

Appendix E:

SEMI-STRUCTURED INTERVIEW TRANSCRIPT

CASE STUDY 2 – AVIAN INFLUENZA

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Transcription of Interview

Duration of Interview: 01:58:19

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[Beginning of File]

I would be happy to talk through the specifics. Having had a quick look at this I think we need to just be clear about, if you like, where the regulatory position, the policy position and the operational divide kicks in because I think this assumes a lot more policy involvement than actually happens. So if I sort of go back one just to make sure that you're fully up to speed with all the bits and pieces so I've fully briefed you.

Essentially the policy process happens before an outbreak, the policy process takes place as part of contingency planning and you will have seen these documents but basically these two documents together form the exotic disease contingency plan. This bit of it essentially sets out how we do it so the set up, the meetings that take place, the daily battle rhythms, who we involve and the processes and procedures and structures we set up. And this one sets out our operational readiness and it's in this one that we talk about capacity, not who gets involved but how we would do it and what the policies are in effect.

So basically we set out the key operations which are culling and then disposal and so the disposal policy is set out in the hierarchy which Simon will have told you about and which we worked with Simon and others to, if you like, put in the risk assessment work, the underpinning work in order to reaffirm that this is an appropriate hierarchy based on risk. So we set out our policy here and it's published, we indicate disposal options etc etc. We consult on this so it goes out for formal public consultation typically once a year.

We are obliged under the Animal Health Act to review the contingency plan and to publish any changes on an annual basis so that tends to mean that we get into slightly longer than a twelve month cycle. So we review it annually and by the time we've gone through the consultation process and published it it can be as long as eighteen months but essentially the policy is consulted on. Ministers are obviously consulted as part of that and Ministers sign

up to the policy and we also lay it before Parliament. So it's laid before Parliament and published on the website and so that it is, in effect, our policy.

The regulation of it, because I know that you also use the regulatory process, the regulatory aspects are regulated by whichever Regulator regulates these things. So if we're thinking disposal, the larger disposal facilities are regulated by the Environment Agency under PPC permits, some of the smaller ones are regulated by Local Authorities under their PPC permits.

The animal by-products bit of the regulatory process is also regulated by the Local Authority although the inspection body, if you like, is also Animal Health which is us. In order to get carcasses from a farm to a disposal facility they need to be transported and the regulatory body for that is a combination of the Environment Agency, Local Authorities and the Department for Transport because infected carcasses are considered to be dangerous goods so they're covered by the Carriage of Dangerous Goods Act and which the Regulator tends to be the Department for Transport.

So that's where the regulatory aspect comes in but, operationally, I can then talk you through how we go about it. I just wanted to make sure that you were clear in terms of that's the policy, the operational decisions work within the policy frame work and, to a large extent, Animal Health is I suppose empowered to make those policy decisions. It informs the rest of the department but doesn't seek its approval so it may affect this flow chart a bit.

Has Simon also run you through the protocols that we have in place for the various disposal facilities? Possibly not. For each disposal option we have a series of operational protocols. So this is the one for rendering and so this basically is a document that sets out how we identify suitable sites, a process map about how we go about the decision making and it's colour coded as to who does what. It then goes into a bit of detail about what staff should and shouldn't do in terms of PPE use, washing down, how we do risk assessments etc but at the end there's bit of a flow chart about the selection process.

So basically we start off with a white list of all PPC permitted Category 1 and 2 ABP approved rendering plants. So that's basically our population so we would consider using one or all of those rendering plants. The next process is could the plant meet the

environmental and bio security requirements set out in the protocol, if no we cross them off our list, if yes they go onto our amber list. So that's our list of plants that we would consider using in an outbreak and that is as far as we go in terms of the decision making process before an outbreak happens.

This one's incineration but we would have a similar map so this basically sets out the amber list plants that we would use. We happen to have done this in government office regions just so they can see how little or how much incineration capacity are in their patches. So these are the ones that we would consider we might use in an outbreak and there's a similar one, which I don't think I've got for rendering. It doesn't really matter, it's just so that you understand that.

In an outbreak we then go through this second bit of the process which looks at which ones we might use. So does the plant meet the environmental criteria so have things changed, has there been a breakdown, have the Environment Agency decided that they're suing them for anything or else. If yes then they stay on the list. Is it operating efficiently to animal by-product standards because that's the regulatory thing, that's the animal by-products thing, yes? Does the plant pose an unacceptable risk to public health? So we talk to the Health Protection Agency or the relevant Health Protection Agencies, have they got any concerns about using it? If no does the plant or access route pose a bio security risk?

So, for example – and it's not a particularly good example for rendering – but if we are dealing with avian influenza is there a poultry unit right next door to it. If it was a beef and sheep farm and we were disposing of avian influenza infected carcasses then there was a bio security risk because we might be risking spreading disease onto the neighbouring unit. If we're happy that there isn't a bio security risk you go down to the next one and then this is a more general sort of catch all, are there any overriding reasons why the site's unsuitable?

In most outbreaks this isn't an issue but let's say, for example, if we got a really big outbreak like we had in 2001 and we start getting public protests. There might be some plants, due to their physical or geographic location, where it would be very difficult if there were public protests, for example, because it might bring a motorway network to a close or something.

So we would discuss with ACPO and the local emergency planners if there were any issues that they were aware of that might lead it.

If all those are still okay basically we get a green list, these are the plants or sites we would consider using, and the way we work is we work on the proximity principle. So basically we work out from the IP, the infected premises, to look at the premises in the area and unless any of those rule them out we pick the one that's nearest. We are asked what about price and cost, at the moment our main driver is the technical issues and the proximity. If there were two that were virtually equidistant and one was cheaper then we would use the cheaper one.

