of these higher pathogenic strains of

1 virus which, in an environment where you are not required  
2 to report and horses don't seem to get as sick and they  
3 seem to recover quite quickly and they don't have that  
4 reporting requirement, then it's not altogether  
5 unsurprising that it hasn't been reported.  
6

7 Q. But you are not seriously suggesting that there has  
8 been some secret outbreak of Wisconsin 2003 in Ireland, are  
9 you?

10 A. No, I'm not, I'm not seriously suggesting that at all.  
11

12 Q. You're a practical vet as well as an academic, aren't  
13 you?

14 A. Well, I'm a veterinarian, yes.  
15

16 Q. You are a man of practical affairs, you make practical  
17 judgments in the practice of being a veterinary surgeon?

18 A. I work at the University of Melbourne. Most of my  
19 practitioner colleagues would feel that I don't do very  
20 much practical at all.  
21

22 Q. You have expressed a view, haven't you, outside the  
23 Commission, that it appears, in your view, that someone who  
24 had contact with horses imported from Japan between 3 and  
25 8 August became contaminated and subsequently became the  
26 inadvertent source of transfer of this virus to horses at  
27 Centennial Park; you have said that, haven't you?

28 A. Possibly.  
29

30 Q. I suggest to you that you said that publicly in your  
31 role as president of the subgroup of veterinarians dealing  
32 with horses.

33 A. Possibly.  
34

35 Q. Well, do you have any doubt about it?

36 A. Can you tell me when I said it?  
37

38 Q. Well, did you say it in a media release in late August  
39 this year?

40 A. Possibly.  
41

42 Q. And it is the case, isn't it, that your view, at least  
43 in August, was that it was more likely than not that  
44 someone who had had contact with a horse imported from  
45 Japan was the inadvertent transmitting agent of the virus  
46 to horses at Centennial Park; that was your view?  
47

1 THE COMMISSIONER: Mr Ryan, do you have a copy of the  
2 document? Because it would be fairer to put it to the  
3 witness and let him read it. You are presumably going on  
4 something you have read.  
5  
6 MR RYAN: I don't have a clean copy with me at the moment,  
7 Commissioner. Perhaps we will come back to it. I won't  
8 press any more about that particular statement,  
9 Commissioner.  
10  
11 THE COMMISSIONER: I think he should have an opportunity  
12 of seeing it.  
13  
14 MR RYAN: Perhaps we could provide one after the  
15 adjournment. I don't have a clean copy to show him.  
16  
17 THE COMMISSIONER: All right. Thank you.  
18  
19 MR RYAN: Q. And turning to the position in Japan,  
20 Dr Gilkerson, you know, don't you, that the diagnosis or  
21 analysis of the virus in the Japanese outbreak points to it  
22 being the Wisconsin 2003 virus?  
23 A. I think the preliminary data suggests that that's  
24 right, yes. I haven't had any official report to that  
25 effect, and certainly there have been no published papers,  
26 or anything like that, but that's my understanding.  
27  
28 Q. Have you looked online for, for example, reports by  
29 the OIE about the nature of the virus that has been found  
30 in Japan?  
31 A. Not to date, no.  
32  
33 Q. Now, can I turn to another topic, subject to coming  
34 back to the point that the Commissioner said about trying  
35 to find that article for you, and that is the duration of  
36 the virus on equipment and material. Correct me if I am  
37 wrong, but when one talks about the duration of viruses on  
38 such material, the material is called a fomite?  
39 A. That's right.  
40  
41 Q. In your report, you don't actually discuss the  
42 question of a fomite in great detail, do you?  
43 A. No.  
44  
45 Q. Although you do talk in your report about mechanical  
46 ways in which the virus can be transmitted.  
47 A. Yes.

1  
2 Q. You told the Commissioner this morning in relation to  
3 survival of the virus on material or equipment that, at  
4 best, it would survive 12 hours.  
5 A. That's right.  
6  
7 Q. And you answered a question earlier today from one of  
8 my colleagues at the Bar table, saying that the virus was  
9 labile, which means unstable, as I understand it?  
10 A. That's right.  
11  
12 Q. The virus that the Commissioner is concerned with, the  
13 equine influenza virus, is primarily spread through  
14 aerosols?  
15 A. Yes.  
16  
17 Q. By coughing and sneezing?  
18 A. That's right.  
19  
20 Q. So it is, if you like, a secondary manner in which the  
21 virus can be transferred that it can be by contact, for  
22 example, with nasal discharge?  
23 A. Yes.  
24  
25 Q. Or on fomites?  
26 A. Yes.  
27  
28 Q. Is the mechanical transfer you speak of transmission  
29 from a fomite to an uninfected horse?  
30 A. Yes.  
31  
32 Q. The way in which a horse becomes infected with equine  
33 influenza is to inhale the virus?  
34 A. That's right.  
35  
36 Q. It could, of course, enter through an open wound or by  
37 injection?  
38 A. Both of those would be unlikely.  
39  
40 Q. Yes, the primary method is by respiration?  
41 A. That's right.  
42  
43 Q. So that when a horse who acquires equine influenza  
44 from a fomite so acquires it, it is inhaling the virus from  
45 the equipment or material upon which one would find the  
46 virus?  
47 A. That's right. Well, I mean, it could be coming into

1 contact with the nasal mucosa, if you like. It doesn't  
2 necessarily have to inhale it deep into its lungs. It can  
3 be in the upper respiratory system as well being infected.  
4  
5 Q. You told the Commissioner that the equine influenza  
6 virus, being an enveloped virus, doesn't remain infective  
7 for prolonged periods outside the host.  
8 A. That's right.  
9  
10 Q. It doesn't just sit around living on a piece of  
11 equipment for any prolonged period, does it?  
12 A. No, that's right.  
13  
14 Q. It can only reproduce within a cell?  
15 A. That's right.  
16  
17 Q. And, indeed, this virus, the equine influenza virus,  
18 is labile and fragile even in what might be described as  
19 favourable conditions for viruses?  
20 A. Sorry, I don't - what do you mean "favourable  
21 conditions"?  
22  
23 Q. Well, let me withdraw that and put it this way: you  
24 have given the Commission evidence of the sort of thing  
25 that can accelerate the degradation of the virus and its  
26 infectivity.  
27 A. Yes.  
28  
29 Q. Sunlight, heat.  
30 A. That's right.  
31  
32 Q. But even in conditions where those active factors are  
33 not present, so there's no particular sunshine, no  
34 particular heat, it does not live very long, does it,  
35 outside of the virus cell?  
36 A. No, that's right, it's an envelope virus. They're  
37 quite fragile in the environment in general.  
38  
39 Q. The time in which a virus will live on a fomite  
40 depends in part, does it not, on the type of surface that  
41 we're talking about on the fomite?  
42 A. In terms of a stainless steel table top versus cloth  
43 or something, yes, that's right.  
44  
45 Q. And it depends in part, therefore, on whether the  
46 material is porous or non-porous?  
47 A. Yes, I would think so.

1  
2 Q. And the harder and less porous a surface, the longer  
3 the virus can live on it as a fomite?  
4 A. The only data I'm aware of on that was from the  
5 AUSVETPLAN talking about how long the virus would survive  
6 on material versus how long it would survive on stainless  
7 steel tabletops and that sort of thing, so whether that's a  
8 factor of how porous the material is or not, I don't have  
9 any evidence to say that that was the contributing factor.  
10 But, yes, it certainly seemed to survive for longer in that  
11 study on the stainless steel bench top than it did on the  
12 material.  
13  
14 Q. As a general proposition, Dr Gilkerson, would you  
15 agree that working out how long a virus will last on a  
16 particular piece of equipment or material is a complicated  
17 question?  
18 A. Yes, it is.  
19  
20 Q. And it's not a question supported by, in the main, any  
21 direct experimental evidence or empirical evidence that you  
22 can turn to to find out the answer to that question?  
23 A. The study I was referring to was performed by Yadav in  
24 1994, I think, and his co-workers there, Professor Uppal  
25 and others. That was the data that was the only available  
26 data, and that was the data that was included in the  
27 AUSVETPLAN.  
28  
29 Q. Does that data suggest that the virus can only survive  
30 on human skin without washing or treatment by disinfectants  
31 for a period of some hours?  
32 A. That's right.  
33  
34 Q. And the study also suggests, does it not, that in  
35 clothing, normal clothing, a relatively porous surface, the  
36 virus might live to up to about half a day?  
37 A. That's right.  
38  
39 Q. Without there being some other anti-viral factor, such  
40 as direct sunlight, heat and the like?  
41 A. That's right.  
42  
43 Q. And you have told the Commissioner, I think, this  
44 morning, that the virus will not survive in conditions of  
45 high humidity.  
46 A. Yes.  
47

1 Q. Dr Gilkerson, obviously I am not challenging your  
2 general expertise, but it's the fact, isn't it, that you  
3 have specialised in the equine herpesvirus?  
4 A. Yes, the term "specialised" carries connotations with  
5 registration as a veterinarian, so I'm not a specialist in  
6 that area. My research focus since I graduated as a  
7 veterinarian has been primarily in the field of equine  
8 herpesvirus research and rhodococcus equi, which is a  
9 bacterial pathogen of foals.  
10  
11 Q. You wrote your PhD thesis on the equine herpesvirus?  
12 A. That's right.  
13  
14 Q. If one goes to your Melbourne University website you  
15 have a list of those publications?  
16 A. That's right.  
17  
18 Q. I don't think you claim authorship of any articles  
19 particularly on the equine influenza virus?  
20 A. No, that's right. As an Australian equine infectious  
21 disease researcher until 24 August, it was very difficult  
22 to do influenza research. In fact, you were unable to do  
23 it unless you worked at the Australian Animal Health  
24 Laboratory at Geelong, because that is the biosecurity  
25 facility.  
26  
27 Q. One last question. You made reference earlier on to  
28 the horse Encosta de Lago. Do you recall that?  
29 A. Mmm-hmm.  
30  
31 Q. Are you making an assumption whether Encosta de Lago  
32 did in fact test positive to having equine influenza at any  
33 particular stage?  
34 A. No, I was referring to the serological data which  
35 showed that he had very low levels of antibody below the  
36 level of detectability of in the HI assay from the AAHL in  
37 the serum sample that was collected on 8 August and that  
38 was logged in to the Australian serum bank.  
39  
40 Q. That would suggest that Encosta de Lago did not have  
41 equine influenza, would it not?  
42 A. That would suggest that he had the antibody levels  
43 below the level of detectability in the serum sample  
44 collected on 8 August, and then subsequently he has  
45 seroconverted. That's what I was saying before about  
46 serology; it doesn't tell you what's happening today. It  
47 will give you that period of time if you take the two

1 samples, so that you wouldn't be able to say that he did  
2 not have influenza on the 8th, only that he had low levels  
3 of antibody, or undetectable levels of antibody.  
4

5 I think he was also swabbed and they tested that with  
6 the PCR and that was negative, but I'd have to check on  
7 that.  
8

9 Q. So just to clarify where we are, though, in giving the  
10 answers you did to my learned friend Mr Meagher earlier,  
11 were you assuming that Encosta de Lago, either in August  
12 2007 or subsequently, had actually had equine influenza or  
13 not?

14 A. Subsequently, yes, he has.  
15

16 Q. And you are sure of that, are you?

17 A. I don't have the data here in front of me of what the  
18 actual titres were, but I was - yes, I'd have to check, if  
19 that's all right.  
20

21 MR RYAN: I have nothing further, Mr Commissioner, subject  
22 to getting out that reference.  
23

24 THE COMMISSIONER: Thank you, Mr Ryan. Anybody else?  
25

26 <EXAMINATION BY MR SKINNER:  
27

28 MR SKINNER: Q. You were asked some questions by Mr Ryan  
29 just now about Ireland. You remember those?

30 A. Yes.  
31

32 Q. The horse population in Ireland is a vaccinated horse  
33 population, is it not?

34 A. There are vaccines there that are commercially  
35 available. Whether people choose to use them or not is at  
36 the discretion of the person, yes.  
37

38 Q. That's in distinction to Australia, which generally is  
39 a naive horse population but for horses which come in from  
40 outside which have been vaccinated?

