



## SCOTTISH HOSPITALS INQUIRY

**Hearings Commencing  
19 August 2024**

Day 13  
5 September 2024  
Phyllis Urquhart  
Melville MacMillan

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**10:03**

**THE CHAIR:** Good morning.

Now, Mr Maciver, we're able to begin with Sylvia-- sorry, Phyllis----

**MR MACIVER:** Phyllis Urquhart, my Lord.

**THE CHAIR:** Phyllis Urquhart.

Do we know whether she's taking-- Sylvia, do we know whether she's taking the oath or---- Oath.

**THE WITNESS:** Morning.

**THE CHAIR:** Good morning, Ms Urquhart. Now, as I think you understand, you're about to be asked questions by Mr Maciver, who's sitting opposite you, but first I understand you're prepared to take the oath?

**THE WITNESS:** Yes.

**Ms Phyllis Urquhart, Sworn**

**THE CHAIR:** Thank you very much, Ms Urquhart. Now, I don't know how long your evidence will take. I suspect it might take much of the morning. We will break for coffee at about half past eleven but should you wish to take a break, please feel free. Just give me an indication and we can break whenever it suits.

**THE WITNESS:** Thank you.

**THE CHAIR:** Now, Mr Maciver.

**Questioned by Mr Maciver**

**Q** Thank you. Could you tell the Inquiry your name please?

**A** Phyllis Urquhart.

**Q** And what's your current occupation?

**A** Site manager, operational estates.

**Q** Where do you do that?

**A** I'm based at Dykebar Hospital.

**Q** And who then is your current employer?

**A** Greater Glasgow and Clyde Health Board.

**Q** Now, you've prepared a statement for the Inquiry today in respect of your time at the Queen Elizabeth University Hospital. Is that correct?

**A** Yes.

**Q** And can I just confirm, are you prepared to adopt that statement as your evidence before the Inquiry today?

**A** Yes, with the exception of the date change.

**Q** Yes, I'll come to that-- I'll come to that in a moment but, just before we do, for those operating the screens, if I need to refer to the statement, which I will do at times, it will come up on the big screen in front

of you, so you'll be able to read it from that. For those operating the screens, perhaps recall that Ms Urquhart came-- was shifted to today from last week's witnesses, therefore, her-- oh no, in fact, she wasn't. I'm getting that wrong. Her statement starts at page 137 onwards of the bundle, so that's where I'll be going to.

Now, just to come to the point you mentioned a moment ago, I am interested in your history with Greater Glasgow and Clyde. So, if we bring up the statements at this point and we go to page 138 of the bundle, you'll see here at question two, you have explained your present role within Dykebar Hospital. And then at question three, which starts at the foot of the page and goes over the next two pages, you set out a very comprehensive account of your profession. The question is your professional roles at Queen Elizabeth University Hospital. Could we skip back two pages to see what the question is?

So, question three, "Professional roles at QEUH/RHC, including dates when role was occupied," and we see here at the first line you have started out by saying, "1 November 2017 to 1 January 2022." That was at the Queen Elizabeth Hospital and if we go

to the top of the next page, you see the first words are "Compliance Manager."

**A** Yes.

**Q** Correct? But then-- And so the first eight lines are setting out the duties. Perhaps we'll just read them for context:

"Duties include provision of technical managerial support and guidance support in meeting the Scottish Government's legislative and statutory compliance, improving compliance and associated action plans across the Greater Glasgow and Clyde sector. Working across 186 sites consisting of eight acute sites and the remainder are partnerships, responsibilities include supporting improvement, performance reporting, awareness raising and ownership, partnership working, attendance at acute and partnership water groups, national water group, etc. "

Now, as I read it, that description is in response to what you're telling us about being compliance manager at the Queen Elizabeth. Is that correct?

**A** Yes. Yes.

**Q** Could you explain the

reference to 186 sites, please?

**A** Basically, what you have is you have a number of partnership sites in addition to the acute sites. So you have a number of clinics and health centers, for example, that you covered as well.

**Q** And these are still within the ambit of the Queen Elizabeth? Would that be correct?

**A** Absolutely.

**Q** Yes.

**A** Well, no, not solely the Queen Elizabeth. They're within Greater Glasgow and Clyde Health Board because my role as compliance manager is across the board for Greater Glasgow and Clyde Health Board. Queen Elizabeth is just one element or one site involved in what the role of Compliance Manager covers.

**Q** And, here, are you talking about the period from 1 November 2017 to the start of 2022?

**A** Yes.

**Q** So you weren't dedicated solely to the Queen Elizabeth during that period, you had a much wider---

**A** Absolutely-- absolutely not. I was providing a service for compliance across Greater Glasgow and Clyde Health Board.

**Q** Okay. So, that's the first

eight lines of that page that's in front of you and then the rest of the page is, if we see the line beginning "16/07/12," you're describing 16 July 2012 to 31 October 2017, Estates Facilities Department, Gartnavel General Hospital and the post is senior hospital estates manager.

**A** Yes.

**Q** Now, can you explain to me the difference between the two roles, please?

**A** The current-- Well, my current role, as per my previous site operational estates manager role, would be-- as per my previous estates manager rather role, would be involved in the daily operations of Estates.

**Q** When you say your "current role", do you mean the one you're doing right now in 2024?

**A** Yes.

**Q** And that's-- Is that-- Are you saying that that's equivalent to the role that you carried out up to 2017?

**A** Yeah.

**Q** Okay. Go on.

**A** So, within the compliance role, when I got involved in the Queen Elizabeth University Hospital, this role was linked to assurance for the Board in relation to water particularly. It was water, confined spaces, working at heights,

and it was across the board inclusive of the Queen Elizabeth University Hospital.

So it was organising audits, providing Board assurance, supporting, like, colleagues in operational roles, providing information and technical advice in respect of water systems to anyone and everyone, including clinical colleagues, whoever asked whatever question linked to the role within compliance. So it's different-- slightly different.

Also, carrying or wearing the hat of authorised person in relation to water systems across a number of sites previously in the estates manager role, and then within the site manager operational estates role, they're basically take responsibility for a greater number of sites.

**Q** You mentioned being an authorised person for water, or wearing an authorised person for water hat.

**A** Yes.

**Q** Just to be clear, were you appointed as authorised person for water?

**A** Yes.

**Q** In respect of the QEUH site?

**A** No, because I was a compliance manager at that stage and

you were not an appointed person. You were there to support and assist with compliance aspects as opposed to operational estates. I was an appointed authorised person for water systems in 2015 for other sites.

**Q** Which sites?

**A** It would have been Gartnavel General Hospital and the Western in those days.

**Q** Okay, so it follows from that then, that you would have been familiar with the duties that lie upon an authorised person for water?

**A** Yes.

**Q** Correct, but you yourself, when you were at the Queen Elizabeth, were not an office holder in respect of those duties?

**A** Yes.

**Q** Instead your role was compliance?

**A** Yes.

**Q** Okay, and you've described to us what compliance in general was. Perhaps if you can briefly summarise the difference between that job from 2017 to 2022 and the jobs you've been doing before and afterwards.

**A** Okay, so, basically, in compliance, you would take to do with providing and supporting Board assurance and getting the message of

water systems out there, and driving compliance right across the board and all sites inclusive of the Queen Elizabeth University Hospital.

**Q** Thank you. Now, you started out by saying that you adopted your statement but for one correction or series of corrections that you'd like to make. So, if I can take you perhaps to-- say we start at question seven, which is page 141. Now, you see the question here is, "Who selected you for your role?" being the role at Queen Elizabeth, and you answer there Alan Gallacher and Mary Anne Kane selected July 2012, and you detail the interviews. That's the correction you wish to make. Could you tell us about that please?

**A** Please. That's a change from a two to a seven, and that was at the time when I was interviewed by both these individuals for the post of compliance manager at the Queen Elizabeth University Hospital.

**Q** When you say, "From two to seven," that's 2012 to 2017?

**A** Yes.

**Q** Is that correct?

**A** The only thing I would like to maybe just highlight is, at that time, I didn't actually walk over and start the position within the Queen Elizabeth University Hospital full time

on July, because I was still covering the operational role in the previous job.

So I started the compliance manager role and I did half a day at that time and also then went back to my operational estates role. In the morning, I would work in the operational estates role and in the afternoon I would work in the compliance manager role, and this went on for about four months before I started. You could say, realistically, full time from November 2017 within the compliance manager role at the Queen Elizabeth University Hospital.

**Q** Okay, thank you. We see references to-- starting in 2012, in a couple of other questions, for example, question 11, but I can take it that wherever there's a reference starting at Queen Elizabeth in 2012, that should be 2017.

**A** Please.

**Q** Thank you.

**THE CHAIR:** It's my fault. When did you begin to have a compliance responsibility for the Queen Elizabeth campus?

**A** I would say from the appointment in July, but it just so happened, due to staff numbers and lack of staff, that I still had to cover my operational estates role within my current role. So it wasn't like one day I

walked over to the Queen Elizabeth University Hospital and immediately covered that individual site. I was still covering a Board-wide service to all of the sites for the Health Board.

**Q** Right. So, when you talk about July, you mean July 2015?

**A** No. I mean July----

**Q** July 2012?

**A** July 2017.

**Q** July 2017.

**A** Yes.

**Q** As I say, my fault.

**MR MACIVER:** No. Well, it might be useful if we just nail the timeline down absolutely then. In 2017, then, from 1 November onwards, you are physically at Queen Elizabeth all of the time, doing a compliance role that covers the whole Board. Did I pick that up right?

**A** Yes.

**Q** Between July and November, you are partly at Queen Elizabeth, partly at Gartnavel, I think, partly doing compliance----

**A** Yes.

**Q** -- partly doing operational estates.

**A** Yes.

**Q** Before July 2017, what are you doing and where are you?

**A** Before July 2017, I am based at Gartnavel General Hospital

as a senior hospital estates manager.

**Q** You're not doing compliance.

**A** Doing an operational estates role.

**Q** And that's not a compliance role at that point.

**A** Not a compliance role across the board, that's correct.

**Q** During that period before July 2017, do you have responsibilities for Queen Elizabeth or not?

**A** Not.

**Q** Not, okay. I'll perhaps come back to that later in one specific context, but, in any event, what I'm interested in is your period at the Queen Elizabeth primarily, over your period at Gartnavel, and, specifically, I'm interested in your compliance manager role rather than anything else you might have been doing during the overlap period, although feel free to tell me if we need to be thinking about that as part of our focus.

**A** Okay.

**Q** Does it follow from what you told me that your duties in respect of the Queen Elizabeth started on 16 July 2017?

**A** Yes.

**Q** In brief terms, what did the job involve?

**A** The job involved a range



of tasks, and it was mainly focused, from my perspective, on water systems. So it was promoting and encouraging the development of water systems for that site.

**Q** And when you say “promoting and encouraging the development of water systems”, in what particular aspect?

**A** Okay, so, basically, it would be touching on all aspects under the SHTM 04-01, and compliance with, like, L8, and all statutory legislation that relates to water systems. So you would be looking to assist with ensuring that systems were compliant and working with the staff that you have there to highlight and provide evidence of compliance and Board assurance. And I would personally report back and-- on what the compliance was at individual sites, and you have like a system, a SCART system, which is a Statutory Compliance Audit Reporting Tool, where you would be involved in reporting that back to the Board.

**Q** SCART system, is that an electronic system?

**A** It's actually a system that is, like, healthcare-wide throughout Scotland, and this system has a range of, say, 73 question sets that relate to water, for example, asking, you know,

“Are you compliant with being aware about your schematic systems? Are you compliant about”-- A whole range of questions. I am more than happy to provide you with all those, should you require.