It's a shame I haven't brought the map for rendering, we rendered the Banbury one as opposed to incinerating. Anyway Banbury will be around here somewhere. We looked at that incineration facility but there were some bio security concerns about it and also we had a fair number of birds there and they couldn't have incinerated them within a day so we went away from that. So we ruled that one out on bio security grounds.

Our other options were a rendering plant in Warwickshire, just outside Nuneaton, there was a rendering plant in Cheddleton in Leek up here somewhere and there was Wessex Incineration which is another big incineration plant there. We did our route plans and it was very clear that the rendering plant at Nuneaton was by far and away the closest and we were content that it met all of these so we chose them. We approached them, they were content to have the business and we signed up and it was as simple as that.

I spoke to the Health Protection Agency, the Environment Agency and the Police and they were all content. We spoke to the Local Authority, they had no reasons why not to use it and so we followed the process and used them. I then announced our intentions at the Bird Table, again there were no issues or challenges to that so we did it.

So that's it in this particular case. A very similar thing happened when we had Foot and Mouth Disease about here. We first of all approached this chap, we had some bio security concerns there and in the end he didn't want to do it either. We cast around, these were the next closest and they had the capacity and we used them. So in the last three, we used this one for Foot and Mouth Disease, we used this one that's not listed but I can show you on a

map upstairs, the one in Nuneaton for the last FMD outbreak, we used the plant in Cheddleton in Leek for the two Avian Influenza ones, the Holton outbreak and the Redgrave outbreak last year, we had one that was up in Scotland and we used this one. So we will choose appropriate facilities to meet our needs. So I don't know if that helps.

It definitely helps. Talking from one who knows the process I suppose you've already explained who is involved in that process and this is with reference to the scientific knowledge that was involved so I suppose that scientific knowledge is also a proximity

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Yeah I suppose the scientific knowledge base really kicks in one step removed, i.e. it is in the production of our policies and plans and if we haven't got the science evidence base we either flag it up and say we've got some extra work to do in this area, let's see how best to fit it or we go out and procure it on the day or in peace time. So the hierarchy basically goes back to 2001 where we were in the middle of an outbreak, the middle of a crisis probably, and the science evidence base or the expert base were pooled together in the heat of an outbreak to pool together some guidance and to review sound science.

We then decided that was great and there was a good evidence base there but it probably needed to be refreshed hence the work that we commissioned with Simon to facilitate an expert panel to follow that science evidence base and you will have seen the report that Simon produced, you will have seen the sort of organisations involved in that.

So that sets our policy base and through the consultation process we are content that there's sufficient scientific challenge to that if required. In terms of the involvement on the day or in the heat of battle, it is very much obvious the Environment Agency are clearly involved and they bring to the party the science base as well to support their regulatory interests. We have the Health Protection Agency in England who are particularly important in this because unless they are content that the public health aspects are safeguarded and worker safety as well it ain't going to happen. So they're a key thing and, again, they bring in their specific science evidence base and I think the Health Protection Agency is a particularly good example of the external expertise coming in because they will look at it from the individual or from the specific outbreak circumstances.

In the last fifteen months we've had Avian Influenza how many times, five times possibly, but we've had H5N1, hi path AI, once, twice, three times. We've had H7N7 once, H7N2 once and H7N3 once and whilst they're all Avian Influenzas they all have slightly different infectiousness or morbidity levels within humans or potential morbidity levels. So the approach taken is bespoke to the particular circumstances that we have and so the Health Protection Agency will advise and review based on the level of risk and the particular circumstances that we have. They don't just say this is an Avian Influenza do it like this, they will apply it to the specifics.

In terms of science base those are our two main sources I guess, the Police are from a more practical side. The Health and Safety Executive are the regulators for personal protective equipment etc but they would tend to be on the fringes and, if we had concerns over whether personal protective equipment was efficient or effective for some strange reason, we would approach them but otherwise they're sitting on the fence.

The other science base is within house, i.e. what are the veterinary manifestations of this particular outbreak or incident and that's where we draw on expertise from within Animal Health but from within DEFRA and the main areas there are the virologists from the Veterinary Laboratories Agency, the epidemiologists, both in the Centre and in the field, and the exotic veterinary advisors and those come together in the expert group which is part of the process.

Basically there is an expert group formed to advise the CVO but basically anyone else of any particular issues and I have used the expert group to verify or confirm details where needed. They tend to be more to do with cleansing and disinfection afterwards as opposed to which disposal facility to use but I have used them, in particular, to discuss, review, agree things like how quickly or to what temperatures things need to be heated to in order to guarantee destruction of the virus and we've particularly used it at the killing plant in Suffolk, the Holton outbreak, whereby there was some wash water from the area used to kill the birds and we had x thousand gallons of this stuff and we went to the expert group to confirm that they were content with our proposals for clean up afterwards. So that's how we would use that, so they come together in a formal expert group. Again, that's set out in the plan.

So the information that they provide you with, is it very much a standard piece of information and you interpret it as you will or is it more of a request base?

Because we've done the work to start with to get our policy basis and the policy basis is based on a whole series of things, it's public health, animal health, human health, environmental risk but it also covers the legal aspects as well so there's not much point having a fantastic system if it's illegal to use. So those are already done there. So the main thing is it will be a specific request from me or from my team to say, in order for us to go through this decision making process we need this key bit of information, and we would phrase it, form it in a way that makes it easy for them to answer.

So we wouldn't just say, I don't know, how resilient is H7N7 virus, we would say we have this specific circumstance, we have infected water, there's x thousand gallons of it or litres of it, we need to do this with it, we're proposing one of these three options, either which option would you like us to do or can you confirm that option A is effective. And so that's how we would use that, if you like, external science and expert challenge.