41 A. That's right. Prior to this outbreak in Australia, it  
42 was actually illegal, and still is, illegal to import  
43 equine influenza vaccines for use in your own horses.  
44

45 Q. Do you understand the term "fulminating", a  
46 fulminating outbreak?

47 A. In general terms.

1  
2 Q. Would that be a fair description of what happened here  
3 in Australia a few months ago?  
4 A. It was an explosive outbreak, yes, that's right.  
5  
6 Q. "Fulminating" means explosive and --  
7 A. Disseminated, yes.  
8  
9 Q. -- quickly transmitted. The figure of 40,000 horses  
10 infected in a period of a few weeks was put to you. That's  
11 generally what happened; is that correct?  
12 A. That's right, in New South Wales.  
13  
14 Q. But if Australia had a horse population like that of  
15 Ireland, in which one could assume there is a fairly large  
16 use of commercial vaccinations, would a similar outbreak  
17 have occurred?  
18 A. No, not in my opinion.  
19  
20 MR SKINNER: Thank you.  
21  
22 MR DICK: Mr Commissioner, I appear for Darley Australia.  
23 I would seek leave to defer cross-examination of this  
24 witness, particularly until he has had an opportunity to  
25 review the material that he refers to in paragraph 78 of  
26 his report, subject to one matter, Mr Commissioner. If  
27 the August press release that Mr Ryan has referred to is to  
28 be the subject of further examination of this witness or  
29 cross-examination, I would also seek leave to have an  
30 opportunity to ask questions that might arise at a certain  
31 time.  
32  
33 THE COMMISSIONER: Anybody else?  
34  
35 MR RICH: Thank you, Mr Commissioner, Rich for the  
36 Australian Racing Board and others.  
37  
38 <EXAMINATION BY MR RICH:  
39  
40 MR RICH: Q. Dr Gilkerson, I would like to take you back  
41 briefly to this issue of incubation period and some  
42 questions around that. There has been some evidence this  
43 morning about the stallion Encosta de Lago showing clinical  
44 signs of infection on 17 August within the Eastern Creek  
45 Station. That's your understanding, is it?  
46 A. That's my understanding, yes.  
47

1 Q. The stallion had been at Eastern Creek, is it correct,  
2 since 7 August, so far as you know?  
3 A. That's right.  
4  
5 Q. So that having regard to the incubation period of  
6 five days, two possibilities seem to present themselves:  
7 one is that Encosta de Lago was infected with the virus  
8 during post-arrival quarantine at Eastern Creek - that's  
9 one possibility?  
10 A. That's right, yes.  
11  
12 Q. And is the second possibility that the stallion had  
13 been infected with the virus prior to arrival at Eastern  
14 Creek but no clinical signs of the virus were detected  
15 until 17 August, that is, some ten days after arrival?  
16 A. It's possible, but I think the low levels of antibody  
17 on the sample taken on the 8th make that less likely.  
18  
19 Q. I see, so of those two possibilities, the most likely  
20 is that, in your opinion, the stallion was infected with  
21 the virus at Eastern Creek?  
22 A. That's right.  
23  
24 Q. Could I explore one subject with you relative to the  
25 incubation period and then the onset of clinical signs.  
26 How likely is it that a horse would be infected with the  
27 virus but would not exhibit clinical signs of the virus for  
28 a period of, say, five days after the end of the incubation  
29 period, and then start exhibiting clinical signs?  
30  
31 Perhaps to explain, I'm seeking to go back to these  
32 two possibilities and which is the more likely. In this  
33 particular stallion, so far as we know, showed the first  
34 detected signs on 17 August; the incubation period is  
35 five days; that would tend to suggest an infection on  
36 12 August, or perhaps after that date. Is it at all  
37 likely, as it were, that infection occurred prior to  
38 12 August; the incubation period lapsed; there were no  
39 clinical signs detected; but then, all of a sudden on  
40 17 August, clinical signs emerged which were detected?  
41 A. That would be unlikely as well. I think it's  
42 important, when you're thinking about the incubation  
43 period - I mean, there have been, in this current outbreak,  
44 known contacts with infected premises and the incubation  
45 period between the last known contact with infected animals  
46 and when the first clinical signs of disease appeared has  
47 been in excess of five days, so six days, sort of thing.

1 So the incubation period is not something that's regulated.  
2 It's just, this is the accepted incubation period that the  
3 OIE Terrestrial Animal Health Code has.  
4  
5 But as to whether a horse could incubate the  
6 infection, not show clinical signs for a considerable  
7 period of time and then go on to show clinical signs, that  
8 would be unlikely. It's not impossible, but that would be  
9 unlikely  
10  
11 Q. And that answer would tend to suggest, again, wouldn't  
12 it, that the proposition that this particular stallion was  
13 infected prior to arrival at Eastern Creek is unlikely?  
14 A. Yes.  
15  
16 Q. Could I turn to the question of incubation period and  
17 infective period. Am I correct in understanding that the  
18 infective period is the period during which one horse is  
19 able to transmit the virus to another horse?  
20 A. That's right, yes, the period where you're detecting  
21 or able to detect infectious virus from clinical samples.  
22  
23 Q. Leaving aside the question of detection, is that the  
24 period during which one horse is, as it were, contagious?  
25 A. That's right.  
26  
27 Q. Do the incubation and infective periods overlap?  
28 A. A little, yes.  
29  
30 Q. A little?  
31 A. Yes. So before the animal is starting to show obvious  
32 clinical signs, there may be infectious virus being shed  
33 from the respiratory tract and the animal may be able to  
34 infect other horses.  
35  
36 Q. You have given evidence in your statement that the  
37 infective period is 14 days, or at least that's the  
38 accepted period.  
39 A. That's right.  
40  
41 Q. And the accepted maximum incubation period is  
42 five days.  
43 A. That's right.  
44  
45 Q. So am I right in thinking that if Encosta de Lago was  
46 infected by another horse, that horse itself, that is, the  
47 horse which infected Encosta de Lago, must have been

1 infected less than 19 days before it transmitted the virus  
2 to Encosta de Lago?  
3 A. Yes.  
4  
5 MR RICH: Thank you. I have nothing further,  
6 Mr Commissioner.  
7  
8 MR CHESHIRE: Commissioner, Cheshire for IRT Australia.  
9 There are two matters, if I may.  
10  
11 <EXAMINATION BY MR CHESHIRE:  
12  
13 MR CHESHIRE: Q. Dr Gilkerson, you said at page 70,  
14 line 42 that you were not aware of any evidence that links  
15 the Maitland event with the quarantine station. I just  
16 want to be clear what evidence you have been provided with  
17 in relation to the Maitland event. Have you been provided,  
18 for instance, with a list of horses from the Maitland  
19 event?  
20 A. Yes.  
21  
22 Q. And the details of their movements?  
23 A. Some. That information is still currently being  
24 acquired, as I understand it.  
25  
26 Q. So at this stage, would you say that you have  
27 satisfied yourself as to the horses at the Maitland event  
28 and their physical movements and the physical movements of  
29 the vets, farriers, grooms, et cetera, associated with  
30 them?  
31 A. I think those investigations are still ongoing.  
32  
33 Q. When you say "those investigations are ongoing", what  
34 do you mean by that - by whom?  
35 A. By the investigators involved with the inquiry.  
36  
37 Q. So at this stage, have you carried out a preliminary  
38 analysis of the data or have you simply relied upon what  
39 the Commission and those associated with it have told you  
40 as to their current impressions and conclusions?  
41 A. I have had a look at what data - it has been a while  
42 since I had a look at the data, so I know that the  
43 investigations have been going on over the past few weeks,  
44 but it has been a couple of weeks since I have looked at  
45 the data from the Maitland event.  
46  
47 Q. When you say "a couple of weeks", is that roughly two

1 weeks or do you mean possibly more?  
2 A. No, the next thing on my list to do is to go over the  
3 data from the Maitland event.  
4  
5 Q. And are you expecting that there is more data that has  
6 been obtained since you last looked at it?  
7 A. Yes.  
8  
9 Q. The other matter which is related to that in the same  
10 piece of transcript, slightly earlier - you talked about  
11 the wind-borne spread out of Eastern Creek creek or the  
12 possibility of a wind-borne spread.  
13 A. Yes.  
14  
15 Q. Have you carried out any analysis or seen any data of  
16 the properties that surround Eastern Creek and its horse  
17 population?  
18 A. I haven't carried out any analysis from the properties  
19 around Eastern Creek. I know that there was one infected  
20 premises, at least one infected premises that was quite  
21 close by, but it became an infected premises later into the  
22 outbreak, and I have been told, but I have not verified,  
23 what the meteorological data, wind direction, those sorts  
24 of things - I have been told that that was inconsistent  
25 with that particular premises being infected.  
26  
27 Q. Was that presented to you as a conclusion --  
28 A. Yes.  
29  
30 Q. So the original data --  
31 A. I have not seen that.  
32  
33 Q. You have not seen that?  
34 A. No.  
35  
36 Q. Is it anticipated or do you anticipate that you will  
37 be provided with that data and that you will be analysing  
38 it?  
39 A. If you would like to ask me questions about it, I'll  
40 go and have a look.  
41  
42 Q. So the answer to my question is, yes, you expect to  
43 see it?  
44 A. I can, yes.  
45  
46 Q. Well, are you currently expecting to see it or not?  
47 A. It wasn't on my list of things to do.

1  
2 MR CHESHIRE: Thank you very much. Thank you,  
3 Commissioner.  
4  
5 THE COMMISSIONER: No other people at the Bar table wish  
6 to ask questions?  
7  
8 MR DONALDSON: No, thank you.  
9  
10 THE COMMISSIONER: Before you re-examine, Mr Meagher,  
11 I want to ask a couple of questions.  
12  
13 Q. It is my impression, and you may or may not know  
14 this - and you can correct it if it is wrong - that the  
15 temporary importation of animals, especially male animals  
16 for breeding purposes, is now largely confined to  
17 thoroughbred horses and breeding is not initiated by  
18 artificial insemination.  
19 A. That's right.  
20  
21 Q. So cattle and sheep and things of that kind are  
22 generally now artificially inseminated; is that right, so  
23 far as you know?  
24 A. As far as I know, yes. There's a lot more artificial  
25 insemination in those species than in horses, and in horses  
26 what artificial breeding is conducted is conducted outside  
27 of the thoroughbred breed.  
28  
29 Q. Do you know why that's so, why the thoroughbred  
30 industry does this? Is it commercial reasons or other  
31 reasons?  
32 A. I think it's a combination of commercial reasons and  
33 the international stud book, for their own reasons, won't  
34 recognise the progeny of thoroughbreds that are born as  
35 a result of artificial breeding.  
36  
37 Q. Would it be able to test the integrity of the breeding  
38 process these days --  
39 A. Absolutely.  
40  
41 Q. -- with DNA, absolutely accurately?  
42 A. Absolutely. The Australian thoroughbred herd, the  
43 foals born in Australia, are already DNA tested for  
44 parentage.  
45  
46 Q. So there's no question these days about the integrity  
47 of the stallion or of the parents, because DNA can

1 establish that?  
2 A. That's right. The technology exists and is used in  
3 Australia to verify the parentage of foals.  
4  
5 Q. Is it possible to undertake all tests that may be  
6 necessary on semen to ensure that it's not infective in any  
7 way?  
8 A. Yes, if we're importing semen, there are certain  
9 diseases that you would be testing for, contagious equine  
10 metritis, equine viral arteritis, those sorts of diseases,  
11 and their testing is done as a routine.  
12  
13 Q. So if artificial insemination were used, then the  
14 possibility of the transmission of any infected diseases  
15 would be almost non-existent?  
16 A. That would be a distinct advantage of using artificial  
17 breeding, yes.  
18  
19 THE COMMISSIONER: Before Mr Meagher re-examines, does  
20 anybody want to ask a question arising out of what I have  
21 just asked Dr Gilkerson? All right. Thank you,  
22 Mr Meagher.  
23  
24 <EXAMINATION BY MR MEAGHER:  
25  
26 MR MEAGHER: Q. Doctor you referred in a couple of  
27 places in your evidence to the AUSVETPLAN.  
28 A. Yes.  
29  
30 Q. Just so that people know what you're talking about,  
31 could you tell us what the AUSVETPLAN is?  
32 A. The Australian Veterinary Emergency Plan. They're a  
33 series of contingency plans, so for various exotic  
34 diseases, a group of people have written the various  
35 AUSVETPLANS for equine influenza or Newcastle disease or  
36 avian influenza, those sorts of things.  
37  
38 Q. Do you remember when the AUSVETPLAN for equine  
39 influenza was last written?  
40 A. Yes. I was part of the working group that put it  
41 together and that went through revisions late last year and  
42 this year, and the version that we've been working off is  
43 the draft of the 2007 version that we were looking at. It  
44 was a draft for approval at Animal Health Australia when  
45 the outbreak occurred.  
46  
47 MR MEAGHER: Thank you.

1  
2 THE COMMISSIONER: There was one further question, I'm  
3 sorry.  
4  
5 Q. You were asked about your experience, Dr Gilkerson.  
6 Have you spent time at the laboratories at Newmarket  
7 yourself?  
8 A. I have visited the labs at Newmarket and spent a  
9 couple of days there over the past couple of years, and  
10 I spent two weeks at the Gluck Centre, in Lexington, in May  
11 this year.  
12  
13 THE COMMISSIONER: Mr Ryan, I am anxious to allow  
14 Dr Gilkerson to get away. There are certainly reasons why  
15 he would want to do that, to return to Melbourne. I wonder  
16 whether there is some way of dealing with that without  
17 keeping him.  
18  
19 MR RYAN: I might be able to ask a couple more questions  
20 with your leave?  
21  
22 THE REFEREE: Yes.  
23  
24 <EXAMINATION BY MR RYAN:  
25  
26 MR RYAN: Q. Was the material I put to you before  
27 something that you said in an interview which was reported  
28 online in something called the Tasmanian Times?  
29 A. It could very well have been. In my role as the  
30 president of Equine Veterinarians Australia, I received  
31 requests for interview from - I think the media person at  
32 the veterinary faculty in Melbourne said I had done in  
33 excess of 80 interviews, so I may very well have spoken to  
34 someone at the Tasmanian Times. At present, I have no  
35 record of that. I have a record in my book, but --  
36  
37 Q. You have no recollection of actually saying that.  
38 I want to make it clear that I am not suggesting that you  
39 are quoted in that article word for word, but that  
40 sentiment is expressed after quotes from you. Do you have  
41 a recollection one way or the other of making the  
42 suggestion that as a practical matter it seemed to you,  
43 in August, that the contamination had come in the way we  
44 talked about before?  
45 A. I don't recall, to be honest. I did so many  
46 interviews. I really have no idea, out of context, what  
47 I did or didn't say. Yes, sorry.

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Q. Could I generalise and move away from whether you did or didn't say that. Do you recall now whether, in that period of giving those interviews, you actually had that view, even if it was only a working hypothesis, that the most likely explanation was escape of the virus through someone coming into contact with an infected horse at Eastern Creek Quarantine Station and then going to Centennial Park?