**THE CHAIR:** That's statutory compliance. Did you say assurance or audit?

**A** It was both, really, both.

**Q** Sorry, it's just the acronym. You explained what the acronym was and I didn't get the third letter.

**A** Oh, sorry. It's-- From memory, it's audit,

**Q** Audit, thank you.

**A** It was a tool used.

**MR MACIVER:** And you're describing something that's like a pro forma.

**A** Yes.

**Q** A set of 73 questions, I think you said, on various aspects to ensure that the water system was compliant, was safe, effectively. Would that be fair?

**A** Yeah, yes. You do actually have the question sets across all the subjects, 39 of them.

**Q** Thank you. Now, your role as compliance manager, was that a new role?

**A** Yes.

**Q** And I don't just mean new to you, I mean it was a new role set up for the first-- you were the first occupant of it----

**A** Yes.

**Q** -- at the hospital. Is that correct? Do you know how the new role came about?

**A** No.

**Q** From then, from the knowledge that you gained when you started, could you intuit why a compliance manager might be sought at the hospital in 2017?

**A** I would think that it would be for Board assurance and I think that it may also be something to do with, you know, Scottish Government, Health Facilities Scotland attempting to put some assurances in place.

**THE CHAIR:** Just so that I'm following this, so when you came into post, there was in place or available to you the SCART question set, which was designed to ask a series of questions with a view to determining whether, in respect of each facility-- is it each facility?

**A** Each topic.

**Q** Sorry.

**A** Each topic, you know----

**Q** Each topic.

**A** -- ventilation, electrical systems, etc.

**Q** Right, but each topic in relation to a particular facility.

**A** Yes.

**Q** Right, so there was a tool in place, as Mr Maciver has asked you, pro formas, a set of set questions.

**A** Yes.

**Q** Now, you were the first person to take on the compliance role in relation to the-- well, in relation to the Queen Elizabeth, in July of 2017. Who, if anybody, should have been filling in that pro forma before July 2017?

**A** Operational estates.

**Q** Operational estates.

**A** Yes.

**Q** Right. Thank you.

**MR MACIVER:** Do you know if that was, in fact, being done?

**A** I don't know because I don't-- well, previously, I don't-- Within the compliance manager role, I got access to all the sites and I think from memory it was a Health Facilities Scotland-driven programme for showing compliance across every healthcare site in Scotland. But, previously, when I was at Gartnavel, for example, I wouldn't have had access to that.

**Q** And when you talk about having access to that system, was that-- are you talking about a database

of records up to that point?

**A** Yes. I did get access through the nationwide compliance manager, a chap named Chris Lyons, who I believe is retired now.

**Q** In your role as compliance manager, were you interested in what had been getting carried out at the Queen Elizabeth before your arrival?

**A** Can you repeat that again, please?

**Q** We were talking about the SCART completion as an example of things that might or might not have been done before your arrival, and you said that you would have had access, when you became compliance manager, to a database, in effect, of records of things that had been done. You became compliance manager in July 2017, phasing into November 2017. My question is that when you became compliance manager, were you-- was that job interested in looking forwards in terms of what's happening now and what might be improved for the future, or was your interest also looking backwards? What's the position now? How did we get here?

**A** It was mostly looking forward, I would say, because you're covering across a board of all sites, and if there was more time and

opportunity, I think that maybe there might be benefits in relation to looking back from a lessons-learned perspective, but, certainly, it was more like pushing forward and attempting to ensure that we had robust systems in place.

We had systems where, when we were being audited as a board, in respect of the Queen Elizabeth University Hospital, that is, that we had all aspects of compliance sitting there, waiting. Evidence that we can show for the likes of authorising engineers to come along and audit, rather than people, you know, maybe trying to fulfil their daily operational estates job, and also under pressure in relation to, you know, "Where's the evidence for this document or where's the evidence for showing my schematics for alterations in the hospital, for PPMs, planned preventative maintenance tasks?" There's a whole range of compliance issues that you should have located in one document centre and that was really my focus, was trying to push in relation to a system, an electronic system named Smartsheet where we could have a central document centre to assist.

**Q** Okay. I'll come on to Smartsheets presently, but I'll maybe try and summarise my understanding

of what you've just told me. You mentioned the sources of legislative guidance and so on, it's SHTM, L8 and so forth. Have I understood you correctly that your primary focus would have been making-- in terms of compliance, making sure that processes evidence was in place now going forward, in order that you could evidence compliance with those-- that guidance and legislative requirements?

**A** Yes.

**Q** Thank you, and before you joined or before you moved to the Queen Elizabeth, had you been taking an interest that hospital?

**A** No.

**Q** What impressions had you had of it, if any, before you started there in 2017?

**A** It was Greater Glasgow and Clyde's flagship, I would say.

**Q** And you'd have known the basic details, that this was the biggest hospital of them all?

**A** Yes, I mean, obviously, it was, you know, one of the biggest things that's happened in healthcare in Scotland. So maybe-- obviously, I was aware of it and it was a big impact in relation to Greater Glasgow and Clyde, and whilst I say, "No, I wasn't interested in it," obviously, from a

natural perspective, you're interested to see the building and when you first go into the building, you're very impacted with like the size of the building.

**Q** Well, I'll ask you about that. Tell us about your initial impressions. In fact, before you do that, before you took up the job, before you moved over, what challenges were you expecting to find as part of your job?

**A** A number of challenges in relation to wanting to deliver in respect of the role, and being mindful of having carried out the operational estates authorised person role, and knowing what the challenges are in relation to delivering services and compliance within the healthcare environment. Also, being able to support colleagues, hoping to bring in a lot of the systems that I had in Greater Glasgow and Clyde or across the board.

**Q** These are just normal general challenges you'd expect to find in any new job. Would that be correct? Or was there anything specific about Queen Elizabeth that you thought might be more difficult or more particular to that location?

**A** Yes. In relation to the Queen Elizabeth, there were specific

challenges because it was challenging to get people who were fulfilling these roles to be able to work with.

**Q** Could you elaborate on that a little bit? Why was that a challenge?

**A** Because no matter how much or whom I sort of spoke to at the time, there were challenges in people who were authorised persons for water systems.

**Q** I'll come on to that specific challenge later, but would I be correct that this would be a challenge that you found once you got there, as opposed to something you'd anticipated before you arrived?

**A** Yes.

**Q** When you did move over to the hospital, what were your immediate impressions?

**A** In respect of the hospital?

**Q** In respect of the hospital and in respect of what your role was likely to turn out to be.

**A** There was an incredible amount of work to do. There was so many challenges in relation to attempting to support colleagues, and questions and looking at individual sites that were being altered and feeding back in a timely manner, answers to all these individuals who all

wanted questions answered quickly. Otherwise, you were of no benefit to people.

**Q** And you said-- you started out there by saying there was a huge amount of work to do. Is that in relation to you personally, or to the hospital more generally or both?

**A** Both.

**Q** What do you have in mind in respect of the hospital generally?

**A** The hospital was extremely busy and impacted with requests, challenges. There was so much work to do in relation to the Queen Elizabeth that it was almost-- sometimes I felt as if we maybe hadn't sort of planned it as well as what we could have, in relation to taking into account, like, individuals for fulfilling roles, maybe as if it hadn't quite been fully assessed, what was needed to support our colleagues.

**Q** When you say "roles", are you talking about the specific name roles that you alluded to earlier, such as authorised persons, or is it more broad than that?

**A** I would say broader than that because you had competent persons. It's not just about authorised persons. You had, like, staff to be able to-- or you required staff to be able to

deliver services across operational estates and this was at all levels, and it also seemed to me as if there was a significant turnover of staff. I did wonder how management perceived the fact that no one wanted to-- seemed as if they wanted to stay there for any amount of time.

**Q** When this first started to become apparent to you, did you get the impression that it was also a matter of concern to other people? I'm talking specifically about the turnover issue that you mentioned last.

**A** To some, yes.

**Q** Can you give examples of what areas or which people?

**A** I think Ian Powrie, for example, was quite concerned about the sort of staff.

**Q** When you're saying "staff"----

**A** As in lack of staff, to be able to deliver services.

**Q** Do you have-- You mentioned authorised persons, competent persons. Is it those named roles that you specifically have in mind or is it wider than that again?

**A** I would say that from observations-- my own personal observations, it would be wider than that.

**Q** Thank you. Just

focusing again on your specific role, compliance manager, what was your assessment of the level of compliance as you initially found it when you started?

**A** Non-compliant.

**Q** Can you explain that to me, please?

**A** It was very difficult to obtain any sort of records across the board.

**Q** Records of what sort of thing?

**A** Records of-- If you think about an audit, if you think about the questions that arise in an audit, for example, whether it be an internal audit, such as ourselves, individual compliance managers going in to carry out an audit within the hospital itself.

**Q** This would be you personally going in and checking a particular ward, department, for example, to make sure that the guidance that should be adhered to was being adhered to. That's the sort of task you're talking about.

**A** Yes.

**Q** Okay, thank you. Can you explain, in that context, the difficulties you're talking about?

**A** So, you would be maybe looking for specific records for audit purposes in relation to, "Can you

illustrate, demonstrate, plan preventative maintenance tasks? Can you provide records in relation to any alterations that have been carried out to pipework? Can you show a plan with your sentinel and representative points on it? Can you"-- something as simple as, "Can you tell me who the authorised person is?" and when they're appointed and, importantly, what contractors we're using, qualifications for contractors and our own staff. A whole range of water-related assurances that you would be looking for.

**THE CHAIR:** Mr Maciver, I don't want to take you out of order and if I'm doing that, please tell me. Could I ask the witness this? You're talking about-- When you came on site, at least by the end of 2017, you've identified, in general terms, an absence of records or an inability to identify where the records were.

**A** An inability to show records in some places. There were records in other locations, but maybe certain individuals that you were dealing with, at the time, couldn't bring them to hand when you were asking about them.

**Q** What would you have expected, which you did not find?

**A** You would have

expected to have these records pulled out of a-- whether it be electronic or paperwork, some sort of file or electronic system.

**Q** Are you saying there was an absence of such a system?

**A** I believe they did have some systems, some electronic systems with records, but there wasn't always that ability to be able to go and pull it out of the electronic system to be able to produce it.

**Q** Now, you give the example of difficulty in accessing planned preventative maintenance.

**A** Yes.

**Q** You give the example of the absence of identification of signal-- or, sorry, sentinel points. Now, these are the points, as I understand it, where water sampling would take place. Is that right?

**A** Yes.

**Q** Right. You also said there was an absence of record-keeping in relation to authorised persons.

**A** Yes.

**Q** Right. Now, you've already explained that authorised person is a role that is defined by SHTM 04-01.

**A** Yes.

**Q** It's one of a number of

roles.

**A** Yes.

**Q** Now, when you came on site, was there a water safety group?

**A** Yes.

**Q** There was? Was there an authorising engineer for water?

**A** Yes.

**Q** Yes. Was there a responsible person (water)?

**A** I believe that would have been, from memory, Ian Powrie.

**Q** Was there a record of it? Now, he would have to be formally appointed. So was there a record of that?

**A** I would like to be able to double-check the records because, remember, I was holding records for the entire Board.

**Q** Right. Was there authorised persons for water?

**A** The only person I remember being authorised for the Queen Elizabeth University hospital would have been James-- Jim Guthrie.