I'm going to show you something here but please forgive me if it's not perfect. As I was going through the report to try and map out the decision process, and this just touches on what you said, when there is an outbreak and whether it's black, amber or red and then coming down. But this bit particularly, I suppose this is where you choose the different sites and this is where you get these different people involved?

Yeah.

So one of these examples you've explained to me about, say there's been an outbreak. You look at your waste hierarchy and then you choose the top one and the see which ones are in the area, is that correct...

Yes.

...and then look at the issues as you've told me about the decision process?

Yes, so, as you say, this is the hierarchy as we come down. To be honest, we consider incineration and rendering to be virtually –

The only routes?

Well no, virtually equal in terms of the hierarchy. These clearly are within the hierarchy but we would only use them if we were absolutely content that these were not open to us. So it is basically between these two. So capacity absolutely right. That's pretty much how I was describing the amber list, that's absolutely right. The one exception to that is Wessex Incineration, which is this one down here, the biggest for Foot and Mouth disease. That has probably three times the capacity of a typical incineration plant but even that is, I mean, in round figures that probably has five hundred tons capacity a week whereas the rendering plant up here has four thousand tons a week capacity. So just to give some figures on the back to it.

I'm not quite sure what that means, I can understand capacity.

Sorry I was thinking the actual operation of the actual disposal.

Perhaps the bit that I haven't covered yet is, just to explain again how we take it forward. Basically when I've decided which plant we're going to use it then gets tasked to two different people. Firstly there is the Procurement and Contracts people who confirm that we have a contract in place, they issue the purchase orders and, if you like, cover the legal side. I then approach the DVM, the Divisional Veterinary Manager as you've put there, who is responsible for that site.

The country's carved up into twenty four Animal Health office areas so I would approach the DVM with the plant in their patch to say we are going to use Plant X. They were probably part of the decision making process in the first place because we'd have probably asked them if there was any reasons why we couldn't use them but we would say we're going to use this. You, the DVM, will need to put in place a team to manage, oversee, supervise the disposal activities at that site and we would have a discussion about how quickly we needed to come on-stream, whether we were going to work 24/7, how it needed to be operated.

So, again, just going back to Banbury, the disposal facility was in our Leicester Animal Health Division office, the outbreak happened in Oxford which was covered by our Reading Animal Health Division office. So LDCC, i.e. the Local Disease Control Centre, was set up in Reading, the disposal facility, although it was only thirty miles from the IP, was actually closer to the IP than the LDCC was to the IP but that was run out of the Leicester office because they were in charge of that.

So the Senior Animal Health Officer for Leicester basically put a team in place and that team consisted of a couple of Animal Health Officers and the SAHO and the Vet visited the premises and drew up the site specific protocols, reaffirmed that it was suitable and then it was actually managed by the Animal Health Officers. So that would be the disposal bit so the Division Operation Manager had little to do with it so it was mainly the DVM setting that up.

These would be stake holders I guess, we're now Animal health and not SVS. It doesn't matter but you may find SVS written elsewhere. Contingency Planning Division, that's us. Rural Payments Agency, they wouldn't have much of a role, they would be a resource base I think. RIO, that's fine, that the Registered Incinerator Operator so that's the trade association. NTLM, what's that? National Transport Liaison Manager, so he's the guy that would be sitting in the NDCC, the National Disease Control Centre.

Again, I'm sure you know all of this but basically the structure we set up are the National Disease Control Centre here in Page Street and then one or more local Disease Control Centres. The National Transport Logistics Manager, if we feel we need one, sits with us in our Field Operations Team as part of the NDCC, the National Disease Control Centre. So he would be responsible for overseeing the transport logistics to get there.

Waste Management, I guess that's the regulatory side of things. It would be predominantly the Local Authority Environment Agency. There are other stakeholders, I guess, but I think that pretty much bypasses them. We would facilitate that so CPD is I think is probably the main. Our role really is to facilitate and make sure it happens. Most activities in outbreaks happen and are managed and delivered through the Local Disease Control Centre, these guys down here, but because disposal capacity is a finite resource and we need to make sure 1) it's

optimised but 2) we have some control over it because it also is one of the areas where it could go seriously wrong, we take a national overview of that. So if, for example, we had outbreaks all over the place we would decide which plant stuff should go to.

This is just a schematic of how it all works. So this is us in the middle, for that read CPD because we morph into the NDCC, so in this case we've got two Local Disease Control Centres so we have a reasonable spread. So the LDCC advised the NDCC that x tons of carcasses require disposal, the National Transport Logistics Manager assigns carcasses to a specific disposal facility. So they say we've got x tons of stuff, we want it disposed of, they come to the Centre, we take a national overview and say we think for this one you need to go to Rendering plant A, so for these two infected premises, and for this one, either because of proximity of the type of species or whatever, we want you to send it to that one.

So one LDCC could be sending to two or more different disposal facilities and, similarly, this one could be sending to one or more of these. That's just a pictorial thing, I'm very simple on pictures. So we decide where it goes and these make it go to wherever we've told them to go to and then we keep in touch with the capacity issues to make sure that we're optimising.

You explained very well the points of entry of the information coming into a decision process from external parties and also internal parties and also the people who are accountable for providing that information. I assume this information is presented 1) in personal communication just to inform your decisions but also in reports or is it always contained in reports?

It depends what you mean by report. We have a very structured process of monitoring and auditing where things go and so those would tend to be in formalised reports. So, for example, when we commission Rendering plant X in this particular case it would be a purchase order which stands them up so that's the means of communication. We would phone them up and say are you prepared to play ball, we would phone the Environment Agency to say are there any problems and normally we try and get them to confirm it in email, if not we make a file note to that effect.