A. At the stage that you referred to, that may very well have been what I thought. If it was early in the outbreak, though, that would have been before the significance of that Maitland Carroll's Ranch event became apparent. If indeed that is what I said - and I have no reason to doubt that I said it - subsequently, I think, the epidemiological importance of the Maitland event has become very apparent.

So rather than the virus going from Eastern Creek to Centennial Park, I think the more likely - all of the trace-backs trace to Carroll's Ranch, even the Centennial Park. Even though they were the first - like I was talking about before, with the index case, the Centennial Park horses were the index case outside of the quarantine station but that doesn't mean they were the first horses infected. It was much more likely epidemiologically that the Carroll's Ranch event was where the first infected horses co-mingled with other horses from the general population.

MR RYAN: We wouldn't be seeking to take that further or criticise Dr Gilkerson on that basis, Commissioner.

THE COMMISSIONER: Dr Gilkerson will be back later, anyway. Nothing further of Dr Gilkerson?

MR MEAGHER: No, Commissioner, if he could be excused for the moment.

THE COMMISSIONER: Dr Gilkerson, as you have gathered, we will have to ask you to come back later. Thank you for your assistance and you are excused now. We will adjourn, then, until 2 o'clock.

<THE WITNESS WITHDREW

LUNCHEON ADJOURNMENT

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UPON RESUMPTION:

MR MEAGHER: Commissioner, the next witness is Jennifer Mary Gordon, who is an executive manager in the Australian Quarantine and Inspection Service.

<JENNIFER MARY GORDON, affirmed: [2pm]

MR MEAGHER: So that I can introduce a question of procedure, Ms Gordon has prepared a statement, or a statement has been prepared by the solicitors acting for the department. I am content to lead the statement, in the sense of tendering the statement and then to embark on questioning of Ms Gordon, on the understanding that Mr Robertson doesn't seek to lead any further evidence from her in the way of documents or what-have-you, which would supplement the written statement.

There would then be cross-examination by parties after I have finished questioning. Subject to what you say, Commissioner, it would be for the parties to sort out the order. It may be that Mr Robertson, in the case of this witness, should be the last to cross-examine, and then I would follow up when the parties have finished their cross-examination.

THE COMMISSIONER: Yes. Do you propose to lead the witness now, Mr Meagher?

MR MEAGHER: Yes, unless Mr Robertson indicates that he has some other material that he wishes to place before the Commission at this stage.

MR ROBERTSON: I don't, Commissioner. The system that has been adopted is that I think a draft of the statement was supplied to the Commission lawyers with a request that if anything seemed to be apparently missing, they let my solicitors know. I certainly don't have any documents that I wish to tender through this witness.

THE COMMISSIONER: Thank you. We will proceed as suggested by Mr Meagher.

<EXAMINATION BY MR MEAGHER:

MR MEAGHER: Q. Your full name is Jennifer Mary Gordon?  
A. Yes.

1  
2 Q. Your address?  
3 A. Edmund Barton Building, Barton, ACT.  
4  
5 Q. What is your current position with the Australian  
6 Quarantine and Inspection Service?  
7 A. I am an executive manager, quarantine.  
8  
9 Q. You have made a statement for the purpose of this  
10 inquiry which is dated 9 November 2007?  
11 A. I have.  
12  
13 Q. Are the contents of that statement true and correct?  
14 A. They are.  
15  
16 MR MEAGHER: I tender the statement.  
17  
18 Q. Could I ask you some questions about the structure of  
19 the Department of Agriculture, Fisheries and Forestry and  
20 then address the structure of the Australian Quarantine and  
21 Inspection Service.  
22 A. Yes.  
23  
24 Q. There are, within the department, different divisions;  
25 is that right?  
26 A. There are.  
27  
28 Q. AQIS is one such division?  
29 A. AQIS is one of the divisions.  
30  
31 Q. Another is the Product Integrity, Animal and Plant  
32 Health Division?  
33 A. Yes.  
34  
35 Q. Is Biosecurity Australia a division of the department?  
36 A. No, Biosecurity Australia is a prescribed agency  
37 within the department, within the portfolio.  
38  
39 Q. What does that mean, in lay terms?  
40 A. I'm not the best person to explain the position of  
41 Biosecurity Australia. It's not my responsibility.  
42  
43 Q. Do you say that, in your position, you have no reason  
44 to interact with Biosecurity Australia?  
45 A. As the executive manager, quarantine, I interact with  
46 Biosecurity Australia quite frequently in terms of seeking  
47 and accessing scientific advice on quarantine matters; but

1 in terms of the structure and the establishment of  
2 Biosecurity Australia, it's not something that I'm required  
3 to be involved in.  
4  
5 Q. You described it as a prescribed agency within the  
6 department. What did you mean?  
7 A. Biosecurity Australia, as I understand it, was  
8 established under separate arrangements from the other  
9 divisions within the department.  
10  
11 Q. Does that mean that it is independent, in some way,  
12 from the other divisions of the department?  
13 A. Yes, as I understand it.  
14  
15 Q. Who is the CEO of Biosecurity Australia responsible to  
16 within the department?  
17 A. As I understand it, the CEO of Biosecurity Australia,  
18 who is John Cahill, is responsible directly to the  
19 secretary of the department.  
20  
21 Q. Is there no line of responsibility between him and  
22 Mr Stephen Hunter, who is the deputy secretary and  
23 executive director of AQIS?  
24 A. Mr Hunter, as deputy secretary, has general oversight  
25 of those functions within the portfolio that go to  
26 quarantine issues and biosecurity issues, and Biosecurity  
27 Australia is one of the functional areas in the department  
28 that is responsible for scientific policy advice on  
29 quarantine matters.  
30  
31 THE COMMISSIONER: Q. Ms Gordon, when you say  
32 "prescribed", I assume that you mean prescribed by  
33 somebody.  
34 A. It is prescribed under a different provision for  
35 public service agencies, but I'm not able to give you the  
36 detail of that.  
37  
38 Q. But that's where we should look - under, what, the  
39 Public Service Act or where should we look?  
40 A. I am sorry, Commissioner, I can't give you the detail  
41 of exactly under what provisions it is prescribed.  
42 I haven't been involved in those matters.  
43  
44 MR MEAGHER: Q. Within the department, in its annual  
45 reports, it describes various outputs or services which the  
46 department provides. Are you familiar with that  
47 expression, "outputs"?

1 A. Yes.  
2  
3 Q. One of those outputs is product integrity, animal and  
4 plant health; is that right?  
5 A. As I understand it, yes.  
6  
7 Q. And another is quarantine and export services?  
8 A. Yes.  
9  
10 Q. Is it correct that some of the divisions or areas  
11 within the department contribute to more than one of these  
12 output groups?  
13 A. Yes. That's true.  
14  
15 Q. Is it correct, as you understand it, that AQIS is the  
16 division which delivers the quarantine and export services?  
17 A. Yes.  
18  
19 Q. The department and AQIS have, each year, what they  
20 describe as a planned outcome?  
21 A. Yes.  
22  
23 Q. Is the planned outcome of AQIS and one of the planned  
24 outcomes of the department that agricultural, fisheries,  
25 food and forestry industries are protected from disease,  
26 underpinned by scientific advice and economic research?  
27 A. I don't recall those precise words as a description of  
28 the output, but I'm, again, not in a position to explain  
29 the outputs of the whole department, because I've worked  
30 only within AQIS, within the department, and am familiar  
31 with the activities of AQIS.  
32  
33 Q. What I described to you is one of the outcomes or  
34 objectives of AQIS, isn't it?  
35 A. They're not quite the precise words that I think you  
36 would find in the portfolio business statements or in the  
37 annual report.  
38  
39 Q. Do you agree that these planned outcomes are recorded  
40 either in the annual report or in the business plan of  
41 AQIS?  
42 A. Could you perhaps repeat the statement that you made?  
43  
44 Q. Do you agree that whatever these planned outcomes are  
45 and however they are described, they are recorded either in  
46 the annual report or in the business plan of AQIS?  
47 A. Yes, the planned outcomes for AQIS, as an operating

1 unit within the department, are described in the portfolio  
2 business statements and in AQIS's own business plans.  
3  
4 Q. When you say "portfolio business statements", what are  
5 you referring to?  
6 A. All departments prepare portfolio business statements  
7 as part of the government's budgetary cycle and have  
8 precise statements against which they are held accountable  
9 to the government for the delivery of the services.  
10  
11 Q. Are the portfolio business statements prepared on an  
12 annual basis?  
13 A. They are, yes.  
14  
15 Q. Are they different from the business plans?  
16 A. Yes.  
17  
18 Q. You, as at August 2007, had the position of executive  
19 manager within AQIS?  
20 A. That's true, executive manager, quarantine. There are  
21 two executive managers within AQIS.  
22  
23 Q. You were one of two managers?  
24 A. I was one of two executive managers in the Australian  
25 Quarantine and Inspection Service.  
26  
27 Q. You were responsible for a subject described as  
28 quarantine?  
29 A. That's correct.  
30  
31 Q. And Mr Read was responsible for exports?  
32 A. That's correct.  
33  
34 Q. Each of you reported to Mr Stephen Hunter, who was the  
35 executive director of AQIS?  
36 A. That's correct.  
37  
38 Q. Again, as at August 2007, there were within AQIS  
39 certain branches; is that the correct way to describe them?  
40 A. Yes, that's correct.  
41  
42 Q. How many branches were you responsible for?  
43 A. Three branches.  
44  
45 Q. What were they?  
46 A. The border branch, which is the cargo and shipping  
47 branch; and the animal and plant quarantine branch.

1  
2 Q. As to the border branch, was there someone who would  
3 be described as a manager or national manager of that  
4 branch?  
5 A. There is a national manager of the border branch.  
6 There is a national manager of each of the three branches.  
7  
8 Q. Is there a national manager of the border branch?  
9 A. There is a national manager of the border branch.  
10  
11 Q. What is his or her name?  
12 A. Dr Andrew Carroll.  
13  
14 Q. Was there a similar manager of the cargo management  
15 and shipping branch?  
16 A. There is also. Mr Tim Chapman is the manager of that  
17 branch.  
18  
19 Q. And of the animal and plant quarantine branch?  
20 A. Mr Peter Liehne is the manager of that branch.  
21  
22 Q. Were each of those persons direct reports to you?  
23 A. They were, and they still are.  
24  
25 Q. In August 2007, were you responsible for the  
26 activities or for overseeing the activities of each of  
27 those branches?  
28 A. Yes.  
29  
30 Q. Within these branches and within the quarantine  
31 service, are there what are described as programs?  
32 A. Yes, there are programs.  
33  
34 Q. What does the expression "programs" seek to identify?  
35 A. A program seeks to identify a particular stream of  
36 activity so that the work done within that program reflects  
37 particular set-up activities, such as the importation of  
38 cargo or management of an airport activity for passengers  
39 coming through an airport or the international mail  
40 activities. So a program itself would break down into a  
41 smaller subset of activities of goods or people coming into  
42 the country.  
43  
44 Q. Within the animal and plant quarantine branch, are  
45 there a number of programs?  
46 A. There are a number of programs within the animal and  
47 plant quarantine branch.

1  
2 Q. Do they include live animal imports?  
3 A. Yes.  
4  
5 Q. Do they include post-entry animal quarantine?  
6 A. Yes.  
7  
8 Q. And import clearance?  
9 A. No. Import clearance is a subset of the cargo and  
10 shipping branch. The live animal imports program is  
11 actually a subprogram of import clearance. So import  
12 clearance is a set of activities that covers the  
13 importation of general cargo coming into the country.  
14 Under the Quarantine Act, general cargo is referred to as  
15 "goods", and goods can be animals, plants or what we might  
16 traditionally consider to be cargo matters, so goods coming  
17 in in containers, for instance.  
18  
19 Q. So does that mean that, in relation to the cargo  
20 management and shipping branch, one program is import  
21 clearance?  
22 A. Yes.  
23  
24 Q. And that a subprogram of that program is live animal  
25 imports?  
26 A. That's correct.  
27  
28 Q. But the national manager of cargo management and  
29 shipping does not deal with the live animal import program?  
30 A. The national manager of cargo and shipping deals with  
31 the live animal import program in the sense that his branch  
32 manages, if you like, infrastructure, so IT systems, and  
33 maintains overall budget arrangements, so the funding for  
34 the live animal imports program is managed through the  
35 broader cargo funding program.  
36  
37 Q. But the gentleman who runs the live animal import  
38 program reports to the national manager of the animal and  
39 plant quarantine branch?  
40 A. That's correct, and that is because the national  
41 manager, animal and plant quarantine basically oversees  
42 technical activities, so it is people who are dealing with  
43 specialist quarantine technical activities related to the  
44 importation of plant materials or animal or related  
45 materials.  
46  
47 Q. Let me just get these programs clear. As to the live

1 animal imports program or subprogram, the national manager  
2 of that is David Ironside; is that right?  
3 A. That's correct.  
4  
5 Q. He reports to Mr Liehne?  
6 A. That's correct.  
7  
8 Q. The national manager of the post-entry animal  
9 quarantine is also Mr David Ironside?  
10 A. That's correct.  
11  
12 Q. And he reports to Mr Peter Liehne?  
13 A. That's correct.  
14  
15 Q. And Mr Peter Liehne reports to you?  
16 A. That's correct.  
17  
18 Q. In general terms, who is responsible, or which program  
19 is responsible, for running the quarantine stations?  
20 A. The post-entry animal quarantine stations program.  
21  
22 Q. In Australia, how many government quarantine stations  
23 are there?  
24 A. I believe there are five, but I can't confirm that.  
25  
26 Q. There is one in New South Wales?  
27 A. The Eastern Creek Quarantine Station.  
28  
29 Q. One in Victoria?  
30 A. Yes.  
31  
32 Q. What is the name of that?  
33 A. That's the Spotswood Quarantine Station. There is  
34 also a plant quarantine station in Victoria, and the name  
35 of that escapes me for the moment.  
36  
37 Q. There is a quarantine station in Western Australia, is  
38 there?  
39 A. There is a quarantine station in Western Australia,  
40 yes.  
41  
42 Q. Where is that?  
43 A. I would have to check the name of that for you.  
44  
45 Q. In any event, Mr Ironside, reporting to Mr Liehne,  
46 reporting to you, is responsible for the quarantine  
47 stations?