**Q** Right, so there was an authorised person?

**A** At that time. Later, you had, like, the likes of Mel MacMillan and Kerr Clarkson.

**Q** Right. What I'm taking from that is that when you took up post, there were, in fact, these persons

that were required by the SHTM 04-01.

**A** Yes.

**Q** Right. Thank you, because I had rather understood from previous answers that there may not have been, but I would be wrong in that. Previous answers by you.

**A** You're correct. There was no one in these roles.

**Q** Sorry?

**A** You're correct. There was no one in these roles, at that time, when I started.

**Q** Right, sorry. In that case, I've misunderstood your most recent-- I've gone through a list of roles. The source of these roles is SHTM 04-01. When you went into post, were there persons appointed to these roles?

**A** No.

**Q** No. Right.

**A** I gave evidence, in my evidence, detailing who was in the role and at what dates.

**Q** Right. The dates, I think, are in 2018.

**A** Yes. So----

**Q** Right. Mr Maciver, I'm very sorry for interrupting you, but I wanted to clarify.

**MR MACIVER:** No, it may be useful if we do just go to those answers for your Lordship's benefit.



I've got question 57 marked for authorised person, which would be in page 158 of the print. We see the foot, 57 is, "What's required of authorised person for water", and that's, "management of the water system, water safety and management functions addressed." That's a fair summary, yes?

**A** Yes.

**Q** And above that, at 56, we have a list of authorised persons and this, I think, is what his Lordship had in mind with 2018----

**THE CHAIR:** Yes, with appointment dates in 2018, as opposed to when Mr Cook came on in 2017. Right.

**MR MACIVER:** Yes. So, if we look at those-- There's one point that I'll just clarify with you. If we look at those dates, they are all 2018. The earliest one that you have there is not Melville MacMillan, as you said, but Scott Macer, and the appointment date you've given there is 6 March 2019.

**A** Yes.

**Q** If I were to suggest to you that Scott Macer's appointment was, in fact, 2019, not 2018, would that ring a bell with you?

**A** I would like to be able to double-check the Smartsheet system to 100 per cent confirm that.

**Q** Your memory was that Melville MacMillan was the first appointment in your time. Was that correct----

**A** It's really Jim Guthrie that I remember, at first. He was the first person that I came in contact with at Queen Elizabeth University Hospital, linked to that role for water systems.

**Q** But going by the dates here, if you take my suggestion that Scott Macer may have been 2019, as it's recorded here, the first person to be appointed would be Melville MacMillan.

**A** Yes.

**Q** And you've repeated that-- If we go to the next page, you see you've repeated the names and dates at 63 and 64 and, again, over the page at 65. At 66, the question is, "What prompted the filling of this role?" and your answer there was:

"The opening of Queen Elizabeth from 2015 and subsequent awareness of operational requirements, incidents, deaths. "

I wonder if you can just explain that answer to me, because given we're talking about appointments in 2018, how can it be that the opening in

2015 would be a thing that prompted the appointment of authorised persons?

**A** I don't know that for a fact. I'm just-- which I know I shouldn't assume, but I'm surmising these were useful, sort of-- not useful, but these could have been maybe drivers in relation to getting personnel in post, because they should have been in post, but they weren't.

**Q** Okay. Thank you, but that's when you're-- At 66, you are speculating rather than----

**A** Speculating.

**Q** -- giving an (inaudible).

**A** 100 per cent.

**THE CHAIR:** But you're not speculating that they weren't in post?

**A** I'm not speculating at all about them not being in post. You just asked-- I was just answering what I thought----

**Q** No, no, no. I'm just-- Just that I'm keeping-----

**A** Sorry.

**Q** Right.

**MR MACIVER:** Just to finish the thought, you-- at 67 on the sheet, you speak about your input into the process but then, at 68, you're asked about "once filled". The question is, "Were you satisfied that the holder possessed the proper skills,

knowledge and experience to carry out the functions?" and your answer there is:

"No. For such a large site, there's always a requirement for a new appointee to familiarise themselves with a system/plant, which would generally take approximately six months if the individual was solely focused upon the single topic of water systems, but the challenge within the healthcare environment is that often an operational estates individual works across various systems."

Now, the question there is a specific one about, once people were appointed to the authorised persons role, were you satisfied? And your answer, as I've read out, would be no, for what I take to be fairly general reasons. I wonder, would you care to elaborate at all, bearing in mind the particular situation that Queen Elizabeth in 2018 and the particular individuals that were appointed, is it the case that they were appointed and you still weren't satisfied?

**A** They were appointed but you do need time to really familiarise yourself with a site, particularly a site the size of the Queen Elizabeth. So it

takes time. You don't always know every individual piece of plant and I think it's reasonable to give people an opportunity to familiarise themselves with a site. So that's the reason I said no.

**Q** Thank you. Just to complete the questioning on authorised persons, it was one matter that came up in evidence last week. We heard about an incident where the suggestion was that you had suggested to Tommy Romeo that he might be appointed the authorised person for water. Do you recall that?

**A** Yes.

**Q** Can you remember when that was?

**A** It was when we were due to have an audit, and what happens in respect of an audit is invitations are sent out to the authorised person or individuals involved in the audit to accept, and that's who I was informed, at the time, was fulfilling the authorised person role. I think the difficulty ahead of that actual meeting, I did question that individual fulfilling that role, because I also knew that he had some reservations in respect of fulfilling the role and I questioned management as to, "Should it be him? You know, is there no one else that I can engage with in relation to it?" and I was told it's

him.

**Q** Right, so there's quite a lot in that answer. I'll ask you about a number of points out of it. The first one was that you said it was in response to an audit or in the-- or while an audit was being taken out or just beforehand. Can you remember what's-- Now, you mentioned a number of audits that might be carried out by various people. Can you remember what this particular audit was?

**A** Yes, it was authorising engineer audit.

**Q** Now, the authorising engineer was Dennis Kelly. Is that right?

**A** Correct.

**Q** And could you have before you document number-- Just give me a moment till I find the reference. Bundle 15, page 1042.

**A** Yes.

**Q** Now, Dennis Kelly gave evidence last week and this was one of the documents that we looked at. This was his audit carried out in May 2017. Are you familiar with this? Do you recall this document?

**A** Yes.

**Q** And if we see there, near the top of the page towards the right-hand side, "staff interviewed", and we

have the two people we've just been talking about, Tommy Romeo and Phyllis Urquhart. "Tommy Romeo, estates manager. Phyllis Urquhart, compliance manager."

**A** Yes.

**Q** Towards the left-hand side, at that side of the page, we've got the date, 4 May 2017.

**A** Yes.

**Q** You started-- We started out by clarifying the date that you started at Queen Elizabeth and that was 12 July 2017. Can you tell me how it came about that 10 weeks before that, on 4 May 2017, you were firstly engaged in an audit at Queen Elizabeth's water system and secondly described as compliance manager?

**A** I think it was one of the days I was over for a familiarisation.

**Q** Okay. Before you actually took up the role of compliance manager?

**A** I believe so. I'd like to double-check my diary in relation to the date, but I believe-- I believe that that would have been-- not unless-- Maybe I'm incorrect with the July. Maybe it was before that, before the July date. The difficulty was, at that time, I was carrying-- I was doing two roles and there wasn't an effective-- I would say, I did start full time from

November but there was a bit of a criss-cross in relation to me carrying out the operational estates role and Queen Elizabeth compliance manager role, related.

**Q** So, if we go back to the, kind of, overlap dates that we talked about at the start, and the way I'd summarised it had been that that's-- there were, basically, three distinct tranches: first, up to 12 July, when you weren't at QEUH and then after 1 November when you were definitely at QEUH, and then an overlap in the middle between 12 July and 1 November. Might it be the case that that overlap period should be brought back a bit so it would be 4 May or earlier? Might that be possible?

**A** Yeah, you could bring it back a bit, whenever this date is detailing 4 May.

**Q** Do you have any way of being more certain of jogging your own memory about that?

**A** I could check my diary.

**Q** No, just as we're here at the moment, is there-- If this document records you as being there as compliance manager----

**A** I was there. I was definitely there.

**Q** Okay, thank you.

**A** It was just the overlap,

you know, the May or July.

**Q** Okay, but we can't be certain right now and it may not matter very much, but this is one specific example where you're recorded as being compliance manager----

**A** Yes.

**Q** -- at that date. Now, you mentioned that as part of the audit process, invitations are sent out to various persons, including-- authorised persons would be someone who might be asked to participate.

**A** Yes.

**Q** And, in this occasion, I noted you saying that you were informed that Tommy Romeo was fulfilling the role.

**A** Yes.

**Q** Who told you that?

**A** That would have been Ian Powrie at the time.

**Q** And you said that you questioned it. Who did you question it to? What did you say?

**A** I questioned it to my senior.

**Q** Who would that have been?

**A** Alan Gallacher.

**Q** And what did he say?

**A** It is who he says, you know, is the appointment. If Ian Powrie, as manager of the site, says,

you know, "This is going to be the person that's going to be trained for the authorised person role", it's very difficult to say anything more in relation to that. He manages the staff.

**Q** Now, you said also, "I knew he had reservations", but I'm afraid I didn't note down who "he" was. Who had-- also had-- shared your reservations?

**A** Tommy Romeo.

**Q** Oh, it was----

**A** Uh-huh.

**Q** And you're asked-- You mentioned your reservations to Alan Gallacher and was told that, no, it would be Tommy Romeo.

**A** Yes.

**Q** What were your reservations?

**A** Tommy has always been known as an electrical systems individual, as opposed to water systems, so his knowledge, skills and experience lie with electrical systems, as opposed to water systems.

**Q** We summarised the role as being management of the water system.

**A** That's what the authorised person role would be.

**Q** And you were concerned that Tommy Romeo's background didn't mesh with that?

**A** Yes.

**Q** Now, you said that-- just the specific language, that you-- that I noted down, you were informed that Tommy Romeo was fulfilling the role.

**A** Yes.

**Q** What did you understand by "fulfilling the role"?

**A** He was going to be trained in relation to water systems and he was carrying out the tasks involved in managing the water systems at the Queen Elizabeth.

**Q** The suggestion wasn't that he was in the role but that he was acting in the same way as he would be if he were in the role.

**A** Yes.

**Q** But you also said that he was going to be trained.

**A** Yes.

**Q** It follows from that, that that hadn't happened yet.

**A** Correct.

**Q** Can you comment on the fact that he was simultaneously carrying out the functions and yet the training hadn't happened?

**A** In my opinion, it's not a good situation. I think it's better for individuals to be trained before carrying and fulfilling these tasks, but it's not always a way that happens across every health board in Scotland

because sometimes individuals are taken on in these roles and they need to be given support and time to be trained and develop in the role.

**Q** What, in your view, ought to happen before a person's appointed?

**A** That they attend training and they are given a shadowing opportunity by an authorised person and six months' opportunity to become familiar with the systems within the hospitals or clinics or wherever they're covering across a health board.

**Q** And without those things happening, would you consider a person to be in a position to undertake this management of the water system role?

**A** Not competently.

**Q** Coming back to the actual conversation that you had with Tommy Romeo, can you remember that, what you said to him, what he said to you?

**A** I can remember roughly, yes, him being a little bit anxious about even going through the audit experience because he didn't want anything to do with the water systems and I think my conversation at the time was that, "You've been nominated for these systems."

**Q** How did he react to that?

**A** "I'm not happy about this." It's also something that, in my mind, I'm quite keen to achieve the audit delivery because it's a cost to the Board in relation to an authorising engineer coming in to carry out an audit and if we, as a board, are non-compliant in any manner, it's always a useful tool to be able to highlight any non-compliances. So part of me possibly had a mindset, "If we're not compliant or there's shortfalls here, I hope that this gets to management that can help look at it in the future to facilitate future deliveries."