This request to us, if you like, we need x tons, that's a proforma form which we endorse and send back to them.

With the LDCC?

With the LDCC so that, in effect, is the commissioning document and the answer going back. When they send stuff from here to there there is a document that accompanies the carcasses.

So very formalised?

It's very formalised. That document, you don't need to remember these things but it's called EXD61, Exotic Disease form number 61, there's loads of them, that covers as the audit trail, it also covers as the commercial document for the Animal By-Products Regulations and it also covers the Waste Transfer Note under the Waste Management Regs. It also acts as the document which we then use to verify that they've arrived because it's a series of forms so the guy that sends it fills in a bit, the guy that escorts it fills in his bit, when it gets to the disposal facility the guy that receives it fills it in, puts in the tonnages and the minute it's gone into the cooker or been incinerated it's signed off as being disposed. So it's a living document that sort of follows those things around from leaving the premises to being destroyed and, again, that's part of the audit trail but it's also part of, if you like, the commissioning process as well.

We try and get things by fax or email so we have a formal record of things and, where it can be formalised and process driven, we do so because, again, we would use those documents more so when rendering plant B sends in their bill. We'll say that's all very well and good but if you add up all the XD61 tonnages is it going to come to that, have you made the difference. So it's a check and balance as well as an audit thing. It also means that when I get phoned up by some mad person from the media to say that XYZ is receiving your dirty infected carcasses we can say actually no they're not.

So what would you say the barriers to that information is, the potential barriers or are people quite forthcoming?

We have the advantage that most of the people that we're seeking the views from it's actually part of their job so the job in the Environment Agency is to regulate disposal facilities, the job with the Police is to maintain public order and, provided that we have gone through due process in setting up the incident in the first place – I'm sure they wouldn't be very cooperative if it was all done without some formalities so as soon as it's raised to an incident level or X, Y or Z, in whatever terminology, it is part of the job.

I suppose the barriers are more to do with getting it done quickly enough and contacting people so it's a time bound thing. So there is a pressure to kill animals as quickly as we can to stop them generating virus. What basically happens is, if we have a suspect disease – you will have seen the amber red process – but we lock down that premises as soon we can to stop disease walking off, flying off or wandering off but, whilst those animals are alive and infected, the viral load, assuming it's a virus, is generating all the time so you've got more infectivity building up so the best thing to do is to kill them as soon as you can 'cause whilst the virus won't die with the animal the virus can't replicate when the animal's dead.

So the aim is to kill them as quickly as we can safely and humanely so we're worried about the welfare of the animal, the welfare and safety of people and also the environment itself. So as long as it's safe to do so we want to kill them quickly. So that puts a time frame pressure on us and these things always seem to happen on a Friday afternoon with the Monday being a Bank Holiday and no-one's around so those are the main barriers. It does mean that we have to be very good with our maintenance and management of contact lists because we have to phone them up and contact them. So those are the main barriers I think.

So it's timeliness of information rather than anything else and, similarly, if we phone our contact in the EA to say is there any reason why Rendering plant B can't be used they've then got to contact their local guys, the guys that would actually know the answer, so they've got to have their own contact list and then it's got to feed back up and feed back up to us.

So I think those would be the main things and just sheer logistics, we've got to ramp up, we've got to make sure we've got enough people to do all these things so our activities tend to be very front end loaded.

So there's obviously a wealth of information that's coming in and, again I suppose the guy at the top who makes the decision. The proportion of information that actually reaches him is it quite low compared to the type of information that actually supports these decisions?

We haven't had a really big one. Because this is operational the person that makes the decision, which is pretty much me, has all the information necessary to make that decision and by and large it's pretty much all of it. However, the person that's accountable for it has virtually none of it. So, in effect, if we just think in the context of where we are here, so you've got Ministers here, you have the NDCC with the Chief Veterinary Officer in effect here and the local [inaudible 46:25] so we would be sitting in here, Culling and Disposals.

The Contingency Planning Director is sort of accountable but really it's the Chief Executive so they would say to me are there any problems and I will say yes or no and I will say I am proposing to use XYZ because of XYZ and they will say okay make it happen but they would not see any of the underlying information so they assume I've done my job properly. They will want to know that I have something and they will want to know that there aren't any issues but they won't see any of the decision making process.

I may well put together a short briefing document saying I've chosen these because of or due to the proximity of something and if they want to know more detail they can have it but I wouldn't send it to them and the way it would tend to work is that I will send them an email or whatever saying I am going to use this particular rendering plant, if you want more information come to me. So that's pretty much it. The CVO will have even less because the CVO only needs to know that there isn't an issue with bodies stacking up.

Is this a realistic representation of the communication lines or is there more informal discussions between you and the CVO or between other parties lower down, say Finance Managers down here?

Yeah it's not bad. The CVO might ask me direct but it's more likely that in one of the meetings that happen. So this is where the CVO would ask. So CVO chairs, basically the Chief Executive or nominated representative goes along there. So the CVO will say any

operational issues to do with disease policy or disposal or whatever and the Chief Executive says yes or no so I would need to brief the Chief Executive if there were issues or make sure that he or she knew where they were going and why they were going. So that would be the CVO's route. The Chief Executive might then come back from that meeting and say the CVO is very unhappy, he's heard XYZ, sort it or do a report or whatever.

So that is pretty much the way it happens. The contact between here and making it happen would be between me or one of my team and the Field Ops Manager in the LDCC or the DVM or the SAHO responsible for running the facility.

So I think the last question over here is the lines of evidence but I suppose this is maybe something you answered earlier about when you talked about choosing the disposal option?

Yes.