1 A. Not all of the quarantine stations. Mr Ironside is  
2 responsible for those quarantine stations that manage  
3 animals. Not all quarantine stations manage animals; some  
4 are plant only.  
5  
6 Q. Certainly, he is responsible for managing  
7 Eastern Creek and Spotswood?  
8 A. Yes, he is responsible for the program administration,  
9 yes, for Eastern Creek and Spotswood, because both of those  
10 have animals.  
11  
12 Q. In his capacity as manager of the live animal imports  
13 program, is Mr Ironside responsible for the procedures  
14 which are followed in relation to the import of live  
15 animals by air?  
16 A. For the development of the standard operating  
17 procedures, yes.  
18  
19 Q. When you say "standard operating procedures", they  
20 should answer the description of procedures followed in  
21 relation to the import of live animals by air?  
22 A. Yes.  
23  
24 Q. To the extent that he has that responsibility, he  
25 reports to Mr Liehne, not to Mr Chapman, of the cargo  
26 management and shipping branch?  
27 A. That's correct.  
28  
29 Q. Similarly, Mr Liehne, in respect of those functions,  
30 reports to you?  
31 A. That's correct.  
32  
33 Q. Could we have on the screen, please, document  
34 CI.0001.024.0017. I will provide a copy to the witness.  
35 Ms Gordon, I take it that you have seen this document?  
36 A. I have.  
37  
38 Q. It has been prepared by the inquiry in an attempt to  
39 understand the structure of the quarantine service. Do you  
40 accept that the document, with the narratives which were  
41 included by AQIS or by the department, is an accurate  
42 document as describing the structure and the persons having  
43 various positions within the structure?  
44 A. Yes.  
45  
46 Q. The document says in the top-left corner:  
47

1                   AQIS has a matrix management approach.  
2  
3                   Could you describe what that means?  
4                   A.    AQIS is structured so that we have national programs  
5                   that are responsible for developing and setting consistent  
6                   national directions for each of the programs, so that, for  
7                   instance, the national programs would develop the standard  
8                   operating procedures to be followed within those programs;  
9                   they would develop their budget arrangements and set  
10                  national budgets. The implementation of the actual  
11                  operations on the ground is carried out through one of our  
12                  regional officers who would be responsible for putting into  
13                  effect the directions set at the national level.  
14  
15                  Q.    Who, then, in this matrix management approach, is  
16                  responsible for formulating the procedures?  
17                  A.    The procedures for any one program are the  
18                  responsibility of the national program.  
19  
20                  Q.    By "national program", you would refer as an example  
21                  to the live animal imports program or the post-entry animal  
22                  quarantine program?  
23                  A.    Yes.  
24  
25                  Q.    Who is responsible for identifying the risks which the  
26                  procedures are proposed to address?  
27                  A.    The actual analysis of the risks for the particular  
28                  goods that are proposed to be imported, such as horses, is  
29                  developed by Biosecurity Australia. When a proposed  
30                  importation is made to AQIS - and if an import permit is  
31                  required, that's considered to be a proposal to import  
32                  particular goods, so horses in this particular case - AQIS  
33                  would look to see whether we have scientific policy advice  
34                  from Biosecurity Australia about the nature of the  
35                  quarantine risks that are related to that particular  
36                  importation and what conditions we might place on the  
37                  importation to bring the risks down to an appropriate  
38                  level.  
39  
40                  Q.    In that answer, you have identified the risks which  
41                  are the subject of import conditions, haven't you?  
42                  A.    Yes, the risks attendant on the proposed import.  
43  
44                  Q.    And which are dealt with by import conditions?  
45                  A.    Which can be managed by import conditions, yes.  
46  
47                  Q.    My question was slightly different. I perhaps didn't

1 make it clear enough. My question was, "Who is responsible  
2 for identifying the risks which the standard operating  
3 procedures are proposed to address?"  
4 A. The national program would take the leadership on  
5 identifying what operational arrangements need to be put in  
6 place on the basis of the scientific policy advice from  
7 Biosecurity Australia, but they would do that in close  
8 consultation with the operational regional people who are  
9 going to actually put them into effect on the ground.  
10  
11 Q. Let me be more specific again. We will come to this  
12 in more detail. There was a work instruction in relation  
13 to the import of live horses from New Zealand and from  
14 places other than New Zealand, wasn't there?  
15 A. There was, or there is still.  
16  
17 Q. At the time that that document was prepared in 2004,  
18 what was your position?  
19 A. In 2004, I was the national manager, animal and plant  
20 program.  
21  
22 Q. Does that mean that this was directly within your area  
23 of responsibility?  
24 A. Yes, it was being prepared within my branch.  
25  
26 Q. At the time that was prepared, no advice was sought  
27 from Biosecurity Australia about those proposed procedures,  
28 was there?  
29 A. I was the branch manager at the time. The program  
30 manager at the time was doing the actual coordination,  
31 discussions and consultations with the regions about  
32 developing those procedures. I do not know whether she  
33 sought advice directly from Biosecurity Australia, but the  
34 conditions for the importation of horses at that point in  
35 time had been in place for some years, so she would have  
36 relied upon that to develop the standard operating  
37 procedures or the work instructions that were developed  
38 then.  
39  
40 Q. Who was the program manager of live animal imports in  
41 mid-2004?  
42 A. Narelle Clegg, at that time, was the program manager  
43 of the animal programs, so she had responsibility for both  
44 live animal imports and for animal exports.  
45  
46 Q. So far as you are aware, no-one sought any advice from  
47 Biosecurity Australia on the subject of risk when that

1 procedure was drafted; isn't that correct?  
2 A. I can't comment on that. I'm not aware of what  
3 consultations took place with Biosecurity Australia at that  
4 time.  
5  
6 Q. You are not aware of any consultations, are you?  
7 A. I'm not aware of the consultations that took place at  
8 that time.  
9  
10 Q. You didn't approach Biosecurity Australia, did you?  
11 A. I didn't approach Biosecurity Australia, but I wasn't  
12 actually developing, myself personally, the work  
13 instructions, so I would not have been in a position to -  
14 it wasn't my responsibility to approach Biosecurity  
15 Australia.  
16  
17 Q. Were you overseeing that task?  
18 A. It was within my area of responsibility at that stage,  
19 but the program manager had the responsibility for  
20 developing the work instructions, and she was doing that.  
21  
22 Q. So far as you are aware, is there any standard  
23 procedure within AQIS to specifically consult Biosecurity  
24 Australia in relation to work procedures as distinct from  
25 import provisions?  
26 A. No, there's no requirement. The responsibilities of  
27 AQIS are to develop operational work procedures to put into  
28 effect the advice from Biosecurity Australia on the most  
29 appropriate means of managing the quarantine risks.  
30  
31 Q. If I can return to the document for a moment,  
32 returning to the top left-hand corner, the first dot point  
33 or asterisk point says:  
34  
35 Communication and interaction generally  
36 occurs directly between senior national and  
37 regional program staff rather than through  
38 a traditional hierarchical structure.  
39  
40 A. Yes.  
41  
42 Q. What does that mean?  
43 A. This diagram, if you look at it and just follow the  
44 lines, would suggest that if the national manager, animal  
45 and plant quarantine wanted to discuss with a regional  
46 manager the operational implementation of some standard  
47 operating procedures, they would go up through the

1 hierarchical structure through me, through the deputy  
2 secretary and then down to the New South Wales regional  
3 manager. In fact, in practice, the national manager would  
4 most likely talk directly to the regional manager or to one  
5 of the managers in that New South Wales office. Similarly,  
6 if they wanted to access scientific policy advice from  
7 Biosecurity Australia, they would most likely go directly  
8 to, say, the general manager, animal biosecurity to get the  
9 advice that they required.

10  
11 Q. Let's say Mr Hankins, who is the manager of Eastern  
12 Creek Quarantine Station, wants to know what the work  
13 instructions are, who does he contact?

14 A. You would probably have to ask Mr Hankins, but I would  
15 imagine that he would most likely speak to Mr Ironside, who  
16 is the manager of the post-entry animal quarantine program.  
17

18 Q. And you would expect Mr Ironside to know what they  
19 were?

20 A. I would.  
21

22 Q. I just want to understand how this structure works in  
23 the context of the importation of live horses by air on a  
24 flight that arrives in Sydney. Assume that there are air  
25 crew on the aeroplane and that there are passengers  
26 consisting of grooms and vets on the aeroplane. Which  
27 programs within AQIS are engaged in the clearance and  
28 movement of the passengers and animals?

29 A. The animals would be managed by the live animal  
30 imports program. The passengers would be managed within  
31 the airports program. Cargo would be managed through the  
32 import clearance program.  
33

34 Q. Then when they get to Eastern Creek, the post-entry  
35 animal quarantine program would --

36 A. Yes.  
37

38 Q. -- be effected, so that there are four programs which  
39 would be engaged by that sequence of activity?

40 A. Yes.  
41

42 Q. Just so that it is clear, the airports program would  
43 deal with the crew?

44 A. The airports program would deal with the crew, yes,  
45 and the --  
46

47 Q. And the passengers?

1 A. And any luggage that the crew had with them, personal  
2 luggage.  
3  
4 Q. Does that include booked luggage?  
5 A. Yes, all personal effects that the crew brought with  
6 them. If it was coming through as cargo, then the import  
7 clearance program would deal with it.  
8  
9 Q. Which is a separate program?  
10 A. Which is a separate program.  
11  
12 Q. And that means separate quarantine officers  
13 responsible for that?  
14 A. Yes, although - yes.  
15  
16 Q. So that if the crew have baggage and it is not in the  
17 cargo hold, then the crew and the baggage are dealt with by  
18 the airports program?  
19 A. Yes, just as any other passenger coming through an  
20 airport would be dealt with by people at the airport in the  
21 airports program.  
22  
23 Q. If the grooms have baggage and it is with them in the  
24 air stall or on the aircraft, then they are dealt with by  
25 the airports program?  
26 A. As I understand it, yes.  
27  
28 Q. And if they have baggage which is put in a unit-load  
29 device in the hold of the aircraft, then it is dealt with  
30 by the air cargo program?  
31 A. As I understand it, although I think you may well have  
32 to check that with other officers who are more directly  
33 involved in clearance.  
34  
35 Q. In relation to the animals - that is, the horses -  
36 they are dealt with by the live animals program, are they?  
37 A. They are dealt with by the live animal imports  
38 program.  
39  
40 Q. What about the air stall which they are carried in -  
41 who deals with that?  
42 A. I'm not directly involved, nor have I been directly  
43 involved in the clearance of horses arriving by air, so  
44 I think it would be best if you were to direct those  
45 questions to people who have more direct responsibility for  
46 those matters.  
47

1 THE COMMISSIONER: Q. But you have ultimate  
2 responsibility, don't you?  
3 A. Yes, Commissioner, I do have ultimate responsibility,  
4 but my responsibilities are largely to oversight the  
5 strategic directions of the programs. I haven't been, and  
6 nor would I expect to get, directly involved in the detail  
7 of clearance of passengers either at airports or cargo  
8 directly.  
9  
10 Q. Is there any departmental procedure to investigate  
11 whether there is compliance with the various procedures?  
12 Is there any inspectorate or anything of that kind?  
13 A. Yes, Commissioner. We have a policy for the  
14 development and management of standard operating  
15 procedures, which allocates various responsibilities to  
16 different parts of AQIS for ensuring that the procedures  
17 are followed and for reviewing the procedures from time to  
18 time.  
19  
20 MR MEAGHER: Q. I just want to get clear: the air  
21 stalls, would you agree, are dealt with by the air cargo  
22 program?  
23 A. I think they are dealt with by the air cargo program,  
24 but I think it is probably better if you confirm that with  
25 people who are directly responsible for delivering that  
26 program.  
27  
28 Q. Who would that be?  
29 A. I believe that Mr Ironside should be able to help you  
30 with those answers.  
31  
32 Q. But that's not part of the live animal imports  
33 program, is it?  
34 A. No, it is not, but Mr Ironside has also had experience  
35 working in the cargo management area, so I think you will  
36 find that he is more familiar with the particular processes  
37 on the ground.  
38  
39 Q. What about the waste products which are produced in  
40 the air stall, whose responsibility are they - which  
41 program?  
42 A. Again, I think you are asking questions that I'm not  
43 directly familiar with. I think - and I qualify that -  
44 that they are probably the responsibility of the import  
45 clearance program.  
46  
47 Q. Can I ask you some other questions about your position