**Q** Okay, so, one of those shortfalls would be there's no authorising person?

**A** Yes.

**Q** And, as you've told us, that was eventually rectified in 2018 by the series of appointments that we've already looked at.

**A** Yes.

**Q** Whose job was it to appoint authorised persons?

**A** The job to appoint authorised persons would lie with the authorised engineer and we, as a board, would nominate the individuals and the authorised engineer would assess them after they were trained.

**THE CHAIR:** Just help me with that. The question was, who would

appoint?

**A** Yes.

**Q** Now, do I understand from your answer that the authorising engineer might be called in to assess competence?

**A** Yeah, no, you're correct.

**Q** That doesn't-- That's not the same as appointing.

**A** Yeah, yeah. You're correct. The actual individual who would appoint the authorised person would be Alan Gallacher because he dealt with the issue of the authorised person letters but the assessment would be carried out by the authorising engineer for the authorised person.

**Q** The obligation to appoint lies with the management. Is that right?

**A** Yes.

**Q** And management is defined as, "The owner, occupier, employer or general manager or chief executive"?

**A** Yes.

**Q** Yes. Thank you.

**MR MACIVER:** I wonder if I might have a reference that might help to clarify that. If we have bundle 27, volume 2 before us. First document within that should start at page 5, and it's the Water System Safety Policy, and we see that's dated from May

2015. There's one paragraph, I think three pages further on, page 8. You see the section in the middle, 3.2, "Director of Facilities, designated person (water)"?

**A** Yes.

**Q** And it records, "The Director of Facilities is the designated person (water). He/she shall be responsible for..." and then there's four bullets. The fourth of those bullets, if we read that, is:

"Appointing in writing the responsible person (water) at sector level, deputy responsible persons (water) at site level and the authorised person (water) at site level within facility's directorate management structure."

**A** Yes.

**Q** So that puts the responsibility on the director of facilities, to be designated person.

**A** Yes.

**Q** Who was that, at the time, when you joined QEUH?

**A** Well, this document, this policy document's 2015, so I think, in those days, it might have been David Loudon.

**THE CHAIR:** My fault, Mr Maciver. What are we looking-- I've

got the page up on the screen but what is this document?

**MR MACIVER:** It's the Water Safety Plan. I think page 5 has the full title of it, Water System Safety Policy. It's marked "draft" and the date-- the approval-- it does have an approval date, however, May 2015.

**THE CHAIR:** All right, thank you very much.

**MR MACIVER:** And the section on page 8 was, "The functions of Director of Facilities." It's certainly never your role to carry out the appointment?

**A** No. No. It is worth pointing out though that I believe the designated person can delegate that duty to another, and I'm not sure whether David Loudon or whoever was the director of facilities at 2015 would have delegated that task to Alan Gallacher because it was actually Alan, I think, that issued these letters.

**Q** Okay, I'm afraid I don't have a letter to hand but, if you looked at the letter, you would see a signature and that would indicate who was actually doing the appointing. In terms of this document----

**A** Well----

**Q** -- the function rests in the first place on the director of facilities, the designated person for water.



**A** The only reason that I can think about it is, 2015, I would have been an authorised person for another site, not the Queen Elizabeth, and I think, from memory, it was Alan that signed my letter. I think, in those days-- But I could look it out and produce it, if you require it.

**Q** Okay, at present, that's good enough. Thank you. We clarified a moment ago that you didn't do the appointments but you were concerned when there were appointments to be made and they hadn't been made.

**A** Yes.

**Q** What did you do when-- What did you do about those concerns?

**A** I raised them with my senior.

**Q** Being?

**A** Alan Gallacher. That's who I report to-- or reported to, and I also highlighted it to Ian Powrie.

**Q** The reason you did that was because----

**A** Because I wanted to be able to deliver assurance for the topic that I was tasked with in relation to compliance, and ensure that there were safe water systems.

**Q** Thank you.

**A** I think I also raised it in

the past at the water safety groups as well.

**Q** Was it a matter that you raised on numerous occasions then?

**A** No, it was only the water safety groups that I was invited to.

**Q** As well as with your superiors?

**A** Yes.

**Q** I don't suppose you can recall how many times you might have pointed this out to people?

**A** No.

**Q** Returning back to this statement, this section we were looking at was about authorised persons. If we move on a few pages to 164, we see here "competent persons." Could you summarise for us what a competent person is?

**A** Competent persons may be individuals with a plumbing background, HNC qualification, maybe like five years' experience in respect of plumbing but we also, as a board, deliver additional training to competent persons because there's a sort of-- more of a skillset in the healthcare environment, competent person plumbing-wise because, if you do not take care, there can be, you know, associated risks with your delivery of the service.

**Q** Okay. These are

essentially maintenance-type roles, keeping the system ticking over.

**A** Yes.

**Q** And they're also roles that have to be appointed. Is that right?

**A** That's correct.

**Q** And the criteria for that would be if you're satisfied that they have enough skills to do the job, basically.

**A** Yes.

**Q** And question-- it's number 86 there. You've set out a number of appointees and there are, I think, six people mentioned are in the middle of 2018.

**A** Yes.

**Q** And you note there also, on the fourth or fifth lines, about the issue you raised before, that no appointment letters were held centrally on record for these individuals.

**A** Yes.

**Q** And so when you described not being able to pull down, easily, records if you were, for example, doing an audit, is this the sort of thing you had in mind?

**A** Yes.

**Q** And you then go on, in the rest of the answer, to detail a number of other individuals in 2018, '19 and 2022.

**A** Yes.

**Q** At the time-- Again, the question is, at the time that you arrived in 2017, were there competent persons appointed?

**A** There was no evidence of it.

**Q** So, it follows from that, that there might have been, but if there was, you couldn't tell.

**A** Yes.

**Q** Does it follow from that, that that's a problem of its own?

**A** It's questionable. You may have had individuals in there working, but without knowing their training background, it's difficult to say it's not a problem, or it is.

**Q** So, it was only-- Again, it was only in 2018 that the proper paper trail, almost, is in place in order for you to be satisfied that these people who are doing these jobs are fit to be doing them.

**A** Yes, and one of the reasons for that is that the authorised person carries out the appointment of the competent persons.

**Q** Are you, in effect, saying that these are two problems that go hand in hand? If you don't have an authorised person, then the task of an authorised person may or may not be getting done.

**A** I would say yes.

**Q** Now, over the page at questions in 90 and 91, the first question, 90, "During any period where it was unfilled [and that would be up till 2018], what happened as a result?" and you've said, "Some works were covered by contractors and generally business as usual." And where you see, at 91, "Was this satisfactory?" that's effectively the same question I've just asked you, and you've told us what the problems are from your perspective.

**A** Yes.

**Q** And, at 92, the question, "What action if any was required of you as a result?" and you've mentioned, again, raising concerns to management of lack of resources, personnel, and at 93-- Sorry, 93 is a different question, but, again, can you recall to whom and how often you raised these concerns?

**A** The individuals mentioned in this point, 93, Ian Powrie, Andy Wilson, Colin Purdon, I would expect to also support me in relation to pursuing numbers.

**Q** And, again, so this was something that started to be fixed in 2018, around the same time that the authorised person issue started to be fixed?

**A** Yes.

**Q** You've already told us that the authorising engineer role was different and that was always filled during your time.

**A** I had always known it to be filled, yes, because that actually was introduced by the CAREB, you know, the community-- a document which goes Scotland-wide in relation to procurement of authorising engineers for individual health boards.

**THE CHAIR:** Okay, I mean, I've got your answer to question 100 in front of me, but can you just help me a little with the commodity action report and EPS bulletin? I think I understand, as you've already told us, that the requirement to appoint an authorising engineer comes from the SHTM 04-01.

**A** Yes.

**Q** Can you just-- It's my ignorance, Ms Urquhart.

**A** No, not at all.

**Q** Can you just help me with what this Community Action Report and EPS Bulletin is?

**A** From memory, the acronym is something like the commodity-- It's linked to procurement. It was a-- I think from memory, it was a National Services Scotland document which dealt with the procurement of authorising

engineers across Scotland, and I can certainly get you the specific definition, but it was a-- and the document. It was a document which dealt with authorising engineers working across all the different boards throughout Scotland.

**Q** Might it be a method of appointment or is it something else?

**A** It's not just-- I don't think it was just a method of appointment. I think it detailed, from memory, like, the expectation of authorising engineers, what they were to deliver, what they were tasked with, and also it gives very specific amounts of money in relation to budget that was related to each individual health board. And with Greater Glasgow and Clyde being the largest health board, you know, from memory, it was a larger budget on that. I'm more than happy to give you that document.

**Q** Right. As you're going through your evidence, you're actually giving yourself quite a lot of homework, which I'm very grateful if you're prepared to do. Can I suggest that you maybe-- I don't know if you have pen and paper there, but you've now promised us one or two documents. Perhaps----

**A** I can get the document for that.

**Q** -- I'll ask Mr Morrison, perhaps, to keep a track on it. I think that might be the best way. We'll give you a list of what you've promised.

**A** Okay.

**Q** And if you supply it, I'd be very grateful.

**A** Okay.

**Q** Sorry, Mr Maciver----

**A** Could I just-- Can I just ask, this particular document was always managed by Alan Gallacher, as in he attended the meetings to do with it. So I just got awareness of the document, but I certainly-- I had asked him for a copy of the document, which he kindly gave at the time.

**Q** Right.

**A** So, yes, more than happy to give you all-- everything you require.

**Q** Thank you.

**MR MACIVER:** I'm grateful, thank you. Can we go back six pages to 161, because here there's the last of the nominated roles that I'm interested in. Designated person for water, is this section-- Now, it's 72 on this page. You give a description, a number of functions that the designated person for water has to do. I shan't read out all of them, but, for example, five lines from the bottom, "One of the functions is to identify to the CMT"-- Who's the

CMT, just for completeness?

**A** The CMT, that is the senior management team, I mean, it's - that wouldn't make sense for an S and a C.

**Q** It might be central.

**A** A central management team.

**Q**

"A risk-based prioritisation of necessary resources required to effectively manage and control water system risks arising from the water systems in the GGC estate to an acceptable level."

**A** Yes.

**Q** Is this an important role?

**A** Vital.

**Q** And in terms of the role we've looked at, it may not be a strict hierarchy, and correct me if I'm wrong, but, in broad terms, the line of accountability would be, the duty-holder at the top, designated person, authorised person underneath, and competent persons actually carrying out the tasks. Would it be roughly, roughly correct?

**A** Yes.

**Q** So, question 71, when you're asked, "During what period was the role filled during your time at QEUH?" and you detail here that, upon request, you've seen a copy of the

appointment letter in May 2024, confirming that the appointment has now been filled and the appointment letter is dated 12 March 2024:

"...and this is the first knowledge I've ever received within GGC of this appointment for design person [but presumably designated person] for water having been filled."

**A** Yes.

**Q** What are your thoughts about that?

**A** It's great news.

**Q** And what are your thoughts about it having not been done until 2024?

**A** Disappointing.

**Q** Is this one of the gaps that you highlighted to Alan Gallacher or to any other superior during your time at the hospital?

**A** Yes.

**Q** How often might you have done that?

**A** Regularly. Every time I attempted to support my operational estates colleagues with copies of letters for designated and other posts to fulfil audit action points that were on Smartsheets to close them down.