It comes down to proximity in the final –

Provided it's technically suitable basically it's a proximity thing and what we do in terms of our evidence base is that Peter, one of the guys upstairs, it's very very simple but he will do either an AA route planner or we've got Microsoft Autoroute, he will plot out a suitable from the IP to the three or four chosen or potential facilities and we will look at time of travel and distance and that forms part of our evidence base. So those are on file that anyone can see if they want to. I may well use that data when I'm explaining to people why I'm using it or defending it at some stage in the future but that would be part of our evidence base so we would file the emails to say yes there's no reason why you can't use it, we will record on a time line who we've spoken to. That's pretty much our evidence base.

This is where I hope it doesn't get too complicated. I'll just talk through the process quickly and then basically what I was going to ask you to do is – because you've told me quite in depth about the decision process so thanks for that. If you can think of that process in a number of stages that would be useful and maybe an occasion where you were involved that differed within those different stages? You only need to say that if

you think that they differ substantially and then I'd just like to contextualise the information that you received, information processed and information passed on. Is that okay?

I'll have a go. What are we going to use, we could use Banbury, I'm not sure which would be the best example.

I mean, I'm asking you when you receive scientific knowledge but when I say scientific knowledge I mean information that supported your decisions really.

I suppose Banbury is as good as any. So sensible stages in the decision making process? Let's call Stage 1 Amber, Pre Confirmation. Our slight problem is that obviously this is more to do with the disposal, my team deals with all the field operational bits so there's a whole load of stuff going on about how we're going to kill them as well and how we're going to transport them. The transporting is sort of relevant because it's part of the disposal process. So let's say that's Pre Amber. Stage 2, let's call that Red, Disease Confirmed, and then let's call this Field Operations or something so that's actually activity on the ground.

In terms of time lines, I can't remember when it all happened. I'm pretty sure that it was a suspect, that the farm reported potential disease on Tuesday the 3rd of June and laboratory confirmation that disease was present was on the 4th of June. We started killing the afternoon of the 4th of June, we finished killing at seven thirty in the evening on the 5th of June. The disposal was completed on the 6th of June and obviously started on the 4th of June – do you see what I mean because they didn't all go at once – and then we completed preliminary disinfection on the 7th of June. So those are just some time lines.

So what was the role? So Pre Confirmation what we do, a form comes round called the NDI1 and that says there is a suspect premises, it tells you what the disease is and where it is. What we did in this pre confirmation, when it came out on whenever it was, the 3rd of June, we plotted it on our smart board upstairs, we looked on Google Earth to see roughly where it was because we tend to do that for any warm suspects. So we started to think about what our options were.

So what we did, and this was a collective decision amongst the four of us, we said this looks a bit iffy, let's see where it is. So we plotted it on the board and we started to think firstly how we would kill them and, in actual fact, one of the first things we did we phoned up our procurement guy that deals with our containerised gassing units or he may have phoned us first actually. Anyway, we had this discussion with him about whether we should think about putting some CGUs on the back of a truck just in case. We delayed that until that afternoon but the local team then contacted us to say we don't like the look of this, we think it might go positive, can we think about how to kill and where to dispose of them.

So we then looked at our map and we thought wonder what our options are and we went through the thought process and I'm sure that even before the disease had been confirmed we plotted out the distances, I'm pretty sure we did that that Wednesday afternoon. In fact, what I'll do is, we have a time line for this particular thing about who we spoke to so I'm just wondering whether it's almost worth going and doing that now, getting that now to get the actual dates in place because that may well cover pretty much everything.

I was going to ask you what was the exact sort of qualitative and quantitative data and then these ones, political, technical, costly, basically just trying to characterise the information and if it varied along the process. So when I say political the implications of getting it right and costly, how much that actually had a role to play in the actual information received and then the same for passing on.

I'll just briefly talk you through what we did but if we've got the time line I can give you, you'll have to treat names and addresses and things as completely confidential and you'd have to take them out of anything that ever gets anywhere near to publication. But basically we went through that process, at a fairly early stage we spoke to the Environment Agency and said these are the ones we're thinking of. Because I know that we looked at Wessex Incineration, PDM Nuneaton or PDM Hartshill, and Poyntons which are the other one. Those are the three that we honed in on and, although we knew PDM Nuneaton was the closest I'm pretty sure we asked if there were any reasons why the others couldn't be used because Wessex had been closed for a while, we knew Poyntons was okay.

We then spoke to the Procurement people when we had a pretty firm idea that we wanted to use PDM Nuneaton and asked them to make contact with the Managing Director because they had a contract with us but we wanted to check that they were still prepared to play. I think we probably had a discussion with him pre confirmation but it would have been probably pre confirmation because we didn't want to set too many hares running by phoning people up saying we've got Avian Influenza if we haven't. So that would have happened at and around the time that the CVO was preparing. So this would have been pre work without pressing buttons and without committing ourselves to any money.

The minute the disease was confirmed, and that was confirmed at an amber teleconference, we then started to really ramp up so our role was to get a document signed to say that the CVO was prepared to kill the animals concerned, we then started exchanges of telephone conversations and emails with Procurement to say we need to get a contract in place. I am pretty sure I sent an email to the DVM of the rendering plant that evening before the disease was confirmed just to say this is a heads up, if it goes positive we're likely to use PDM, who should I be contacting to set the place up.

In terms of doing things, Peter in our team tends to do the route planning, Dan tends to do the contacts with the Environment Agency, the Local Authorities about the use of the facility and Simon tends to concentrate on the killing side of things so he would have been liaising with options for killing, they would be telling me what they were doing, I would be checking where we were at and I would make some of the phone calls.