1 within AQIS. Are you a member of the executive management  
2 team?  
3 A. Within AQIS, yes.  
4  
5 Q. Were you a member of the executive management team in  
6 2005 to 2006?  
7 A. Yes, I was.  
8  
9 Q. Are you a member of the AQIS leadership and governance  
10 committee?  
11 A. Yes, I am.  
12  
13 Q. When did you become a member of that committee?  
14 A. The AQIS leadership and governance committee was  
15 constituted in its current form in about mid-2005, as  
16 I recall, so I would have been a member of that committee  
17 since that time.  
18  
19 Q. And, I am sorry, I didn't ask you this: since when  
20 have you been a member of the executive management team?  
21 A. I started acting as an executive manager at the end of  
22 2004, the beginning of 2005, so I would have been a member  
23 of the team since that time.  
24  
25 Q. You are also a member of the audit committee of the  
26 department?  
27 A. Yes, I am.  
28  
29 Q. When did you become a member of the audit committee?  
30 A. I became a member of the audit committee I think about  
31 12 to 18 months ago.  
32  
33 Q. The responsibilities of that committee include the  
34 internal control structure, risk management systems and  
35 internal and external audit functions?  
36 A. Of the department as a whole, yes.  
37  
38 Q. Do the risk management systems include systems for  
39 monitoring the implementation of standard operating  
40 procedures and work instructions?  
41 A. No. The monitoring of work instructions and standard  
42 operating procedures in AQIS is the responsibility of AQIS  
43 as a business unit. We are required generally within the  
44 department to have risk management systems in place, so  
45 those procedures would be part of our risk management  
46 systems.  
47

1 Q. So that you accept that a procedure for monitoring the  
2 implementation of operating procedures and work  
3 instructions answers the description of a risk management  
4 system?  
5 A. It is an element of a risk management system, yes.  
6  
7 Q. The audit committee has responsibility for the  
8 oversight of risk management systems?  
9 A. Yes, at a high level for the whole of the department.  
10  
11 Q. What does "oversight" mean in that context, then, when  
12 you say "at a high level for the whole of the department"?  
13 A. The audit committee for the department is looking at  
14 ensuring that there are assurance systems in place for a  
15 range of matters that the department as a whole and all the  
16 businesses within the department are required to have. So  
17 it goes to assurance systems for our financial management  
18 issues, for our risk management issues, and it would look  
19 to ensure that there are systems in place so that each  
20 division within the department is able to provide assurance  
21 to the secretary that it is meeting its obligations under a  
22 variety of legislative and other obligations.  
23  
24 Q. What are the assurance systems within the AQIS  
25 division which enable it to provide that assurance to the  
26 secretary?  
27 A. We have a range of budget review measures. For our  
28 financial systems, internal audit arrangements are in place  
29 and external audit from time to time. We have systems for  
30 assessing the risks of delivery for various programs and  
31 systems in place to identify human resource issues and  
32 other management issues that we are required to use to  
33 deliver our business.  
34  
35 Q. In relation to business plans, do they have to be  
36 reviewed within AQIS by the executive management team?  
37 A. Yes. Each of the programs within AQIS develop  
38 business plans under the framework of the overall AQIS  
39 business plan, which also articulates into the overall  
40 departmental business plan. The program managers work with  
41 the national managers to ensure that they identify the  
42 particular risks that those programs are facing and develop  
43 strategies for the coming year to address those risks.  
44  
45 Q. Do the business plans have to be reviewed by the AQIS  
46 leadership and governance committee?  
47 A. They are reviewed by the leadership and governance

1 committee.  
2  
3 Q. Does that mean that in relation to the business plans  
4 for 2006/2007 - that is, the business plans for each of the  
5 programs within AQIS - you are one of the people who  
6 reviewed them as a member of the executive management team  
7 and the AQIS leadership and governance committee?  
8 A. Yes.  
9  
10 Q. In your statement, if you could go to that, please, at  
11 paragraph 8, under the heading "Current position and  
12 responsibility" you set out what you take responsibility  
13 for in the following paragraphs through to paragraph 12.  
14 Do you see that?  
15 A. Yes.  
16  
17 Q. Do you agree that this is an accurate description of  
18 your responsibility as executive manager in the quarantine  
19 service: "The efficient and effective operation of AQIS  
20 quarantine and plant programs and delivery of AQIS business  
21 strategies"?  
22 A. I'm no longer responsible for AQIS plant programs -  
23 for plant quarantine programs. My responsibility is now  
24 for all the quarantine programs, so my title is now  
25 executive manager, quarantine. Until the beginning of this  
26 year, I had responsibility for quarantine programs except  
27 for animal programs, but I had also responsibility for all  
28 plant programs including export programs.  
29  
30 Q. As at August, you were responsible for plant and  
31 animal quarantine programs, weren't you?  
32 A. Yes, that's right.  
33  
34 Q. Do you say that you weren't responsible for animals  
35 before January?  
36 A. That's right.  
37  
38 Q. Since January, have you been responsible for the  
39 efficient and effective operation of AQIS quarantine - that  
40 is, animal and plant - programs?  
41 A. Yes.  
42  
43 Q. I want to take you to a document which you referred to  
44 earlier in your evidence. It is the department policy on  
45 standard operating procedures. The document is  
46 AQIS.2002.015.0002. Do you have that on your screen?  
47

1 MR MEAGHER: I can hand the witness a copy of the  
2 document, Commissioner. I don't expect the witness to read  
3 the document on the screen in that form.  
4  
5 THE COMMISSIONER: Could I have a copy as well, please?  
6  
7 MR MEAGHER: Yes. Can I inquire of those operating the  
8 electronic system whether we will be able to see the  
9 document on the whole screen at some stage today.  
10  
11 Q. Can we go to page 4 of the document.  
12  
13 MR ROBERTSON: Commissioner, what is the date of this  
14 document?  
15  
16 MR MEAGHER: It is a document with the date November 2005.  
17  
18 THE COMMISSIONER: Do you have that, Mr Robertson?  
19  
20 MR ROBERTSON: I don't at the moment, Mr Commissioner.  
21  
22 THE COMMISSIONER: We will get it to you as soon as  
23 possible.  
24  
25 MR MEAGHER: Could we go to electronic page 4 of the  
26 document.  
27  
28 Q. Ms Gordon, is it correct that this document, which is  
29 described as "AQIS Policy Standard Operating Procedures",  
30 was adopted in November 2005?  
31 A. I recall that we did have a draft document at that  
32 stage, and I think this is the document. The one that I am  
33 more familiar with is one that we updated in 2006.  
34  
35 Q. Was this document endorsed by what is described as the  
36 AQIS leadership and governance committee in November 2005?  
37 A. As I understand it from the note on the front of this  
38 particular document, yes.  
39  
40 Q. Did it provide for standard operating procedures and  
41 work instructions?  
42 A. It created a policy, developed a policy, to guide the  
43 development of standard operating procedures and work  
44 instructions within AQIS.  
45  
46 Q. On page 4, if we could scroll down, it says under the  
47 heading "Who is responsible for preparing an SOP":

1  
2  
3  
4  
5  
6  
7  
8  
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47

The national program manager will allocate resources to ensure that SOPs are prepared, maintained, audited and reviewed in a timely manner.

Who is the national program manager referred to there?

A. That would be the national program manager, live animal imports or post-entry animal quarantine programs for animals.

Q. That would be Mr Ironside?

A. That would be Mr Ironside.

Q. Over the page to the top of page 5, it contemplates that a standard operating procedure is a concise document that describes the management of and process of delivering an activity and that it may contain a work instruction, which is a short, succinct, easy-to-understand document.

A. That's correct.

Q. Is that still, within AQIS, a correct description of what a standard operating procedure is and what a work instruction is?

A. I think so. I would have to confirm that by looking at the more recent document, but it sounds as though it may well be the same.

Q. Before this document was brought into existence, was the position that there was no clear definition of what a standard operating procedure was and what a work instruction was?

A. No, different programs use the terminology differently. This document was developed to try to ensure that all programs had a consistent understanding of the difference between a standard operating procedure and a work instruction.

Q. It sets out on page 5, under the heading "Clearance and approval of an SOP", steps which must be taken before a standard operating procedure is ultimately approved. Do you see that?

A. Yes.

Q. On electronic page 6, it says:

The national program manager must endorse

1 the final draft of an SOP ...  
2  
3 A. Yes.  
4  
5 Q. What was the position before November 2005 in relation  
6 to standard operating procedures or work instructions?  
7 A. In what sense? I'm not sure that I understand the  
8 question.  
9  
10 Q. You were, in 2004/2005, responsible the animal and  
11 plant quarantine programs?  
12 A. Yes.  
13  
14 Q. What was the position in those programs in relation to  
15 the preparation and approval of standard operating  
16 procedures or work instructions?  
17 A. It was a similar arrangement. The national program  
18 manager would have taken responsibility to develop either  
19 work instructions or standard operating procedures and  
20 would have consulted closely with the regional operational  
21 people about the actual arrangements. The national program  
22 manager had ultimate responsibility for developing the  
23 national direction for the program.  
24  
25 Q. You were relevantly the national program manager of  
26 live animal imports, were you --  
27 A. No. I was the national manager. I was the branch  
28 head in 2004. The national program manager for live animal  
29 imports at that time was Narelle Clegg.  
30  
31 Q. Who was the national program manager of post-entry  
32 quarantine stations?  
33 A. There was a slightly different structure in 2004.  
34 I was the branch head of animal and plant programs - or at  
35 that stage, for that year, I was actually only managing  
36 animal programs, because there was a number of matters that  
37 I was required to focus on in terms of animal exports.  
38 There was a senior program manager, who was Narelle Clegg,  
39 and then she had working to her a number of managers who  
40 took responsibility for different elements of the program,  
41 so she had an officer working to her directly managing live  
42 animal imports and post-entry animal quarantine programs.  
43  
44 Q. Who were they?  
45 A. I can't recall off the top of my head exactly who was  
46 in the positions at that point in time.  
47

1 Q. Who was responsible for signing off on and approving  
2 work instructions in 2004 which addressed live animal  
3 imports and post-entry quarantine stations?  
4 A. Narelle Clegg would have had the final responsibility.  
5  
6 Q. Did you have any say in relation to that?  
7 A. No. I would have been consulting with Narelle if  
8 there were any particular issues where there were concerns  
9 being raised by any of the regions that needed me to step  
10 in and to resolve those matters, but the actual development  
11 of the standard operating procedures or the work  
12 instructions would have been within Dr Clegg's  
13 responsibilities.  
14  
15 Q. If you go to electronic page 7, at the top of the  
16 page, it says:  
17  
18 The National Program Manager will appoint  
19 appropriate staff to perform the audits to  
20 determine whether SOPs are being followed  
21 and remain current and effective.  
22  
23 Do you see that?  
24 A. Yes.  
25  
26 Q. Again, is that, in the context of these programs,  
27 a reference to people like Mr Ironside?  
28 A. That would be right, yes.  
29  
30 Q. What was the position before November 2005 in relation  
31 to the performance of audits to determine whether work  
32 instructions or operating procedures were being followed  
33 and remained current and effective?  
34 A. Before November 2005 or 2004?  
35  
36 Q. Before November 2005, when this operating procedure or  
37 policy was introduced.  
38 A. I think, as I mentioned earlier, this policy was  
39 really ensuring that there was an overall documented policy  
40 for the development of standard operating procedures and  
41 clarity in the nature of the sorts of documents that we  
42 required to set national directions in programs. The  
43 actual arrangements were very much the same, where the  
44 national programs had responsibility for developing general  
45 guidance for operational implementation by regional  
46 officers in relation to particular programs.  
47

1 Q. Could I ask you, then, what the position was as at  
2 August 2007 in relation to standard operating procedures or  
3 work instructions addressing the live animal imports  
4 program, and specifically horses, and the post-entry  
5 quarantine station, and specifically Eastern Creek. What  
6 were the current standard operating procedures and work  
7 instructions, if any?

8 A. As I understand it, there were work instructions that  
9 had been drafted in 2004 and were still relevant prior  
10 to August 2007 for the clearance of live horse imports  
11 generally and specifically for New Zealand.  
12

13 Q. When you say "as I understand it", do you mean based  
14 on your present knowledge, which is informed by inquiries  
15 you have made and what-have-you since this flu outbreak?

16 A. That is correct. I was aware that those work  
17 instructions were being developed during 2004, because  
18 I was the branch head at the time, but I hadn't reviewed  
19 them since that time and hadn't looked at them since I had  
20 become the executive manager.  
21

22 Q. First of all, are the only operating procedures or  
23 work instructions which you are currently aware of, which  
24 were said to be in place in August 2007, these instructions  
25 that you have just referred to as being developed during  
26 2004?

27 A. I now know that they are the only ones that were final  
28 documents that had existed since 2004.  
29

30 Q. Do you say that that work instruction was a final  
31 document?

32 A. The work instructions for the clearance of live horses  
33 and the work instructions for the clearance of horses from  
34 New Zealand were final documents.  
35

36 Q. You said in an earlier answer that you were aware that  
37 they were being developed during 2004. That was because  
38 you participated in the development of those documents,  
39 didn't you?