**Q** So, many, many occasions.

**A** Yes.

**Q** What happened in response to any of those?

**A** I can't 100 per cent answer that, because I wasn't at each meeting to be able to see what the outcome-- or hear the discussion about it.

**Q** It follows from what you've told us that there was no progress in actually appointing anyone until this year.

**A** Correct.

**Q** And is this something you'd have been raising from 2017-- throughout your time, 2017 to 2021?

**A** Correct.

**Q** Did you feel your concerns were being listened to or were even being noticed?

**A** In respect of the appointment of the designated person?

**Q** Yes.

**A** Yes.

**Q** So, you did feel that they were being noted?

**A** Yes, they weren't being listened to.

**Q** Yes, they hadn't-- My apologies for a negative question.

**A** Ah, it's quite all right.

**Q** What ought we to take from the fact that this role has-- this

important-- this vital position, as you put it, has gone unfilled all the way up to 2024?

**A** My personal opinion is if you are expecting your staff to deliver in relation to important services across water systems, you lead by example, and you wear that hat in relation to the role that you are given, and show support to your staff.

**Q** And, as far as you were concerned, that wasn't being done. Is that right?

**A** In respect of that appointment, I personally was just disappointed that it maybe wasn't evident. I mean, maybe there was a letter somewhere. I just wasn't privy to it, or the rest of my operational estates colleagues.

**THE CHAIR:** Sorry, maybe there was a-- I just didn't hear.

**A** Letter.

**Q** A letter of appointment.

**A** es.

**Q** Of the designated person.

**A** Of the designated person, and I just didn't manage to see it because I just hadn't been privy to it.

**MR MACIVER:** Going over the page to question 75, a question asked of you was, "During any period where it was unfilled, what happened as a

result?" and you've said, "Business as usual."

**A** Yes.

**Q** Bearing in mind what the nature of the role was, and I specifically mentioned to you one of the functions being allocation of, or prioritisation of resources to manage risk appropriately, can you explain to me that if there was no designated person in place, how would that role be getting performed?

**A** You may actually have a situation where there's a number of tasks being delivered by a designated person, but they've just not signed the letter. It's very difficult for me to answer what the designated person was doing with their time, without that evidence or being privy to it. So I don't want to be unfair to the potential designated person of that time.

**Q** Okay, so, in fairness to you, you're making quite clear that you're not in a position to say whether that task was being-- or not being carried out because you're not in a position, in fact, to know whether there was a designated person in place, which follows from what you've told us about the first evidence that you have seen of the position being filled was 2024?

**A** Okay, so being the

compliance manager for water systems attending the Board Water Safety Group and all individual sector water safety groups, if there had been an appointment of a designated person, I would have expected to be aware of it.

**THE CHAIR:** Well, I was going to ask you that. We're talking about compliance with regulatory requirements.

**A** Yes.

**Q** Your role was to, to the best of your ability, ensure that there was compliance with these regulations.

**A** Yes.

**Q** You would seem-- It seemed to me at least, that you were the obvious person to have access to -- among other pieces of information -- the formal appointments to the roles that we're talking about because, as I would imagine it, apart from anything else, that gives clarity both to the person in the role and to those such as yourself, who have an interest in knowing whether the roles are being fulfilled?

**A** Yes.

**Q** I mean, have I sort of understood the situation?

**A** Yes, that's correct. I think there may-- I would like to

double-check the smartsheets to establish whether Alan Gallacher had been appointed as a designated person for a period because there was some mention in relation to that, but, basically, I maintained the electronic records for all the training across the board as one of the tasks. So all the records that were held in relation to having been signed for the roles, were stored in there.

**Q** Now, you mentioned Smartsheets in your statement. As I understand it, it's a software system, but can you just explain what it does?

**A** It's an electronic system that basically records every time someone accesses that system to check the records, every time someone inputs a new record or alters an existing record. So it's quite a powerful electronic system because it has an auditable trail of every access from every individual at all times.

**Q** Right, okay, it does that, but does it have a data holding function, in other words----

**A** Yes.

**Q** I mean, I have no technological skills in this area, but what is the information that it's holding?

**A** So it may be holding sort of records of names for appointments

of authorised persons, competent persons and responsible persons, the dates they were trained, when they're due to be retrained and what they're trained in, and that's across a number of topics in Greater Glasgow and Clyde, but the one I dealt with was for water.

**Q** Right. Sorry, Mr Maciver.

**MR MACIVER:** Not at all. I just have a few more questions about Smartsheets and then perhaps we can have the morning pause. What you're describing here is an IT system, database recording certain information. You gave an example of appointments as having been one of those, but was it wider than that? Did it record other things as well?

**A** Yes.

**Q** This was, I think you said, a centrally available database that anyone could access and would be recorded for doing so?

**A** When I say anyone can access, you had to give them the access – so you as the license holder. If, for example, you were having an audit carried out, you could give that individual authorised engineer the access to the document centre temporarily for an hour, day, whatever period you deemed required.



**Q** Thank you, no, I understand that. So that would have been very useful to you, had it existed at the time, when you were doing the sort of audits that you started out by telling us you were struggling with because you couldn't get the records for?

**A** Yes.

**Q** Just to be clear, Smartsheets were your innovation. Is that correct?

**A** Not mine personally. I think it was actually a chap named Joe McElwee that started the system. I just worked on developing it to suit the needs of the topic.

**Q** Thank you. Had there been anything like it before that you came across at the Queen Elizabeth?

**A** No.

**Q** When you got that in and you got it up and running, what were the effects?

**A** When I got the----

**Q** Smartsheets introduced and up and running, accepted?

**A** It was very interesting, actually, because you had a situation where initially a lot of sort of operational colleagues were almost, like, hesitant or reluctant to hand over information, and then I think once the benefits were starting to be seen, I

think some people appreciated it. It's just-- I think there's been sort historical-- maybe started in some systems, worked in some systems and then it's been like, "Right, okay, we'll change to the next system." Whereas, I don't know whether, personally, colleagues were just concerned that this was going to be a system that they maybe put some work into and it didn't go anywhere.

**Q** I didn't ask you when you managed to get this system in place.

**A** I have the sort of date on the Smartsheet system for whatever individual record you're inquiring about. You can see the actual date when the page was created and it's different dates for different systems, but if you're talking about the document centre for the Queen Elizabeth, I would have to have a look at the date creation, but I'm more than happy to do that if you need that information.

**Q** Really, my particular interest was how long after you started did you manage to get this system operational?

**A** I think it was probably by about March.

**Q** So that would be March 2018?

**A** Yes.

**Q** Yes.

**A** I mean, it's more of a sort of ever-developing system because as more people are trained or leaving or coming or going, you had to record that information.

**Q** You said there was some reticence at the start but, generally, people were won over by the benefits.

**A** I think so.

**Q** Looking back on it, how pleased are you with that innovation?

**A** I'm pleased, uh-huh. It's just good to have a record because I wouldn't be able to sort of necessarily tell you who was in place X number of years back, without some form of record.

**Q** Okay, I've got no further questions on Smartsheets, so this might be a convenient point to break for the morning.

**THE CHAIR:** So, this would be a convenient moment to break. As I said, Ms Urquhart, we usually take a coffee break about half past eleven. So can I ask you to be back for twelve o'clock?

**A** Yes.

**Q** Thank you.

(Short break)

**THE CHAIR:** Mr Maciver?

**MR MACIVER:** Thank you. Can I take you back towards the start of your statement please, page 141 of the bundle? We've covered the reporting structure quite a lot in passing, but you introduced that quite early in your statement at question six, when you're asked, "Who did you report to? Did the persons you report to change over time?" and you say you reported to Alan Gallacher, which is as you've described to us earlier. Then you say:

“...other than a period of approximately three weeks after I produced an audit with the QEUH, when I was then informed that my manager would change from Alan Gallacher to Ian Powrie.”

Firstly, what was the audit that you're describing having done at that point?

**A** I was tasked with an audit of the Queen Elizabeth Hospital in respect of water systems.

**Q** Can you recall when that was?

**A** From memory-- from memory, I think it was not long after I'd started in the role.

**Q** Sometime in----

**A** 2018, I think.

**Q** Sometime in 2017, but perhaps no more specific than that. Would that be fair?

**A** Yeah.

**Q** Do I take it from your answer that after three weeks you changed back to Alan Gallacher?

**A** Yes.

**Q** Do you know why that was?

**A** No.

**Q** I'll come back to audits again in a moment, but just to complete the picture of the organisational structure, could we move forward to page 152 of the statements and, at question 19, you're - you've been asked about where your role was in the hierarchy, and you describe you, in your post, reporting to the head of corporate estates, Alan Gallacher, with no staff reporting to you, and then mentioning Gary Cullen and George Walsh as individuals who worked alongside you, "dealing with electrical systems and mechanical systems". Can you describe, among the three of you, what that arrangement was? Was it a team where the individuals look at completely separate things? How did that work?

**A** We were a team of individual compliance managers, three

in total, including myself, and one had the topic of mechanical systems, Gary Cullen, and another had the topic of electrical systems, George Walsh.

**Q** Did your roles overlap at all?

**A** No, not that I can remember.

**Q** Was there a compliance person for ventilation?

**A** That would have been covered in mechanical systems through Gary Cullen.

**Q** Essentially, the three of you are working separately. So, does it follow from that, your role was quite an isolated one? Or did you not feel that?

**A** I didn't feel that. I felt as if we were a team of compliance managers and we would maybe discuss different elements or aspects of our individual topics from time to time. So there was an element of discussion opportunities. I didn't feel isolated or alone, in terms of the compliance challenge and role.

**Q** Okay. So, there was a degree of collegiality----

**A** Yes.

**Q** -- among your team but when it came to actually doing the work, you carried that out basically entirely separately. Is that right?

**A** Yes.

**Q** How did that dynamic play into you actually getting things done? Did you experience pushback when you were trying to achieve things?

**A** Absolutely.

**Q** Tell me a bit more about that. How did that manifest itself?

**A** So, you would have situations where, as I explained to you previously, people would, maybe, be a little bit hesitant at first, thinking, "Is this another system that I'm putting a whole load of time and effort into that is not going to reward me?" on their individual basis, and they're very busy individuals. These operational estates people who are firefighting, delivering planned preventative maintenance tasks and a whole range of tasks to support clinical and infection control colleagues, and facilities right across the board. So time was very, very precious in relation to your time with these individuals. So you had to-- and made the most of every engagement opportunity with them.

**Q** What powers, if powers is the right word, did you actually have to secure action?

**A** Not as much power as I thought I was going to have in the role.

**Q** Was that a frustration for

you?

**A** Probably yes.

**Q** When you were experiencing pushback, how would you go about overcoming it?

**A** Try to use influencing skills and show examples. Sort of, try to work and support the individual to show that you were not all about trying to extract information from them, but looking to genuinely put relevant robust systems in place.

**Q** So, looking at it from the other side of the task rather than the end-point trying to secure action, how did you go about determining that there was action that needed to be taken? How would you learn that there was an issue that needed addressing?

**A** You could learn there was an issue requiring addressing because you could-- the individuals in some occasions would tell you. You would be able to see from the audit records, the SCART audit records, the discussion at the sector water safety group meetings, some discussion at Board Water Group meetings that you were invited to. So you could tell through these sources, authorising engineers' audits, as I mentioned, SCART audits, your own personal audits when you were permitted to do

so.