So it's a collective but it would be all under my responsibility but individuals within it would have collected the evidence base to support that so Dan would just say to me I've spoken to the Environment Agency, there is no reason why we can't use PDM. I wouldn't have said please show me the document that says that, if you see what I mean? I don't know if that comes into what information or knowledge.

Definitely. So you've explained who you get the information from.

We would have a team based discussion.

Is this in the first stage?

Yes in the pre bit I would have said Peter, can you please run some maps off to see how far it is between these various things, Simon would have said I'm just going to do this, this and this or I'd have said can you do this. I would have said to Dan can you phone the Environment Agency and see if there are any issues and they would then report back to say I've spoken to Chris Wilding, he doesn't know but he's going to ask his local person. So it would have been that sort of level of feedback and then when we got the definitive advice back then that goes on the file.

And then the red?

The reason we knew it was red is that Will, who's my boss and the Head of JCC, came out of the amber teleconference and said CVO's confirmed disease, get moving. So that verbal trigger, and it was verbal feedback from a meeting, I never did see the notes of the meeting because I didn't need to. So a verbal decision from the amber teleconference, disease has been confirmed, we need to kill them so basically that triggered us to go and start identifying or formalising our thought process.

So was that information very qualitative, would you say?

It was quantitative in as much as it is Avian Influenza, it's highly pathogenic and it's H7 but it was qualitative in as much as it was verbally transmitted and at that stage we didn't know what its N number was. So we knew it was H7, we didn't know what its N number was so, to a certain extent, it was qualitative but on the scale it was more quantitative than qualitative.

So with qualitative would you say it was sparse, moderate or high?

I would say that in the amber phase it's all qualitative, well pretty much so because it's suspect disease, it's approximately twenty five thousand birds, these are the symptoms but we don't know if they've got disease. So on the scale of qualitative to quantitative it's, I don't know, eighty percent qualitative, twenty percent quantitative, something like that. When we get to red it's the other way round, it's probably eighty percent quantitative, twenty percent

qualitative and when we get to field ops it's all quantitative. It's I speak to the Field Ops Manager in LDCC and he says we're doing this, this and this, I've killed XYZ, it's all quantitative. There's very little qualitative data coming forward, it is facts and figures.

I suppose, in terms of the feedback from the Environment Agency, all they would say is we have no reason to say that it isn't suitable. Now whether that's quantitative or qualitative, I don't know, it's not a whole load of data to say that their PPC permit was signed XYZ, they've had three complaints in the last three years, all they say is there are no reasons that we know of not to use this place.

And that's at the final stage?

Our process is we will not contract with an Operator until we are content that the Environment Agency have no issues with it and the Health Protection Agency have no major concerns either.

So on the first occasion how political was the information?

I'm not quite sure what you mean by political.

As in you mentioned earlier that you didn't want to tell anybody.

Yeah it is quite political, I suppose it is. What's the difference between that and social?

Social being very communitive, for instance, in the final stage when you talked about the Environment Agency it was very much to pick up the telephone, talk to them, do you have any issues with this.

I mean, it's always political because of the consequences of getting it wrong, there normally is a political element because at the end of the day this is being done by the Secretary of State. It's not a typical emergency response where there is some implied criticism of government if it goes wrong. Under the legislation the Secretary of State is required to do things and it is being done on behalf of the Secretary of State so it's not like, I don't know,

Buncefield where you've got a whole load of things going off and the emergency responders go in and do it. This is the Secretary of State saying I'm doing this. So there is always a political element.

So is there more?

Early on, until we know what it is, there is more a political issue concerned because, firstly, we don't want to scare the natives and, secondly, we don't speculate. So there is certainly a political element there.

If you were to rank these then from 2, 3 or 4 being insubstantial neutral or substantial across the board of the different occasions?

Are these occasions or stages, can we call them stages?

Stages yes.

If we say stages then I probably think political is a 4 for the first stage and then 3 for the other two, I think.

And social?

Run social by me again?

Like the amount of social interaction that was required to obtain this information.

So how much consultation and things?

Yeah that's it.

In which case it's probably a 4 in the amber phase because we have to do a lot of consultation, a lot of talking about. It's probably still a 4 in red and then I think it is all operational then, whilst we need data flows it's probably a 2. And technical, that's probably

a 2 in the early stages because we're talking principles and prospects there. It then switches into – in the red that would be a 4 because we need to know whether it's technically feasible, whether it's legally feasible etc and then in the operational phase the external data coming in, it's just a 2 I think or is it a 3? No put 2/3, no leave it as a 2. I'm only wavering in as much as the technical data coming forward is –

Would you say it's insubstantial then?

No in the decision making process it's insubstantial but actually that's where a lot of the data comes in that will be, if you like, recorded and assimilated but only used if things are going wrong. So that's the only reason I'm slightly wavering but I think, in terms of the decision making process and the external feeds, it's probably insubstantial.

Costly, at the beginning it's neutral so it's a 3. In the red phase it would be a 4 but it's not our main reason for choosing it but it is at that point that we look at the cost of doing it and then when we're doing it it's neutral but we are very mindful of the cost. So we base decisions on cost but it's not the driver.

I suppose we could actually do it, let's do a fourth bit, and the fourth bit is ramp down or glide down or whatever they like to call it and that's where cost is important and what I'm saying is here we think we might have to kill something, we decide that we've got to kill something, dispose of it, we're killing it and now we've got to decide whether we can lay people off.

So if we go back to our political thing again, political pretty much becomes a 2. The consequences of us spending millions of pounds nugatory expenditure I guess there is a political thing. Social, that's probably still a 2. Technical probably goes back up again to a 4 and, on the basis of that, I'm looking to say what is the best reasonable forecast of where this disease is going, what are the epidemiological links to here, do we think this has spread so I'm asking lots of those sort of questions and cost is very high up on my agenda.