40 A. Yes, I was the branch head at the time and, whilst  
41 I wasn't directly involved in writing the documents, there  
42 had been a number of discussions with regional officers  
43 about the content of those documents, and I had been  
44 involved in those conversations with regional officers. So  
45 I was aware that those documents were being developed and  
46 had, as the branch head, sought to resolve some differences  
47 of opinion about the content of the document and was of the

1 view that the information - the advice had gone out to the  
2 regional offices that these were, at that time, final  
3 documents.  
4  
5 Q. Did you say that there were advices that went out to  
6 the branches that said that they were final documents?  
7 A. Yes.  
8  
9 Q. That's your recollection?  
10 A. Yes, it is.  
11  
12 Q. Let's have a look at some of the documents. First of  
13 all, could I take you to the document to see whether we're  
14 talking about the same document. It is AQIS.0001.001.0011.  
15 I have a copy for the Commissioner and for the witness if  
16 the witness would like a copy. If you look at the footer  
17 of that first page, electronic page 11, you will see that  
18 it describes itself as "Version 1, October '03, first issue  
19 of work instruction".  
20 A. Yes.  
21  
22 Q. The author is George Hughes?  
23 A. Yes.  
24  
25 Q. Who was George Hughes in October 2003?  
26 A. George Hughes was a member of the live animal import  
27 program.  
28  
29 Q. If we can scroll to the next page, page 12, and go to  
30 the bottom of page 12, you will see that it has a date at  
31 the footer, "As at 11 May 2004".  
32 A. Yes.  
33  
34 Q. Is it your current understanding that that document  
35 was apparently issued in that form on 11 May 2004?  
36 A. I don't recall the actual issue of the document, but  
37 that would be as I would understand it.  
38  
39 Q. That document was available, as you understand it,  
40 from that time on what is described as the AQIS intranet;  
41 is that right or do you not know?  
42 A. I don't know that it was actually on the intranet at  
43 that time, but that is where our documents are located and  
44 I would expect that this document would have been placed on  
45 the intranet at the time, on or about that time.  
46  
47 Q. Is the intranet an internal information network to

1 which officers and staff of AQIS can have access?  
2 A. It is.  
3  
4 Q. And it is an electronic network?  
5 A. It is.  
6  
7 Q. Is this document the only document which, as you  
8 understand it, as you have said, was finally issued as a  
9 work instruction in respect of the clearance of live horses  
10 from places other than New Zealand as at August 2007?  
11 A. As I understand it, this was the only document for  
12 horses other than horses from New Zealand that was a final  
13 document in August 2007.  
14  
15 Q. If that were the position, would you expect that that  
16 would be a document which set out procedures which had to  
17 be followed, or which there was a discretion about whether  
18 they would be followed or not?  
19 A. No. As I understand it, this would set out procedures  
20 that should be followed unless the officer implementing  
21 those procedures came across circumstances where he wanted  
22 to seek further advice on varying the particular  
23 procedures. By and large, the procedures are written to  
24 give general guidance to officers. They are not  
25 prescriptive down to all levels of detail, because,  
26 obviously, there are circumstances in the nature of the  
27 work that is done where, from time to time, it is sensible  
28 to vary them. One would expect, in those circumstances,  
29 that the officer would seek further guidance, but not  
30 always.  
31  
32 Q. Is there anywhere in the document where it says that  
33 the officer doesn't have to implement the procedures if the  
34 officer thinks that he or she should get further advice on  
35 varying them?  
36 A. No. My normal expectation, as the executive manager,  
37 is that an officer would follow these procedures. However,  
38 if in all the circumstances there was an issue that arose  
39 that caused the officer to consider that the procedures  
40 didn't fit the circumstances, I would expect a trained  
41 quarantine officer to seek advice about what to do in the  
42 alternative.  
43  
44 Q. Do you say that, as you understood it, there was no  
45 obligation on the quarantine officers to comply with these  
46 procedures?  
47 A. I think it is the language that you are using, that

1 I am trying to distinguish between an obligation - these  
2 are the standard operating procedures, and we would expect  
3 officers to follow them unless they had particular reasons  
4 why these procedures would not meet the particular  
5 requirements of the circumstances, in which case they might  
6 need to vary them. But, in those circumstances, we would  
7 expect them to bring them to more senior attention and seek  
8 advice.

9  
10 Q. Did you, in August 2007, expect that quarantine  
11 officers would be following these procedures in relation to  
12 clearance of horses other than from New Zealand?

13 A. For the most part, yes, I would expect that in August  
14 2007 they would have been following these procedures.

15  
16 Q. Had you, before August 2007, received any indication  
17 from any quarantine officer in New South Wales that these  
18 procedures were not adequate or practical or sufficiently  
19 drafted to take account of conditions in New South Wales?

20 A. I think, as I indicated earlier, I hadn't actually  
21 looked at these procedures since 2004. At that time, there  
22 were officers in New South Wales who had expressed views  
23 suggesting that there were aspects of the procedures that  
24 they thought needed to be further expanded or addressed.

25  
26 I have not heard anybody raise concerns about them  
27 since that time, but then, this year, since I've been  
28 responsible for the animal programs again as part of my  
29 responsibilities as executive manager, I haven't looked at  
30 the procedures at all nor have I had conversations with  
31 anybody about importation of horses.

32  
33 Q. The officer from whom you received comments in 2004  
34 was Dr Widders, wasn't it?

35 A. No. My conversations in 2004 about these work  
36 instructions were with the regional manager, who had raised  
37 some concerns that I understand Dr Widders had raised with  
38 him. But my conversations were with the regional manager  
39 to try to identify whether the concerns were ones that  
40 needed to be addressed in the work instructions or whether  
41 they were particular views that had already been covered  
42 off in the consultations that had occurred in their  
43 development.

44  
45 Q. Could we go to document EII.0002.001.0032. Do you see  
46 that that's an email to you from Mr Turner of 7 June 2004?

47 A. Yes.

1  
2 Q. It has as an attachment a response to the LAI review.  
3 A. Yes.  
4  
5 Q. The "Graham" is Mr Turner, who was the regional  
6 manager of New South Wales?  
7 A. Yes.  
8  
9 Q. He said:  
10  
11 Please see Phil's response to the LAI  
12 review as discussed last week.  
13  
14 A. Yes.  
15  
16 Q. Do you recall receiving this email?  
17 A. Yes.  
18  
19 Q. Did you read the attachment?  
20 A. I did.  
21  
22 Q. This is after the work instruction was promulgated?  
23 A. Yes, and the review that was referred to was a review  
24 that was done, that had begun in 2003, to look at the  
25 procedures and the structure of the work units that were  
26 clearing live horses. It was part of a wider review where  
27 the program was looking at the structure of all the live  
28 animal import programs to determine what was the best  
29 complement of people and what instructions they required to  
30 manage their job.  
31  
32 Q. Perhaps if we go to another document, which is  
33 DAFF.0001.069.2306. Do you see that?  
34 A. Yes.  
35  
36 Q. That's the live animal import review that you have  
37 just referred to?  
38 A. I think so, but without being able to see the whole  
39 document, I can't confirm that.  
40  
41 Q. If we go to electronic page 2309 - perhaps I can hand  
42 you a copy - as the executive summary suggests, this was a  
43 review which was concerned primarily with providing  
44 guidance on staffing of the live animal import program or  
45 office; do you recall that?  
46 A. Yes.  
47

1 Q. One of the concerns was whether officers who were  
2 qualified veterinary officers were doing things which could  
3 be done by quarantine officers so as to save money; is that  
4 right?  
5 A. It was focused on working out the best way that we  
6 could utilise our staff and their technical qualifications  
7 in the context of a cost-recovery program where we needed  
8 to ensure that we were delivering our programs as  
9 efficiently and as effectively as possible.  
10  
11 Q. But, ultimately, this was about saving something like  
12 \$40,000 or \$50,000 a year in salary for vets, wasn't it?  
13 A. No, it wasn't about saving money per se; it was about  
14 ensuring that we used our people as efficiently and as  
15 effectively as possible so that we weren't charging fees to  
16 the importers any more than was necessary to deliver the  
17 quarantine outcomes that we were responsible for.  
18  
19 Q. But the amount which was ultimately sought to be saved  
20 was about \$40,000 or \$50,000 a year; is that right?  
21 A. We weren't seeking to save a particular amount of  
22 money. We were trying to ensure that we were using our  
23 officers as efficiently and as effectively as possible and  
24 utilising the technical qualifications of our veterinary  
25 officers in the best possible way in the interests of  
26 quarantine outcomes.  
27  
28 Q. With a view to reducing your costs by about \$50,000 a  
29 year; is that right?  
30 A. No. We weren't trying to save money in the way that  
31 you suggested. What we were trying to do was to ensure  
32 that veterinary officers were used where their technical  
33 skills could be best utilised and to not have them doing  
34 functions that perhaps could be as well done by  
35 non-veterinary officers, and the cost of that would then  
36 not be reflected in the fees that importers had to pay for  
37 the services that we deliver.  
38  
39 Q. But if you didn't do that, then you would have to have  
40 employed additional veterinary officers, which would have  
41 increased costs by about \$40,000 or \$50,000 a year; is that  
42 right?  
43 A. The way you are phrasing the question suggests that we  
44 were trying to reduce the number of veterinary officers as  
45 an outcome in itself, and that is not the purpose of the  
46 review.  
47

1 Q. You weren't seeking to do that, but the branches were  
2 asking for more veterinary officers, and you were saying  
3 that you didn't need them because quarantine officers could  
4 do what veterinary officers were doing; isn't that right?  
5 A. No, what we were doing was looking at the nature of  
6 the functions that needed to be performed to determine what  
7 functions could be performed by people with different sorts  
8 of qualifications, and some of the functions that our  
9 veterinary officers were performing didn't necessarily need  
10 to be performed by somebody with veterinary qualifications.  
11

12 Q. If you go forward to electronic page 2331, you will  
13 see the recommendations of this review. One of the  
14 recommendations was to develop work instructions for the  
15 clearance of imported animals?

16 A. Yes.  
17

18 Q. Is it correct that there were no such work  
19 instructions before this review was published in late 2003?

20 A. I wasn't directly involved at this level of the  
21 program, given my responsibilities as the branch head at  
22 that time, but it is my recall that there weren't national  
23 work instructions; each of the regional offices had work  
24 instructions that had much in common, but they had  
25 developed over time with differences in them. What we were  
26 trying to do at this point in time was to ensure that we  
27 actually had overarching national work instructions for the  
28 program.  
29

30 Q. When this review was published, at the same time a  
31 draft work instruction, including a draft of the clearance  
32 of live horses, was published; is that your recollection?

33 A. I don't actually have recollection of the detail of  
34 this, because at this particular time I was responsible as  
35 well for live animal exports, and I had particular  
36 responsibilities for assisting with the review of the live  
37 animal exports program and developing a whole new set of  
38 processes, procedures and legislation to support that  
39 program, which was why the change had been made to have me  
40 be branch manager of animal programs only. So the detail  
41 that you are looking for I am probably not able to give you  
42 in that sense.  
43

44 Q. Could you go, please, to document DAFF.0001.069.2449.  
45 If you scroll down to the original email message, this is  
46 an email from a Mr Michael Hibbert to a number of people.  
47 A copy of it went to you and it attached the review of the

1 live animal import sections which we've just looked at. Do  
2 you see that?

3 A. Yes.

4

5 Q. It is dated 5 May 2004. In the second paragraph, it  
6 says that the review also includes national recommendations  
7 such as formulation of work instructions and centralisation  
8 of permit issuing and that the work instructions have been  
9 formulated for each imported species and are currently  
10 available on the intranet. Then in the last paragraph, it  
11 says:

12

13 The work instructions can be implemented  
14 immediately.

15

16 Is it your recollection that this was the email by which  
17 the promulgation of these work instructions was announced?

18

19 A. Yes.

20

21 Q. Who was Michael Hibbert; what position did he have?

22

23 A. Michael Hibbert was an officer within the live animal  
24 imports program in Canberra.

25

26 Q. Do you see at the top, on 21 May 2004, Dr Widders sent  
27 an email to Mr Turner attaching his response to this  
28 review? Do you see that?

29

30 A. Yes.

31

32 Q. That's the response that you received a copy of with  
33 the email from Mr Turner to you of 7 June; do you remember  
34 that? I took you to that email earlier.

35

36 A. I recall the earlier email. I'm not sure whether what  
37 is attached here is the same as the attachment to that one,  
38 because obviously it is not entirely clear.

39

40 Q. Let's look at this one first. If we can go forward to  
41 electronic page 2458, under the heading "National  
42 Recommendations" you see what Dr Widders said. He sets out  
43 the recommendations in the report, and then he says:

44

45 In principle I support each of these  
46 recommendations.

47

48 He says:

49

50 Work instructions have now been drafted by  
51 AQIS Canberra for a range of animal

52

1 commodities. Many of these will require  
2 significant input from experienced regional  
3 officers to ensure that they are  
4 operationally practical.  
5

6 Do you see that?

7 A. Yes.  
8

9 Q. What was ever done about that?

10 A. I can't comment. I wasn't directly working on these  
11 work instructions. They were being undertaken under the  
12 guidance of Dr Clegg, who was reporting to me at the time.  
13

14 Q. The answer to my question is that nothing was done at  
15 all, isn't it? That is, there was no attempt made to deal  
16 any further with the work instructions which had already  
17 been put on the intranet?

18 A. That's not my recall. I recall having conversations  
19 with the regional manager later that year; following the  
20 email that was sent to me, I had discussions with the  
21 regional manager, as I recall it, to identify what the  
22 issues were that were of concern to Dr Widders, because  
23 these work instructions and the background to this review -  
24 he had been consulted and had been involved in the  
25 development. His views were taken into account in the  
26 development of the work instructions.  
27

28 Q. But he was saying in this note that they had been  
29 drafted by Canberra and that they required significant  
30 input from experienced regional officers to ensure that  
31 they are operationally practical?

32 A. That was obviously the view of Dr Widders.  
33

34 Q. Well, he was responsible for live animal imports in  
35 New South Wales, wasn't he?

36 A. He was the officer that was responsible for the live  
37 animal imports program, and that was obviously his view.  
38

39 Q. If that was his view - that is, that they were  
40 operationally not practical - did it follow that he didn't  
41 have to comply with them?