**A** Was there any delegation or any allocation of work from above to you, to get things done?

**A** Yes.

**Q** What sort of thing might be allocated to you?

**A** Working to close down the action-- not me personally, but working to support and create an evidence record for the Queen Elizabeth University Hospital outstanding actions, for reports such as the reports that you have mentioned within your request.

**Q** And you've mentioned a number of methods by which information from below might come to you.

**A** Yes.

**Q** Were those relatively informal channels?

**A** Not always. You would have like-- individuals sometimes would put, like, requests in through emails or even verbally, and telephone calls, "Can you come and help me, Phyllis, with this?"

**Q** Did you run anything like a helpline or a help email account that people would email to----

**A** Yes, regularly. I can show evidence of sent emails. Maybe not so much the telephone calls, but,

actually, also as compliance set up an actual email address some time on from that, but throughout my entire time in the Health Board, you know, I've been regularly asked questions in relation to interpretation and SHTMs, and----

**Q** Okay. So, setting the issue of pushback to one side, did you have any trouble getting engagement with your role and what you were trying to achieve?

**A** A little bit, as I mentioned to you previously, at first, but I think when people realised what the end goal or the benefit-- you know, you had that support and buy-in, in relation to the end goal.

**Q** Do you feel then that your role was a useful addition to culture at Queen Elizabeth?

**A** I do, yes.

**Q** Was there anybody carrying out the substance of what you were doing before you took up that role? By which I mean, and perhaps I phrased that badly, but you went in formally as the compliance manager with a set list-- or not a set list but a set-- you had ambitions for things you wanted to achieve. Was there an equivalent person or persons or mechanism or arrangements in place before you arrived, notwithstanding

that there wasn't a compliance manager?

**A** I'm sure there were individuals somewhere championing water systems and safety around water systems but, I suppose, you could say that was maybe in the former sector estates managers, they were pushing for some type of compliance across the board in respect of water safety, because they would be holding the individual sector water safety group meetings.

**Q** Did you come across initiatives or the like that had been-- that were ongoing or had been done before you arrived that made you think, "Yes, there was somebody doing my job before I arrived"?

**A** In a compliance role? I think individuals were working in their individual locations, you know, North East, Clyde, you know, different sort of geographical sectors of the water safety and doing good works in relation to these elements and there was, obviously, like, reporting from there that would go into the Board Water Safety Group and ultimately for the chief exec reporting. So there was an element of good works going on there, and I think it's difficult for me to answer from, like, the chief exec position for a holistic overview of water

systems. I can only assume that there would be.

**Q** Just where we mention the chief executive there, and I'm recalling that we spent quite a bit of time before the break going through the various appointed roles that were or weren't filled, is it the case that ultimately the responsibility for filling those roles would fall upon the duty holder, who is the chief executive? Would that be correct?

**A** Yes, that's correct.

**Q** Did you-- And that was Jane Grant during your time, I believe?

**A** Yes, I believe it's Jane Grant. I think prior to that, it was Robert Calderwood.

**Q** During your time at the Queen Elizabeth, did you see any evidence of interest being taken by the chief executive towards these appointed roles that have exercised you so much?

**A** I think it's difficult for me to answer that question because I didn't get to see everything that was happening across all sort of senior management levels. From my position, I can't-- I'm maybe struggling to sort of think of situations and I don't want to sort of put a negative in relation to management but I'm sure there was some sort of reporting back

and forward or, you know, through the Board Water Safety Group. I just-- I can't say really more than that. Sorry.

**Q** I think, in fairness, you're making clear that you weren't in a position to-- you didn't have a panoramic view of everything.

**A** Yes.

**Q** Okay. Can I move onto something else, at this point, which is reports prepared by DMA Canyon.

**A** Yes.

**Q** Now, if we look to page 177 of the statement, you start addressing those about question 157. The questions there start off by referring to a 2015 risk assessment in respect of Legionella carried out by DMA Canyon.

**A** Okay. So, could I just be 100 per cent clear about this? This report, I suspect I may have seen a part of the-- not the report itself, I've never ever seen the actual physical report itself at that time, but I think what I may have been given is an Excel spreadsheet from Andy Wilson, who was the site manager at the Queen Elizabeth University Hospital at the time, who emailed it over to me so that I could create a Smartsheet for closing down actions with the operational estates colleagues at the Queen Elizabeth University Hospital,

and I can show you the exact date that I created that but it was nothing like 2015. It would have been more like 2017, possibly even 2018 when I created the action list to close it down. Close down the actions, that is.

**Q** All right, we might be able to narrow down to this a little bit if we just look at the questions because you've given a date here at 158 and 161 of 3 July 2018 and you're saying that, just above 160, that it was brought to your attention by Alan Gallacher and, at 159, you're saying that-- what I think you said a moment ago was that this was to assist with closing and evidencing actions.

**A** Yes.

**Q** Can you tell me about that process, please?

**A** So, it was extremely busy, from memory, at that time and I had been working with Jim Guthrie in relation to closing down actions, and it was a matter of evidencing those actions. So it was taking photographic evidence and recorded evidence in relation to works being complete, item by item, and that's-- but, obviously, it was difficult for me to say 100 per cent that was all under the 2015 report because I was never given the actual physical report.

**Q** Okay----

**A** If I had been given the physical report, I would have attached it to the Smartsheet because-- Sorry to hark back to the Smartsheet again but, if you look at the Smartsheet, every risk assessment, audit, document that relates to an individual site is attached via a little paperclip symbol within the Smartsheet system which shows you exactly the document and when it was put on the document centre.

**Q** Okay, so, that's the process that you're describing with Alan Gallacher having brought it to your attention in 2018. Is that correct?

**A** Yes, but he had got it, I believed, although I can only say, you know, from hearsay, through Andy and the team.

**Q** Andy Wilson?

**A** Mm-hmm.

**Q** So, if we go over to the next page, at the bottom, 166, "When did you first see the DMA 2015 risk assessment in full?" then, at the top of the next page, you say, "I didn't see the document," which is what you've told us a moment ago. "Andy Wilson emailed me a comparison document in respect of some actions closed between the 2015 and 2017 risk assessments," and that was brought to your attention by Andy Wilson.

**A** Yes.

**Q** That's correct, and that's you've described to us before.

**A** Yes.

**Q** So, in actual fact, when I'm asking about the 2015 risk assessment, is it correct that what I should understand from this is that (a) you didn't see the 2015 risk assessment but (b) you did see a comparison of some kind between the 2017 and 2015 risk assessments?

**A** Yes.

**Q** Can you describe what that comparison was, what it looked like? What was in it?

**A** It was, basically-- You can see it. I mean, you can see every audit, every link to it since I put it on the Smartsheet because it shows an auditable trail of every entry, every input, every sort of access for individuals to look at and it, basically, was two risk assessments-- now as I know, from 2015 document, two risk assessments that detailed all the outstanding actions in respect of the Queen Elizabeth University Hospital and whether there were actually like links within both of these documents to the same audit point being made.

You know, for example, like dead legs. A dead leg's been removed from the system, a dead leg number five at



level four being removed and whether that was repeated in each individual risk assessment.

**Q** That's what I was trying to get to. So, was it-- effectively, the document you're talking about, was that a list of action points?

**A** Yes.

**Q** And you were to either secure that they'd be done or to get evidence that they had been done? Was that right?

**A** Yes.

**Q** And you did that via Smartsheet?

**A** Yes.

**Q** How did you find that? Was it effective?

**A** Very good, because it was one way of recording closure of anything that's outstanding without it going missing because it sits there in a central document centre.

**Q** And, just to ask you the obvious question, did that actually work? Was it actually adhered to? Did people fill in the closure section or was closure done automatically by the sheet in some way?

**A** It did work because each individual has to close down-- It depended what the action was. You know, there's maybe, like, some actions applied to site managers,

some actions to authorised persons, some actions to me even on behalf of, like, the Board policy and response. Depended what the actions were but you can see all the actions detailed in Smartsheet if you want complete detail.

**Q** So, taking a step back then, and you've set out in great detail what you actually did and how that worked, but taking a step back and thinking as a compliance manager about what you were being shown here, a list of matters to be actioned, some, I think, at least of which had been carried over from the 2015 risk assessment. What were your thoughts when you saw this task?

**A** The task related to the outstanding actions for the 2015 report?

**Q** Yes.

**A** "Golly, let's get these closed as quickly as possible."

**Q** Because?

**A** Because anything outstanding in respect of water systems is a red flag for me.

**Q** Just to follow that thought through, why is it a red flag to you?

**A** Because it can impact so many different situations, so many immune-compromised patients.

There's so many implications of not actioning some of these points. To be able to understand the healthcare environment, I think personally, takes time, and to know what the risks are associated with not doing these works in a water system is different from any other environment that I've worked in.

**Q** What did you think about-- Were you able to form a view on how safe the water system was that you'd been given the job of dealing with?

**A** At that time?

**Q** Yes.

**A** I had my own personal thoughts. I had my own personal thoughts but it was like a jigsaw around about that time. I only was privy to certain parts of it. I mean, this Inquiry is going to be a fascinating result because it's just going to highlight so many different impacts and risks associated in healthcare.

**Q** You said you had personal thoughts. What were they?

**A** I suppose you could just say I came from a place where I carried out certain actions and closed down certain tasks and you expect that to happen at all your sites, and I think it was a bit of a sort of naive perspective of mine, expecting the same standard, records, documents of

systems throughout every individual site in the Health Board. That's just my naivety.

**Q** Can I take you to bundle 6, page 416? Now this document's an L8 risk assessment. It doesn't mention DMA Canyon here, but you'll see the dates, site survey dates:

“Completed September 2017. Surveyed outlets in October 2017. Management review meeting for a gap analysis January 2018...”

And then, a review date for September 2018. So you're familiar with this document?

**A** Yes.

**Q** Can you recall when you saw it and who gave it to you, who showed it to you?

**A** I actually-- I actually transposed this document onto the Smartsheet. It's detailed in line 39 of the Queen Elizabeth water systems compliance tool, the page that was created, and it was put on for the purposes of closing down the actions. I would have to double-check the Smartsheet exactly to see what date, unless I've answered it in one of my questions there.

**Q** Oh, it's a specific point that I'm interested in. You've already

spoken about your involvement with dealing with the 2017 and 2015 action points, but can I take you to page 597 of this document? Now, this page is recording a gap analysis carried out on 30 January 2018. The paragraph towards the bottom beginning, "A written scheme guidance..." is the one I'm interested in because it mentions you in it, and it's recording:

"A written scheme guidance was issued by DMA in 2015. Though not updated, is anticipated to be fully utilised as the written scheme for the site and became the overarching control document for Legionella control. NHS Greater Glasgow Estates has since issued a general written scheme to be implemented in each of their sites. However, DMA are awaiting feedback from NHS Estates compliance team on a number of queries raised before any changes are made to make this site-specific. A draft document for discussion has been supplied to Phyllis Urquhart and DMA are awaiting feedback on this."

Do you recall that draft being provided to you?

**A** So, this is a draft document of the 2017 risk assessment, okay?

**Q** Right.

**A** So, yes, I will recall like-- I will have the date when I put it in Smartsheet.

**Q** So, this isn't a draft written scheme being provided to you?

**A** This is-- They could have provided a draft written scheme. They could have provided a draft written scheme. I'd need to double-check and see what was on that Smartsheet page.

**Q** Well, at the moment, I'm just interested in what you can remember from this reference, and is it fair to say you don't recall getting a draft written scheme?

**A** I would be able to tell if I have a look at the Smartsheet pages. I mean, I was getting quite a lot of documents from numerous different sites, but I can confirm that exact date and what I've got.