I suppose then it's justified to look at cost?

Yes because I'm incurring a cost, I didn't make all the decision based on how expensive it was but I as sure as hell need to justify why I've still kept this particular rendering plant on standby costing me twenty grand a day and it's not doing anything. So I think that's useful to put that in there. The drivers, and obviously you've put them in this particular thing, do change.

Shall we go back and put numbers in?

Okay. So we've got 80/20, I guess it becomes all quantitative there.

So this is insubstantial here? Sparce sorry.

So you've got a different ranking here. How abundant, qualitative, this is probably that one.

Because what you've given me there is very useful as far as the importance of the information.

It's a different way of doing it.

It's probably a better way of doing it.

In here we shift back a little bit so that's a hundred percent and zero, if you like, but here we start getting into speculation again so it probably goes 50/50 so it's informed speculation and, in terms of the abundantness of it, it's difficult to split the two up but it's sparse to start with. That's probably 2 and that may be 3. I think probably it's moderate for both of them and in this bit it's abundant and when we get into there I think qualitative is abundant because we have data, put it as a 3 and that's probably a $\frac{3}{4}$, call it 4. Does that help?

Yes it does, this is really helpful. When I was looking at this, because of trying to map this into an agent based model because you have one agent communicating with another agent, I was thinking of it as you receiving information, processing information and passing it on. You've given me a good description of the information you received and I

think you've pretty much told me how you processed it as well and how you passed it on. Would you agree with that?

I think so yes.

With regards to the personality aspects, conscientiousness, and this is just a definition of conscientiousness. There's a lot of words that explain what conscientious means so, if you're highly conscientious you're on the 5 side but, if you're not you're down here but there's also what this means to you and why.

If it's possible on these different occasions what the ideal and what the actual situation was. I don't know if it was that contentious that you would see it as an ideal and an actual. For instance, here we have conscientiousness, the extent to which the individual is well prepared, planned, efficient, orderly, meticulous, reliable, driven etc and on occasion on actual it's 2 but the ideal might have been a 5.

I'm not quite sure how best to –

Maybe this is quite hard for you to answer.

If you were to ask me about the way I am and where I would place myself on this thing, I have more of the traits of a 5 than a 1 in that I think together with the rest of the team, we are well prepared, we are planned, we're pretty efficient, we're pretty organised and orderly, we're pretty meticulous, we're pretty good at that, we are reliable, we're very driven, we do that. Taken as a whole the team is very that, some of us are certainly that, we're not quite so good at that, we certainly do that and we're not that. We can do with that, we're not that, we're not that, we are quite casual, we're easy going but we are ambitious, we're not easily distracted and we don't do that.

So me personally I'm pretty much at this end, as a team we're probably here somewhere. Now if I had to flex this a little bit on occasions we're inclined to be, in the first occasion, up here whereas if it happens then that's absolutely right, it's the ideal and the actual, but if it doesn't it's nugatory work so you could say the ideal may be somewhere in the middle.

These seem to me to be personality traits as opposed to reactive traits and I think, to be honest, we're here across all of them because, as far as we're concerned, all bits of the outbreak are equally important. If we cock it up at the beginning this won't work and it doesn't pay to be too casual when ramping down.

So you don't find that you're possibly always up here but the idea would be that sometimes you are down here?

I don't know really, maybe we're not the right people to ask in that we think we need to be here and, by our very nature, if we didn't think we needed to be here we wouldn't be there and I'm pretty confident. I'm struggling to separate actual from ideal.

That's okay, maybe actual and ideal are the same.

The worry would be if the ideal was here and we were down here. I think we've been pretty good.

What about extroversion?

So five is an extrovert is it?

Yeah.

Unworried would not be right, calm yes, unconcerned no, even tempered normally yes but particularly in this phase, 2 and 3, I'd know that I am more easily wound up and inclined to swear a lot more than usual. Even tempered, as I say that goes like this. Calmness, I think is almost, externally anyway. Worry would be in the middle, it goes up a bit as we go into 2 and 3 and then goes right back down again.

So would you give this a mark here?

Yeah and probably down here.

And this was for?

That's worry.

Is that correct?

Yeah I can live with that. Even tempered and slow to anger I consider to be pretty much the same. Optimistic, I think that's fairly even, put a straight 4, that's for optimistic, I'm always a glass is half full. Guilt free, yes as far as I know I'm guilt free. No blues, I won't score that. Hard to embarrass or shame, resist urges, not excitable, resilient to stress. Probably resilient to stress is worth looking at. So how would you score that, is highly resilient –

Yeah if you were a 5 you'd be highly resilient to stress?

So start as a 5, in the first occasion it stays a 5 then I think it probably stays as a 5 in the amber bit but in this bit it could easily go to a 3 and then it's probably a 4 and then it goes back to 5 again. I know I get stressed because I wake up in the night thinking about things, shit I've forgotten that.

I don't know if that helps but that's just the way I feel. As you'll see, I think this proneness to shouting at people is as a result of stress so they're all linked I think but maybe you can find some sort of metric out of that.

As far as being highly extrovert?

I am not highly extrovert.

But on these different occasions what would you say was the most advantage to be?

I think it's professionalism I'm more interested in. I don't know, I suppose you're better off being slightly more extrovert than introvert but I think actually competence and professionalism and ability to do the job are actually far more important than whether you're extrovert or introvert. I'm an introverted extrovert or an extroverted introvert, I think. In

some of these personality things I can literally be a both extremes Fred, extrovert and introvert, but for the other personality traits I'm very much in the middle.

I think we'll jump over these, the conscientiousness and everything, just because I think it is quite hard for you to see these and cluster them as an actual and an ideal situation and I can understand that. But when these different occasions would you say that, for instance, in the amber stage, with receiving the information was it a number of these, would you tick a number of these and not tick others?