42 A. Once the work instructions were finalised and regional  
43 officers were advised that they were the work instructions  
44 to be followed, it would have been my expectation that they  
45 would follow them, although if they had views, we would  
46 take those into account and it was always open to amend the  
47 work instructions subsequent to that. All our work

1 instructions are capable of amendment and we certainly take  
2 into account the views of our regional officers if those  
3 views are considered to have merit.  
4  
5 Q. But this officer had raised expressly the fact that he  
6 didn't consider that they were operationally practical, and  
7 I suggest to you that he didn't receive any response to  
8 that between this date and August 2007.  
9 A. Could you perhaps go back up to the date of this  
10 email?  
11  
12 MR ROBERTSON: Commissioner, could I interrupt for a  
13 moment. I don't know what the position of the witness is.  
14 Certainly, unless it is my own computer screen, we don't  
15 have these documents, apart from on that screen over there.  
16 I don't know what the witness has. Quite often, it is much  
17 better for the witness to have a paper document to get the  
18 context.  
19  
20 THE COMMISSIONER: I agree, Mr Robertson.  
21  
22 It is difficult for you, I suppose, Ms Gordon, in some  
23 ways.  
24  
25 Do you think we can provide the witness with a  
26 document?  
27  
28 MR MEAGHER: I have been providing the witness with some  
29 documents.  
30  
31 THE COMMISSIONER: Q. If you are having any problems  
32 about following anything - and it may be difficult when you  
33 don't have the material immediately before you - please say  
34 so.  
35 A. Thank you.  
36  
37 MR MEAGHER: I had thought that the system would permit  
38 the parties to see these documents on the screen.  
39  
40 MR AGIUS: No, we're still on 2309.  
41  
42 THE COMMISSIONER: Some people are more computer capable  
43 than others.  
44  
45 MR MEAGHER: Q. Can I ask you to go back to page 2449 of  
46 this document, if that is possible.  
47

1 THE COMMISSIONER: Q. Do you have that, Ms Gordon?  
2 A. I do have now a paper copy, thank you, Commissioner.  
3  
4 MR MEAGHER: Q. The copy of the document that you have  
5 indicates that the email from Dr Widders is dated 21 May  
6 2004.  
7 A. Yes, that's correct.  
8  
9 Q. That's after the document was issued in the form in  
10 which it appeared on the intranet as at August 2007; is  
11 that your understanding?  
12 A. Yes, that's my understanding, I think.  
13  
14 Q. And it is before you received an email from Mr Graham  
15 Turner on 7 June attaching a copy of this same response.  
16 A. That's my recall of the email that you put up earlier.  
17  
18 Q. I will give you a copy of the email of 7 June. What  
19 I am suggesting is that this document was put up on the  
20 intranet in a form drafted by Canberra and then the subject  
21 of comments by Dr Widders in May, which were not acted upon  
22 or responded to at any time between that time and August  
23 2007.  
24 A. It's my recall that I had conversations with the  
25 regional manager after he sent me this email on 7 June 2004  
26 about the substance of Dr Widders' comments and that  
27 Dr Clegg had meetings with the operational people in  
28 New South Wales to resolve the concerns that Dr Widders  
29 had.  
30  
31 Q. Do you say that it's your understanding now that those  
32 concerns of Dr Widders were resolved in 2004?  
33 A. I can't state specifically that they were resolved.  
34 As I explained earlier, my particular responsibilities were  
35 to ensure that, if there were issues, I took them up with  
36 the regional manager or the senior people in the region to  
37 identify whether they had substance. As I recall, I had  
38 conversations with Dr Clegg about the need to follow up  
39 Dr Widders' comments, but it is also my recall that the  
40 concerns that Dr Widders had raised in this document had  
41 already been addressed prior to the finalisation of the  
42 work instructions and had been taken into account in that  
43 document.  
44  
45 Q. Could we see document AQIS.1001.033.0001. I will give  
46 you a copy of that. If we scroll down, this is an email  
47 from Dr Widders to Mr Hughes of 31 October 2003 containing

1 Dr Widders' comments for the live horse work instruction  
2 made using "track changes". Do you see that?  
3 A. Not on the screen. The copy itself is not entirely  
4 clear, but I think it indicates some tracked changes.  
5  
6 Q. Do you recall whether you saw this version of the live  
7 horse work instruction in late 2003?  
8 A. No, I don't recall seeing this version.  
9  
10 Q. I ask that we go to electronic page 0008 and the  
11 heading "Arrival at Airport". You will see that what  
12 Dr Widders did was to put his comments in capitals and in  
13 square brackets after the words of the draft work  
14 instruction. Do you see that?  
15 A. Yes.  
16  
17 Q. Do you see that in relation to the subject of arrival  
18 at the airport, the instruction said:  
19  
20 Ensure that only personnel relevant to the  
21 unloading and transport of the horses are  
22 present at the transfer area and ensure  
23 that any personnel other than those that  
24 travelled on the flight...that are required  
25 to handle horses during unloading are  
26 wearing appropriate protective clothing.  
27  
28 As you understand it, that work instruction, as eventually  
29 issued, was relevantly in that form, wasn't it?  
30 A. Look, I'm sorry, I can't comment on that. I would  
31 have to go back and compare the particular documents. And,  
32 as I have indicated a couple of times, I wasn't directly  
33 involved in writing these documents. My role at that time  
34 was to ensure that if there were any issues of concern  
35 being raised by a regional office in respect to the  
36 development of the work instructions being done in  
37 Canberra, we had a process in place to take those into  
38 account and resolve the issues themselves rather than get  
39 myself involved in the detail of the writing.  
40  
41 Q. Assume that the work instruction, as issued, included  
42 the words in the draft but didn't take account of  
43 Dr Widders' comments. You will see that the comment  
44 suggests:  
45  
46 ...this area requires upgrading [because]  
47 these work instructions require that

1 farriers and vets attending the horses  
2 during PAQ change clothes and shower. This  
3 should apply equally to people handling  
4 horses at arrival.  
5

6 Do you see that?

7 A. Yes, although it is difficult to read. It is very  
8 fuzzy.  
9

10 Q. You can see that, Ms Gordon, can't you?

11 A. Perhaps if I wear glasses I might. Yes.  
12

13 Q. Since August 2007, there have been revisions made to  
14 the work instruction, haven't there?

15 A. Yes. The work instructions are - enhanced provisions  
16 have been put in place since we knew that we had equine  
17 influenza in the country and that we needed to address the  
18 presence of an additional risk that we hadn't taken into  
19 account in the development of these work instructions at  
20 that time.  
21

22 Q. Just tell us, what was the additional risk that you  
23 hadn't taken into account in the development of these work  
24 instructions at that time?

25 A. In 2004 and until August 2007, the management of risks  
26 for horses, and particularly the issue of equine influenza,  
27 basically worked around arrangements that we called the  
28 continuum of quarantine, which requires us to consider, to  
29 the extent that we possibly can, putting in place  
30 arrangements to keep the risks offshore.  
31

32 So what we did was to develop, on the advice of  
33 Biosecurity Australia, conditions on import permits that  
34 required the risks to be managed, to the extent possible,  
35 in the country of origin of the horses and through a series  
36 of layered progressive measures to address the residual  
37 risks on arrival in Australia.  
38

39 Since August 2007, when it became known that we have  
40 equine influenza in the country, we have sought to put in  
41 place additional measures to manage the now known  
42 additional risks that we have with equine influenza in  
43 Australia.  
44

45 Q. So what was the additional risk that you hadn't taken  
46 into account in the development of these work instructions  
47 at that time?

1 A. In 2004, we didn't have a case of equine influenza in  
2 Australia. Since August 2007, we do.

3  
4 Q. Are you saying that in 2004 you didn't think that  
5 equine influenza was a serious risk?

6 A. No, I'm not saying that I didn't or that we generally  
7 didn't think equine influenza was a serious risk. It was  
8 always known to be one of the serious risks attendant on  
9 the importation of horses.

10  
11 But the advice for managing those risks from  
12 Biosecurity Australia that was reflected in the conditions  
13 on import permits sought to put in place measures that  
14 would, to the extent possible, address the risks prior to  
15 the horses arriving in Australia so that, to the extent  
16 that we could through pre-export quarantine, through  
17 vaccinations, through certification from the veterinary  
18 authorities in the countries that the horses came from, we  
19 were seeking to ensure that horses did not arrive in  
20 Australia with equine influenza.

21  
22 The arrangements that we had in place for managing  
23 horses after arrival in Australia took into account the  
24 fact that it was understood that the measures for  
25 pre-export management of horses would actually address the  
26 risk of equine influenza.

27  
28 Since August 2007, when it became known that we had  
29 equine influenza in Australia, we identified the need to  
30 put in place additional measures to manage what was now  
31 known to be a risk that we had already here.

32  
33 Q. Could we focus a minute on what Dr Widders suggested  
34 in 2004 at the airport. He suggested, at the airport, that  
35 the truck drivers and others who were handling the horses  
36 should be required to shower or change clothes if they  
37 weren't going to the quarantine station; do you see that?

38 A. Yes.

39  
40 Q. Has that procedure now been implemented, since August  
41 2007?

42 A. I can't comment specifically on that. The documented  
43 procedures that we're putting in place now - I haven't seen  
44 the final version of those. I've been in Sydney while they  
45 have been worked on, and officers within the division who  
46 have been developing new procedures to address the risks  
47 would be better able to comment on the precise requirements

1 that we have in place now.  
2  
3 Q. But, Ms Gordon, you know that since August 2007 one of  
4 the new procedures involves people having contact with the  
5 horses at the airport to be required to shower and change  
6 clothes, don't you?  
7 A. I understand that we were putting in place - or had  
8 discussed putting in place arrangements to require that.  
9 I wouldn't say that I know for a fact that that is exactly  
10 what we are requiring at the moment, no.  
11  
12 Q. Can you offer an explanation as to why the suggestion  
13 which Dr Widders made in late 2003 in respect of a risk  
14 that he apparently appreciated was not adopted in the work  
15 instruction?  
16 A. No, I can't. I wasn't involved in the development of  
17 these work instructions at that time, and I'm sure that  
18 Dr Widders could give you his reasons for putting it in  
19 there now.  
20  
21 Q. The regional manager for New South Wales sent you,  
22 apparently at your request, a copy of Dr Widders' comments  
23 on the work instruction in June 2004, didn't he?  
24 A. I'm sorry, this document was not sent to me in 2004.  
25  
26 Q. His comments on the review.  
27 A. His comments on the review. But this particular  
28 document that you have up on the screen at the moment  
29 I don't recall being sent to me.  
30  
31 Q. But the regional manager sent you his comments on the  
32 review in June 2004?  
33 A. The regional manager sent me a document written by  
34 Dr Widders in June 2004. I'm not sure, and I would have to  
35 spend some time looking at those documents to know whether  
36 in fact these comments were in those documents. I don't  
37 recall that they were.  
38  
39 Q. Could I ask you a couple of other questions. I want  
40 you to make some assumptions. Assume that in March of this  
41 year, there was a new manager introduced to the Eastern  
42 Creek Quarantine Station. Would you make that assumption?  
43 And assume that, at that time, no-one at Eastern Creek was  
44 aware of the work instructions that you have identified and  
45 that no-one was acting on the basis that they were in place  
46 and were required to be addressed. Will you make that  
47 assumption? Who would be responsible for that failure, if

1 that was in fact the position?  
2 A. I think, if you go back to the policy on standard  
3 operating procedures, the 2006 version, which I think is  
4 the most recent version, we've identified the managers and  
5 supervisors of individuals as being responsible to ensure  
6 that they are aware of what work instructions or standard  
7 operating procedures they need to use in the work that they  
8 do, but the other way that an individual officer could  
9 identify which work instructions or standard operating  
10 procedures were relevant would be for that officer to speak  
11 to the national program manager.  
12  
13 Q. Who would be responsible for that failure, if that was  
14 in fact the position?  
15 A. I'm not sure of exactly the point of your question.  
16 If you are asking how would a new manager in a program  
17 identify what work instructions they had to follow, it  
18 would normally be their supervisor who would draw their  
19 attention to work instructions or standard operating  
20 procedures, but they also are able to ring the national  
21 program managers to ask what information is available to  
22 guide them in the work that they have to do.  
23  
24 Q. Let me take it a step further. Assume that the  
25 manager then telephoned Mr Ironside and said that he was  
26 not aware of any work instructions or procedures and  
27 requested that Mr Ironside advise him of any that were  
28 applicable and forward copies of them. Assume that, and  
29 assume that Mr Ironside sent a copy of the work instruction  
30 and a copy of another document which was in a draft form,  
31 described as an operations manual for horses. Make those  
32 two assumptions. Who is responsible for the apparent  
33 failure to be able to identify clearly the work instruction  
34 as the one document which was to govern procedures?  
35 A. I'm sorry, I am having difficulty understanding the  
36 actual question.  
37  
38 Q. Well, whose job was it to see that Mr Ironside knew  
39 which were the documents which were to be applied within  
40 the program?  
41 A. Mr Ironside was responsible to the national manager,  
42 animal and plant quarantine, who had just recently taken  
43 over responsibility for animal quarantine, so he could have  
44 sought advice from Mr Liehne. If Mr Liehne needed to  
45 qualify exactly what work instructions or standard  
46 operating procedures were available within that program, he  
47 could look up our intranet or he may have spoken to

1 Dr Clegg, who had been responsible, until the beginning of  
2 this year, for those programs.

3  
4 THE COMMISSIONER: Q. Ms Gordon, I am having some  
5 trouble with this. In the past, administrative procedures  
6 involved somebody, when he or she took up a job, being  
7 given a duties sheet.

8 A. Yes.

9  
10 Q. You know what I mean by that?

11 A. Yes.

12  
13 Q. Then that person would immediately know what he or she  
14 had to do, and the document would be very explicit,  
15 normally, and then, if it were not explicit enough, the  
16 person taking up the duties would go to the superior and  
17 say, "Well, there are these gaps; what's the situation?"  
18 Was there any procedure here for a person taking up a new  
19 position being handed a duties sheet and somebody above  
20 that person ensuring that the person taking up the job knew  
21 what was in the duties sheet and was carrying out the  
22 duties that are prescribed?