**Q** Okay. That might be another matter that you have to----

**A** I have to do homework on.

**Q** -- clarify afterwards. The reference to written schemes takes me question 125 of your statement. It's page 171 of the bundle, and 125, I

won't read this, but you're discussing there the significance of a written scheme, and then over the page, 126, you're asked and you confirm that a scheme was in place when you started work at QEUH. 129, you say the scheme was in place from December 2016.

**A** Yes.

**Q** Then, 128, you've been asked who prepared the scheme and the names there are Alan Gallacher, Gerry Cox, Melville MacMillan, Colin Purdon and yourself, Phyllis Urquhart. Again, it's a date question, but can you help me to make sense of the dates of this scheme dated from December 2016? How can your name be one of the preparers of it?

**A** I'm not sure about like that date-wise, but, I mean, they're maybe talking about, like, a written scheme that I had for other sites, and my previous site like, at that date, not particularly for the Queen Elizabeth University Hospital. I'd need to have a look because December 2016 is a date that I wouldn't have been at the Queen Elizabeth. So, I mean, have they used, like, the template that I used over at Gartnavel? That's, you know, for a written scheme. That's what I'm really wondering.

**Q** Okay, well, that was why

it was the discrepancy in dates. That's the reason I asked the question.

**A** Okay.

**Q** Just to close off this chapter, I don't think I need to take you to it, but is it correct that you did go on to instruct a risk assessment, a further risk assessment from DMA in 2019?

**A** Yes.

**Q** In general terms, did that show improvement?

**A** From memory, yes.

**Q** But, also from memory, were you satisfied with what you got back?

**A** From DMA?

**Q** Yes.

**A** Yes.

**Q** And did that allow you to push things forward in your compliance manager role?

**A** Yes.

**Q** I'll perhaps close off my questions by just asking you a few questions in relation to elements of the water system that you refer to later in your statement. Page 189, you're discussing dead legs.

**A** Yes.

**Q** And you mentioned them yourself, spontaneously, a few minutes ago. Indeed, I shan't get you to explain the significance of dead legs, but I'm interested in knowing your

impressions on how-- to what extent you were able to secure the action that you thought necessary in terms of addressing the dead leg issues?

**A** Perfectly, as in I could take photographic evidence, which I did, along with operational estates colleagues. So I saw it with my own eyes and----

**Q** When you say you saw "it", are you talking about dead legs in place or----

**A** Well, like, I didn't see-- I maybe saw where a dead leg had been and been removed, apologies.

**THE CHAIR:** Yes, right. I was just wondering how you photograph a dead leg, but it's-- but what you can photograph is a space where there was piping and no longer piping.

**A** Yes, yeah.

**Q** Right, okay.

**MR MACIVER:** So, you said you started out with the word, "perfectly", so it's pretty strong. You're satisfied that those dead leg issues, they had been addressed?

**A** Yes.

**Q** At the bottom of that page, you are asked to comment on effectiveness or otherwise of flushing, and it may be that there's not much to say, given your previous answer, but can you explain how satisfied you

were that flushing was being carried out as a means of water control?

**A** So, flushing is a moving target. Flushing is challenging within the healthcare environment because you are reliant upon collaboration with all your other colleagues. Clinically-wise, facilities-wise, depending on who has occupation of a space within the healthcare environment, it's a huge responsibility and, in my personal opinion, an education issue for all individuals working within the healthcare environment, because you have-- and I'm not picking on any single group, but you have, say, for example, a consultant who has a space within a particular location in the hospital who decides that they would rather use their space for storage, as opposed to a toilet or a shower room. And because their need is more for that and they don't quite appreciate the importance of not having this individual or individual outlets flushed and, as an organisation, we still haven't included that in our induction or learnPro training system.

So it would be so beneficial if people coming into the organisation or even in it do not have any expectation, because they do not need to use a particular outlet, that, operationally, Estates will remove that outlet,

because they won't. There's a whole sense of requirements from a building standards perspective, for instance, where individual buildings are designed upon occupancy and provision of toilets, showers, wash hand basins, depending on the use of these areas. And, therefore, these should have the benefit of documents such as building warrants associated with removing them.

**Q** This is clearly a matter, still, of some frustration for you. Is that right?

**A** Slightly, you may detect.

**Q** Does it follow from that, that it's not a matter that you ever had fixed to the standard you would like when you were at Queen Elizabeth?

**A** Yes.

**Q** The last question-- Just over the page, please, the last question there is about point-of-use filters. I won't get you to read your answers, but just in general terms, what are your views on those items of equipment?

**A** I think they can be very beneficial in the correct circumstances. I think there's a lot of risk associated with them in relation to effective record-keeping of when they are utilised, adequate education for the users who are using them, and,

importantly, Facilities colleagues who are tasked with cleaning them.

**Q** Thank you. You see the second half of that page is about single rooms and there's a section of questions there. I won't get you to-- I won't take them through you point by point for reasons of time, but can you recall what actions you might have had to take that were presented to you because the hospital had single rooms as the default means of accommodation?

**A** I think they were all-- operational estates colleagues were very, very challenged in relation to covering, you know, any point-of-use requirements right across all these single rooms and----

**Q** When you say point-of-use requirements, what sort of actions are you talking about, or problems?

**A** Being able to source the required number, being able to have staff put these in place, an actual physical point-of-use filter, being able to ensure that staff were all suitably and adequately trained to be to manage and deal with them and clean them.

And I suppose there would be an element for my clinical colleagues as well there, in relation to educating visitors that are maybe coming to see

a patient in a room who say, "What's that big white blob that's in the end the water outlet?" You know, there's a whole number of questions that arise in relation to-- You also have like an entire-- like, group to educate in relation to why you actually have something like that on the end of a tap, and your instinctive reaction as someone that doesn't know about these things would be, "Oh, is it safe, this environment for my"----

**Q** You're talking about the filters?

**A** Yes.

**Q** In terms of the single use rooms or single occupancy rooms, do you have a view, in general, as to whether those are a good thing or a bad thing?

**A** From my personal point of view, I've thought about this quite a bit and I've listened to quite a few different presentations and thoughts in relation to it and I think as a patient it may be quite a nice experience because you have your own private area. I'm looking at my own family's experience and I've been up visiting family, in the past, where you have an element of privacy but, from a health board, resources, staffing perspective, ventilation perspective, water system management perspective, I personally

think that we could maybe make greater savings on an old fashioned, numerous bedded ward basis.

**Q** Thank you. Going over two pages at 192, there's a section on monitoring and, again, just to ask you generally, I think to summarise what you're saying here, you are sceptical as to the idea of monitoring as a cure-all or a single basis for addressing issues that might arise with the water system. Would that be fair and is there anything you want to elaborate on, in regard to that?

**A** No, I think that's fair. That's definitely my opinion. There's just so many different aspects involved in water systems and, definitely, it's vital to keep a holistic overview of what's happening across them, but, personally, as I mentioned previously, I think there's a big education shortfall for all individuals involved within the healthcare environment.

**Q** Thank you. I'll just perhaps-- Perhaps this will be the last question, but just to skip on two more pages to 194. At 244, you were asked about taps and, as part of that, you were asked about flow straighteners, and an issue was drawn your attention about an incident in Northern Ireland in 2012 and you appear to be fully conversant with what happened there.

Can I just ask you, to what extent were you aware of those difficulties at the time you arrived at the Queen Elizabeth and, indeed, before you got there?

**A** I wasn't aware of the specific issues at the Queen Elizabeth University Hospital because it wasn't openly discussed. You only get told what individuals thought you were to be told and what knowledge you were to get. So quite a lot of information I managed to-- not managed to, because it's not like I was pursuing this information with any sort of desperation for knowledge, but a lot of information was given to me by operational estates colleagues, not necessarily my seniors.

**Q** My question was perhaps less about these specific issues that arose at QEUH and was more about to what extent were you aware, generally, as part of compliance job that taps, flow straighteners were a potentially problematic----

**A** A risk.

**Q** Yes, a risk.

**A** Well, I've listened to years of training and presentations and, you know, from time to time, you have, like, companies who are promoting their solutions to, like, these

challenges, and there's an element of sort of innovation opportunity I would say definitely in that line, but I've listened to years of it. I don't mean years of it, to sound like that, but I've listened to years of talking about the risk associated and what happens and who's impacted. I think maybe, again, that's one of my shortcomings is that I expect many other people to maybe also be aware of the same information because it's been all over the news, but it's what it means to each individual.

**Q** Okay, just one last question. Sorry, two last questions. An issue I meant to come back to, and I didn't, was in relation to-- you remember we discussed the audit that has been carried out by Dennis Kelly in May 2017?

**A** Yes.

**Q** I think you've said in your statement that the requirement to do audits was an annual one.

**A** Yes.

**Q** Now, you may or may not recall this but there were audits for 2017, 2018, 2020, 2021 onwards but there was no audit for 2019. Were you aware of that?

**A** I was.

**Q** Can you explain how that came about?



**A** I think it was partly to do with actions maybe still to be closed down from the previous audit. There was a number of factors at that time. It was hugely busy right across the board and there was a number of activities and anxiousness from numerous different groups.

**Q** From a compliance point of view, were you aware at the time that the audit was due and hadn't been carried out or was it being carried out?

**A** Yes, yes, because I personally felt it was my responsibility, so yes. I asked, "What's happening about this audit?" because it's one of the things that I reported in through the SCART group about.

**Q** Who would that report have gone to?

**A** That would have been like the assistant director and the head of corporate estates, Alan and Mark.

**Q** Thank you. The last question I've got for you is just in relation to your conclusion. I won't take you there, but you've generally said you were satisfied with the work that you did at Queen Elizabeth, but you felt you were not as effective as you'd have liked. Would you care to elaborate on that at all?

**A** I think that-- I think everyone asked about a job and their

individual role always has these greater expectations of being able to achieve and put systems in place, so that no one is ever put at risk and I don't feel as if I've achieved that.

**Q** Thank you.

**THE CHAIR:** Sorry, can I just ask you about a previous answer? Mr Maciver drew your attention to the fact that there was no water safety audit for 2019 and just to make sure I've got my note correct, you felt it was your personal responsibility to see that there was an audit. Is that what you said?

**A** It's one of the items that I would report on. So I did personally feel that I had to go to my senior and say, "What's happening about-- What are we doing about this audit?" because you would have to report on all, right across the board, so----

**Q** And you did that?

**A** Yes.

**Q** You said – again, just so my note is correct – you reported to the assistant director?

**A** Well, the assistant director would have access to my compliance report, which was raised at every SCART meeting.

**Q** Right.

**A** So----

**Q** That would include the

point that there was an outstanding audit?

**A** Yes, because you----

**Q** Who was the----

**A** -- because you would report on what audits had been carried out and, at each one of these, who was in the role.

**Q** Who was in the role?

**A** I think at that time-- I think it's Mark Riddell.

**Q** Mark?

**A** Riddell.

**Q** Riddell. Don't know if that's a name I've picked up on before and to head of estates, who was Alan Gallacher. Is that right?

**A** He was head of corporate services or corporate estates rather.

**Q** And you were reporting that to him?

**A** Yes. Well, they all attend, like, these meetings, SCART meetings that we have quite regularly. We were reporting what's outstanding.

**Q** Right. Now, Ms Urquhart, what I want to do is just check with the room or allow Mr Maciver to check with the room whether there's any other questions which anyone considers you should be asked. So it shouldn't take more than 10 minutes. Can I invite you to go

back to the witness room?