Yes so receiving information on the amber. So they're certainly informing. Educate, well.

You don't need to educate them to receive it.

I don't need to educate who, sorry? Are they educating me?

Yeah.

They're not words I automatically associate with receiving information. I'm happy with the inform, educate, advise, guide.

And it's particular to the amber?

Yeah.

I guess what I've done here is taken the actions that are possible within policy or within regulatory decisions.

Okay leave it at that. Passing on, in that phase we're not doing a lot of passing on so I think it's inform, advise, guide.

What about the red stage?

It's certainly informing, educating, advising, guiding, influence. I suppose there's a bit of instruct and direct, there would be a bit of warn, there could be a bit of enforce in there as well. Passing on or informing, advising, guiding, influence, encourage, persuade, instruct, direct, we could be warning and threatening. Probably unlikely to be those at this stage.

All I'd say in here is they could be all of them because if things are going wrong they could be enforce, prosecute, sanction and, similarly, if these sort of things go wrong we could be threatening, sanctioning, enforcing and prosecuting. But if things are going well they're in this inform, education, guide and influence.

And no action?

Well it could actually be a no action.

Is that similar for 4?

4 is being done so actually that's about instructing and directing and, similarly, in passing it on I guess a bit of informing as well and it's more about please be aware oh Chief Executive, I've pulled the plug on this contract, there is a risk that if we haven't got it we'll have to do it all again but, equally, I'm saving money by doing it. So that's an inform.

It could be all of them. When it's going right it's the top half, when it's going wrong it's the bottom half.

The reason why I've asked you these questions is because under these different situations, I suppose because you've got a regulatory situation, it can be quite restrained can't it and there won't be so much allowance for the expression of personality.

So this is the end. Looking at this from risk averse to risk taking, how do you see you presence today going from very conservative to very liberal? How would you rate the level of risk taking in regulatory decisions?

Right gosh.

Or risk based decision making?

What have I got to do, just tick a box?

Yeah just tick one of the boxes. So today would you say it was very conservative, conservative, pretty liberal, liberal or very liberal? I guess what I'm getting at here is, when I'd go to conferences and talk to people about what I was doing and they would say about the amount of risk based decision making in regulatory decisions today, they would explain it as a pendant and the way it was swinging towards very much risk taking or depending on their personal opinion and some people would say that in years to come it will be swinging back the other way.

My only comment is that I'm not convinced that things have changed much in risk averseness. What I think has happened is that there is now risk based decisions being made. So my view is that the risk averseness hasn't changed much, it's just that instead of having one size fits all the regulatory process is risk based so, instead of visiting all two thousand small businesses to check their paperwork, we now only visit twenty of them, the highest risk ones. I don't think we're any more risk averse but the process by which it is applied has changed significantly and I'm not quite sure how that's captured in that.

What if you would say the process of risk based decision making or the extent of risk based decision making?

I would say we're moving. If we change the scale, if we can do this twice if you like so if this end is risk based policies/regulation and this is one size fits all, I would suggest that at the moment we are at a 4. I think it will go to a 5 in ten years time, I don't know about twenty years time. Ten years ago I suspect it was 2 and twenty years ago I suspect it was 1. Twenty years in the future, I don't know, there's a bit of me that says it will go back to 4 again.

So the principle ways in which the use of scientific knowledge has changed? There's been much more reliance on scientific knowledge?

I think there is certainly more evidence based policy making going on and that is implicit in more sciences going into the decision making process and I think it's going in to enable risk based policy making to happen because, without that science bit, you have to do a one size fits all, you have to be as precautionary as the Minister of the day needs to be.

I said that I'm not sure that we have become more risk averse. I think, again changing your scale again, I don't think politicians and policy makers are any more risk averse than they were before, what I think there is a drive towards is more short termism in that, if the risk is going to manifest itself within the term, there's more likely to be risk averse than if it's in the long term.

So by bringing this time scale down you can take the decision without worrying about the risk?

Yes and all the consequences and I do think various decisions can be based on that. I think there is much more inclusion of science information and knowledge in the policy making process to start with as opposed to proving it's right or wrong afterwards. I guess it must do and I guess it really depends on how applicable the science is to that particular thing so I think it's horses for courses.

Okay like being in that issue of time, you said, as well?

Yes. Is there a need to strengthen or reform the use of scientific knowledge? I do sometimes wonder whether – it's not really quite the right question but sometimes I do wonder whether there is enough, if you like, applied science going on. It seems to me that funding is either for dear market or very very blue sky stuff, what seems to have been lost is the application of some of that scientific knowledge. So you've got guys doing very very high brow stuff on TSEs or stuff like that but it has no practical relevance. It's a very good bit of pure science and maybe it can be used to inform something else but it doesn't actually have any relevance in the real world.

Yeah definitely.

So I'm all for the full spectrum of science from the R to the D end, I think we've missed a bit in the middle.

The applied sciences?

The applied sciences because there's a good R and there's a good D but it's that bit in the middle because nobody wants to fund it, it's not pure science or academia and it's not commercial development.

So they don't feel like they're getting the best of either worlds?

Exactly so the purists will say that applied stuff, all you want to do is focus on the principles and then the commercial boys actually only want to know about the development bit. I don't know if that helps?

No it does, I think it answers the question really well.

I think also that what we could also do is use more, I don't know, sort of expert groups, more use of peer groups to get a balance, a sort of science evidence based thing, because you tend to find that some of the academics are very precious with their information and they won't work with someone else because they have a different view or something.

You'll be happy to know that's the end. Thank you so much for your time.

[End of File – 01:58:19]