23 A. Yes, Commissioner, but I think I have become confused,  
24 because I've been asked questions about two different  
25 officers. One was --

26  
27 Q. Don't worry about the other questions you have been  
28 asked; just focus on mine for the moment, please. Was  
29 there any such procedure here?

30 A. Yes, Commissioner. Any officer taking up a new  
31 responsibility within AQIS would be expected to have a  
32 conversation with their immediate supervisor about the  
33 nature of the duties that they were assuming. They would  
34 be referred to the business plan that would already be in  
35 place or that would be being developed for carrying out  
36 those responsibilities if they were a manager, so there is  
37 a business plan for live animal exports and a business plan  
38 covering the post-entry animal quarantine station. The  
39 managers of those programs would look to those business  
40 plans.

41  
42 They would also be expected to enter into an agreement  
43 with their supervisor about their particular  
44 responsibilities and the information that was available to  
45 assist them in carrying out those responsibilities, and  
46 their supervisor would have a responsibility for drawing  
47 their attention to any general standard operating

1 procedures or work instructions that were available.  
2  
3 Q. Would the business plan descend to the minutiae of the  
4 day-to-day duties of a person taking up the position?  
5 A. It would depend on the level of the officer. An  
6 officer at the level, say, of David Ironside, who manages  
7 the post-entry animal program and the live animal imports  
8 program, would be expected to look to the business plan  
9 governing both of those programs, because it would set out  
10 the agreed processes that were going to be followed in  
11 those programs for that year; it would tell him what  
12 reviews he would be responsible for undertaking or whether  
13 there were new instructions that had to be developed;  
14 systems being developed; particular risks that had been  
15 identified that he would be required to manage.  
16 A lower-level officer in those programs would have an  
17 individual performance plan, which would spell out their  
18 particular responsibilities, which would feed into the  
19 completion of that business plan.  
20  
21 Q. When you say an "individual performance plan", you are  
22 referring to what I would describe as a duties sheet?  
23 A. Basically, yes, Commissioner.  
24  
25 MR MEAGHER: Q. If the position is that Mr Ironside  
26 wasn't able to clearly answer an inquiry from the manager  
27 of the Eastern Creek Quarantine Station, if that were the  
28 position, there is obviously a breakdown at the level of  
29 Mr Ironside in understanding what the procedures were which  
30 he was supposed to implement and oversee; do you accept  
31 that?  
32 A. Well, it is based on an assumption that Mr Ironside  
33 didn't know the detail of the program. It's not  
34 information within my knowledge, and I really can't comment  
35 on it.  
36  
37 Q. At the regional level, there is a regional manager,  
38 Mr Turner, and then there are assistant regional managers,  
39 one of whom looks after cargo management, shipping and  
40 technical support; that's right, isn't it?  
41 A. Yes, as I understand it.  
42  
43 Q. Would you expect those regional managers to be aware  
44 of the existence of a work instruction and the obligations  
45 to comply with it?  
46 A. I would expect them to know that there would be work  
47 instructions and to know where they would look to find

1 those work instructions or the standard operating  
2 procedures.

3

4 Q. Since August 2007, there have been efforts made to  
5 produce revised standard operating procedures for live  
6 animal imports?

7 A. Yes. Now that we know that we have equine influenza  
8 in the country, we have put in place additional measures to  
9 manage the risks against that known situation and on the  
10 basis that the existing measures that we had had in place,  
11 which had sought to manage the risks offshore, hadn't been  
12 as effective as we had intended.

13

14 Q. Have you also undertaken inquiries to determine  
15 whether the work instruction which you have identified was  
16 being complied with at Eastern Creek Quarantine Station?

17 A. No. Fairly shortly after it became evident that we  
18 had equine influenza in the country, the executive  
19 director, in consultation with the secretary of the  
20 department, tasked our compliance and investigations unit  
21 to begin an investigation in terms of what had gone on.  
22 So I, as the executive manager, stood to one side in terms  
23 of determining exactly what had failed in that  
24 circumstance.

25

26 Q. So that you haven't, as a result of inquiries, formed  
27 a view as to whether the work instruction had been complied  
28 with?

29 A. No. The compliance and investigation process started  
30 fairly soon after the identification of equine influenza in  
31 the country, and in the first week after it had been  
32 identified, I have not been at work; I've been off on  
33 leave.

34

35 Q. I want to take you to the AQIS business plans that you  
36 have referred to. Could we go to AQIS.2003.012.0001.  
37 I can hand the witness a copy of parts 1 and 2 of this  
38 document. Is it the general structure of this AQIS  
39 business plan for 2007/2008 that it contains separate  
40 business plans in part 2 in relation to each of the  
41 programs?

42 A. Yes. Part 2 comprises what we call a "plan on a  
43 page" for each of the AQIS programs. There are also  
44 separate documents which expand on those plans on a page.

45

46 Q. Each of those plans on a page summarises a separate  
47 business plan, which is a schedule to the AQIS business

1 plan?  
2 A. Yes.  
3  
4 Q. Those schedules form the complete versions of the  
5 business plans for each of the programs?  
6 A. Yes.  
7  
8 Q. Could I take you to part 1 of 2 and to the appendix,  
9 which starts at electronic page 14. There is what is  
10 called a CPD risk register. What does "CPD" stand for?  
11 A. I think it stands for corporate policy division.  
12 Overall, within a department, there is a register of risks  
13 that the department has identified and that it is seeking  
14 to manage.  
15  
16 Q. If you go over to page 15, there is a number of risks  
17 identified. The first is "Risk 1. Production - major pest  
18 or disease incursion that undermines production and  
19 exports". Would equine influenza fall within that risk?  
20 A. I would consider it to fall within that risk.  
21  
22 Q. What does this document tell us about that risk  
23 category? Could you explain what this document is supposed  
24 to tell us about that risk category?  
25 A. I don't have the corporate risk document with me, so  
26 I'm unable to cross-refer to the relevant corporate risk.  
27 But in ticking the "Strategic" box, it is indicating that  
28 it is likely to be a risk, if it happens, that affects a  
29 number of programs or a number of areas of the department.  
30  
31 Q. You are described as the risk manager for this risk;  
32 do you see that?  
33 A. On the hard copy that I have with me, I am one of the  
34 two risk managers.  
35  
36 Q. For risk number 1, you are described as the risk  
37 manager.  
38 A. Oh, sorry, pardon me. Yes.  
39  
40 Q. Would risk number 1 include the risk of equine  
41 influenza?  
42 A. Yes, it's very likely to include equine influenza.  
43  
44 Q. And risk 2, over the page to electronic page 16.  
45 A. Yes.  
46  
47 Q. What does it mean when it identifies you or you and

1 another person as the risk manager?  
2 A. Risk number 2 identifies both myself and Greg Read.  
3 Greg Read is the executive manager for exports. He is my  
4 counterpart.  
5  
6 Q. But what does it mean when you are identified as the  
7 risk manager either alone or with someone else?  
8 A. That means that that risk comes within the areas of  
9 our responsibility. Risk number 1 is largely about a major  
10 pest or disease incursion that would occur in Australia  
11 that could have an impact on our production or export  
12 systems.  
13  
14 Q. Would risk number 2 include equine influenza?  
15 A. It could include equine influenza, but risk number 2  
16 also picks up potential loss of an export market, so to  
17 that extent it picks up the responsibilities of Mr Read.  
18  
19 Q. Are you familiar with the "hazard analysis, critical  
20 control point" document which was prepared in relation to  
21 the Sandown quarantine facility, which is a privately  
22 operated facility?  
23 A. I'm aware that there is such a document, but I'm not  
24 familiar with the detail of it.  
25  
26 Q. Have you ever seen the document?  
27 A. No, I haven't looked at it in detail, no.  
28  
29 Q. Have you ever seen it?  
30 A. No, I haven't read it in detail. I've seen a  
31 document, but I haven't read it.  
32  
33 Q. But you appreciate that in relation to that private  
34 facility, there was a hazard analysis prepared, which  
35 identified all of the risks involved in importing live  
36 horses and holding them at that quarantine station before  
37 they were permitted to participate in racing events?  
38 A. I'm advised that that was done, but I'm not personally  
39 aware of what's involved in that document.  
40  
41 Q. You have never looked at the standard operating  
42 procedures which form part of that document?  
43 A. No, I haven't.  
44  
45 Q. Is it the position that no equivalent risk analysis  
46 has been prepared in relation to Eastern Creek Quarantine  
47 Station?

1 A. Well, no, not to my knowledge. I haven't seen such a  
2 document, no.  
3  
4 Q. You agree with what I have put?  
5 A. I haven't seen any document, so --  
6  
7 Q. Do you agree that there has been no equivalent risk  
8 analysis undertaken by the Commonwealth in relation to  
9 Eastern Creek Quarantine Station?  
10 A. Not to my knowledge.  
11  
12 Q. Can you explain why not?  
13 A. No, I can't, I'm sorry.  
14  
15 Q. Can you explain why it is apparently necessary for the  
16 privately operated quarantine facility to comply with such  
17 a requirement but that Eastern Creek does not?  
18 A. No.  
19  
20 Q. It is the fact, isn't it, that Biosecurity Australia  
21 has never been requested to do a risk analysis in relation  
22 to the activity of importing live horses from the point of  
23 view of equine influenza?  
24 A. I'm unable to answer that question. I think you would  
25 have to direct that question to officers of Biosecurity  
26 Australia. The conditions for the importation of live  
27 horses have been in existence for quite a considerable  
28 period of time, so I'm not aware of the risk analysis that  
29 was undertaken when those conditions were first developed.  
30  
31 Q. But since August 2007, Biosecurity Australia has been  
32 asked to look at the quarantine procedures at the airport  
33 and at Eastern Creek, hasn't it?  
34 A. Yes.  
35  
36 Q. Why was it only first asked to do that in August 2007?  
37 A. In August 2007, we identified that we had equine  
38 influenza in Australia. Prior to that time, we didn't.  
39 The conditions under which we had managed the importation  
40 of live horses into Australia had been in existence for  
41 many years and there had never been a situation where we  
42 had equine influenza. So we asked Biosecurity Australia to  
43 have a look at all of the procedures to see what we needed  
44 to do now that we actually had that risk in Australia and  
45 needed to ensure that we were managing it.  
46  
47 Q. Before August 2007, what did you regard as the most

1 significant disease risk involved in the importation of  
2 live horses?  
3 A. Prior to August 2007, I had not paid a great deal of  
4 attention to the particular importation conditions for  
5 horses. They were only a very small part of my business.  
6 The detail of the import risk analyses and the operational  
7 arrangements for a whole range of imported goods, including  
8 animals, were managed at the program level. My  
9 responsibilities didn't have me getting into those details  
10 unless a significant issue arose which required executive  
11 oversight at my level. There were a number of issues of  
12 that sort, but horses was not one of them.

13  
14 Q. Is it the position that before August 2007, you  
15 personally had not turned your attention at all to what  
16 were the risks which had to be guarded against when  
17 importing live horses?

18 A. Up until the end of 2004, I had paid attention to the  
19 issues of importing horses, in the sense that I was  
20 overlooking the development of the new work instructions.  
21 Equine influenza was one of the issues that were being  
22 considered in that context, and we were developing national  
23 guidelines for operational arrangements in the regions to  
24 management the importation of live horses, knowing that  
25 equine influenza was one of the risks that we were dealing  
26 with.

27  
28 The conditions that we were seeking to put into  
29 operational effect were those that Biosecurity Australia  
30 had advised us would address, to the extent possible, the  
31 risks of equine influenza. As I indicated earlier, that  
32 was largely to ensure that the major management measures  
33 were put in place prior to the horses coming to Australia,  
34 to the extent possible, to keep those risks offshore and  
35 then to have a series of complementary measures in  
36 Australia on the basis that the risk had largely been taken  
37 care of prior to the horses arriving in Australia.

38  
39 Q. Can I ask you now, Ms Gordon, please to address my  
40 question. My question was, "Is it the position that  
41 before August 2007, you personally had not turned your  
42 attention at all to what were the risks which had to be  
43 guarded against when importing live horses?"

44 A. No, as I indicated, up until --

45  
46 Q. Had you or had you not turned your mind to that  
47 question?

1 A. Up until the end of 2004, I had turned my mind to  
2 those questions. I was aware --  
3  
4 Q. What were the disease risks that you thought had to be  
5 guarded against?  
6 A. On the advice of the technical officers in my branch,  
7 I was aware that there were a number of disease risks.  
8  
9 Q. What were they?  
10 A. I cannot recall now all of those risks, but equine  
11 influenza was certainly one of those risks.  
12  
13 Q. Was that regarded, as you were told, as one of the  
14 significant of those risks?  
15 A. All of the risks that would have been identified, all  
16 of the potential issues such as equine influenza and a  
17 range of other diseases of horses, that were advised to us  
18 by Biosecurity Australia that needed to be managed, would  
19 have all been considered important diseases that we had to  
20 ensure, to the extent possible within the arrangements we  
21 had in place, that we were managing.  
22  
23 Q. Did you regard it as a significant risk in 2004 that  
24 had to be guarded against by quarantine procedures?  
25 A. Yes. On the advice of Biosecurity Australia, equine  
26 influenza was one of the disease risks that had to be  
27 guarded against, to the extent possible.  
28  
29 MR MEAGHER: Commissioner, is that a convenient time?  
30 I am going to move to another subject.  
31  
32 THE COMMISSIONER: All right. We will adjourn, then,  
33 until 10 o'clock tomorrow.  
34  
35 AT 3.58PM THE COMMISSION WAS ADJOURNED  
36 TO WEDNESDAY, 14 NOVEMBER 2007 AT 10AM  
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