**A** Certainly.

**Q** Right, we'll take 10 minutes just to check that there's no further questions.

**(Short break)**

**THE CHAIR:** Mr Maciver?

**MR MACIVER:** My Lord, there's just one question in three parts, so I propose to ask it and finish more swiftly.

**THE CHAIR:** Perhaps just one or two more questions, but not very much.

**A** Okay.

**THE CHAIR:** Mr Maciver?

**MR MACIVER:** Thank you. There's really one question that's in three parts and it's feeding off something that you told us earlier. Do you remember I asked you about when you started, whether you had views on the safety of the water system, and you said you did, but you didn't tell us what they were. So, could you just elaborate, what were your personal views as to whether, in 2017, when you arrived at Queen Elizabeth, whether you were confronted with the safe water system?

**THE CHAIR:** Sorry, I didn't hear that question. In 2017?

**MR MACIVER:** When you arrived at the Queen Elizabeth, what were your thoughts on whether you were confronted with a safe water system?

**A** So, when I started there in the compliance manager role and I got involved with operational estates colleagues, very, very disappointed because I thought, "Where are the people?" You know, but there's a number of things that have-- that I've learned since then about the other parts of the jigsaw in relation to the Queen Elizabeth University Hospital. So, you know, I know for a fact that there wasn't staff in roles. I could see when I walked into their plant rooms, it was like a significant challenge compared to any other plant rooms that I had seen in time and size of water storage tanks, size of pumps that were significant and, you know, you think to yourself, "This is a completely different beast from other 11-story buildings" that you've been in and had experience of and seen and how--

You know, I had my own personal thoughts in relation to the management there and I was kind of, truth be told, slightly disappointed but I don't think I fully appreciated the challenge that the likes of the

management that were running with that site had and, you know, the opportunity for them to, you know, get delivery to their questions and concerns.

**Q** The specific question was about safety. That was the word that I used. What were your thoughts on whether you were looking at a safe water system?

**A** At that time, when I first joined, I had-- I didn't see a complete full picture of everything immediately. So I was thinking along the same lines as every other person that entered that site at the time that it was safe. You don't really get the picture instantly until you start getting access to different elements of it.

**Q** Did your----

**A** You know----

**Q** Did your view change, then, the longer you were there?

**A** So, that I thought, at one point, "This is an unsafe system, an unsafe place"?

**Q** Did you get to that point?

**A** I don't think I-- I felt a little bit edgy in relation to all the discussion and debate and historical events that happened there. You know, I had some real concerns, should I say, in relation to starting to hear the different parts of the jigsaw

from different sources. I was also, remember, very, very busy across all sites. It wasn't just about the Queen Elizabeth University Hospital.

**Q** Was there a point then where you started to cross over to think, "Hang on, this isn't a safe system"?

**A** Possibly, yes.

**Q** Around when might that have been?

**A** Maybe the beginning of 2018.

**Q** Could you attribute that to any particular event or was it a matter of your state of knowledge?

**A** It was my knowledge. I would say my knowledge at the time and not knowing or seeing the whole big picture.

**Q** Given that you stayed for nearly five years in total, and, presumably, your knowledge grew throughout that time, was there a time when you crossed back and began to think, "This is a safe system again"?

**A** Yeah.

**Q** Could you put a time scale on that?

**A** Different elements made you feel, what can I say, more content in relation to different aspects. It wasn't like, I can never remember, reaching January 2020 or whenever

and saying, "Oh, that's me, I feel a lot better and happier about the system."

I didn't think like that, to be honest. I just started thinking, you know, "Well, that's great. We'll get through X amount of training." So there's a whole host of people, you know, trained and appointed for the roles. So that's a big impact on the safety of the system, because these are the individuals that are dealing with the heart of it.

**Q** So, I appreciate your position that it's obviously a fuzzy matter and difficult to put a finger on, but I'll ask the question this way then and this is the last thing I'll ask you. If around the-- If it was around the start of 2018 that you began to become seriously concerned that this was not a safe water system, for how long did you continue to be concerned? Would you be able to put a timescale on it that way?

**A** I'm probably not a good person to ask that question of, because if you have the required number of staff to operate that system safely at that hospital, I would still-- because my mind's just-- I'm just a risk assessor headed individual, I would just always be hesitant to have 100 per cent confidence in relation to sickness, annual leave because I know how it

works in relation to the Health Board. You know, people can become sick and be off and who's running with their role? That doesn't always provide confidence. So, I think I'd rather not answer that question. Thanks.

**Q** Yes, I'll leave it there. Thank you.

**THE CHAIR:** Do I take it that Mr Maciver has picked up the question correctly? I'm getting an affirmation of that. Ms Urquhart, that's all the questions we have for you, and I thank you not only for attending today and answering the questions you've been asked, but also the work involved in preparing your witness statement, which is part of your overall evidence to the Inquiry, for which I'm very grateful, but you're now free to go. Thank you very much.

**THE WITNESS:** Thank you. Thank you.

**THE CHAIR:** Now, we have, I think, Mr MacMillan this afternoon?

**MR MACIVER:** We do.

**THE CHAIR:** Perhaps we might take our lunch break until ten past two?

**MR MACIVER:** Yes.

**THE CHAIR:** Right. Thank you.

**(Adjourned for a short time)**

**THE CHAIR:** Now, the next witness is Mr MacMillan.

**MR MACIVER:** Mr MacMillan, my Lord.

**THE CHAIR:** Good afternoon, Mr MacMillan. As you will understand, you're about to be asked questions by Mr Maciver, who's sitting opposite you, but first I understand you're prepared to take the oath?

**THE WITNESS:** Yes.

**Mr Melville MacMillan, Sworn**

**THE CHAIR:** Now, I don't know how long your evidence will be. I would certainly expect it to be finished by about four o'clock. However, if at any stage you want to take a break in your evidence, just feel free to give me an indication and we'll take a break. I mean, what I want to be-- or what I want to impress on you is that you're in control of this situation. If you want to take a break, we'll take a break. Okay?

**A** Thank you.

**THE CHAIR:** Mr Maciver.

**Questioned by Mr Maciver**

**Q** Could you tell the Inquiry your name, please?

**A** Melville Russell

MacMillan.

**Q** What's your occupation?

**A** I'm an operational estates manager at the Queen Elizabeth campus in Glasgow.

**Q** How long have you been at the Queen Elizabeth for?

**A** Since November 2014.

**Q** Now, you prepared a witness statement for the Inquiry, is that right?

**A** Yes.

**Q** And are you happy to adopt that statement as your evidence to the Inquiry today?

**A** Yes, I am.

**Q** Okay, I'll have some questions for you and I might wish to refer to some of your answers in that statement. If I do so, it'll come onto the screen that's immediately in front of you so you'll be able to read from that. For those operating the screens, Mr MacMillan was originally within last week's witnesses and therefore his statement's within volume 2 rather than volume 3.

I wonder if we might go to that. To start us off, page-- the statement starts at page 267 and, at page 268, at question 8, you have set out what your roles were within the Estates Department at the Queen Elizabeth, and they are, firstly, from the date you

told us, November 2014 to April 2018, you were estates duty manager and thereafter you were day shift operational estates manager, and is that the role you're still in today?

**A** Yes, it is.

**Q** Do you want to tell me about what those two jobs entail? What roles did they hold?

**A** Well, the estates duty manager was predominantly working on a shift rota on days and nights, and we basically-- we'd take calls from the helpdesk, from the nursing staff, basically on a-- I would call it a firefighting operation, that we would go to these jobs and repair them, fix them as best we could. That's basically for the estates duty manager's job on shifts.

My day shift job now, and-- when I started that in 2018 in April, I was given the task of managing the water system in the Queen Elizabeth due to my past experiences.

**Q** Right, okay, we'll maybe come onto that because a little bit further down, at page 272, you talk a little bit about your past experience. Question 26, I've got marked, you've set out your qualifications.

**A** Yeah, I----

**Q** Do you see that----

**A** I'm a fully qualified

plumbing and heating engineer. I served my time way back in the 1980s. I've done several jobs since then and I have been back to do further education: I've done an HNC in electrical/electronic engineering and then I was put through my two degrees through university, my B Eng in building services engineering and then my master's in building services engineering.

**Q** Okay, and at 27, just below that, you describe having been an estates L8 technician plumber at IRH. Two questions there, L8 is Legionella, is that correct?

**A** (No audible response).

**Q** Where's IRH?

**A** Inverclyde Royal Hospital in Greenock.

**Q** In Greenock, thank you.

**A** Yep, I worked there previously. I've worked there twice actually. I worked there from 1990 to 1999 and then I moved abroad and I came back in 2008 and, I think, if I remember rightly, it was roughly about 2010/2011 I went back to Inverclyde Royal to work. Basically I got my old job back.

**Q** So you were a Legionella qualified plumber both times?

**A** Yeah, yes, I-- when I went back for the second time to

Inverclyde Royal, I predominantly dealt with all the Legionella works, managing a contractor for my manager at the time.

**Q** Okay, so you were well-familiar with Legionella before you ever reached the Queen Elizabeth?

**A** Yes, I was, yes.

**Q** And that's been a theme, would it be fair to say, of your working life there?

**A** Yes, I was a plumbing technician for ten years/nine years and then more predominantly more to do with the L8 work, Legionella, when I came back, yeah.

**Q** Okay. In the two roles that you talked me through a minute ago, can you tell me how work came to you, how you were allocated tasks?

**A** At the Queen Elizabeth?

**Q** Yes.

**A** Well, in the duty estates manager, once we were on shift, we would basically use the FM First system to see what jobs had been put on the system by nursing staff etc and I would allocate those jobs to my shift team and also we would take emergency phone calls and I would also issue job lines to my staff on an *ad hoc* basis when we had-- when we got the calls in.

I would also go with them

because I'm a very-- I like-- I'm very-- how can you put it? I'm interested. I'm very interested in my job and I'm interested in how other people's jobs are in the hospital so I would always go with them to find out how things work.

**Q** Okay, and that duty job, that's the one you describe as "firefighting"?

**A** That's the firefighting job, yeah, because basically that's what we were doing, firefighting every time we were on shift.

**Q** Does that mean there was no rhyme nor reason to it? You were just----

**A** You just didn't know what you were going to get. We, as duty shift managers, there was five of us, we made up-- we basically made up, with the lack of PPM system, we basically made up our own checks that we would all carry out on our-- on the start of our shifts.

**Q** Now, tell me about that. Sorry, you're saying "the lack of a PPM system"?

**A** There wasn't-- We didn't have a full PPM system when the hospital opened.

**Q** PPM is Planned Preventative Maintenance, is that correct?

**A** Yes. So, my understanding was that, a new hospital, it would all have been populated and we would have been working through them or through that system but that didn't seem to be the case. We had to-- We made up our own at times: medical gas, electrical checks. There was certain checks we'd done during the night. Filtration system for the water etc.

**Q** What periods are we talking about here?

**A** Well, this would be when I was on shifts.

**Q** This is throughout?

**A** Probably the first-- The first year or so, maybe.

**Q** Right, so that would be maybe from around the end of 2014 to around the end of 2015, would that be fair?

**A** No, I can't quite remember when I started on my shifts. I started on my shift pattern after the hospital opened. So it would be later on in 2015, nearer into 2016 would have been-- and we kept those checks up for the whole time that I was estates duty manager.

**Q** Right. So this is a period when patients were in? So, patients arrived in April, say, of 2015, it would be maybe April to April that you're



talking about?

**A** Probably, yeah.

**Q** Right, and I think you said you'd have expected there to be a PPM system?

**A** Yeah, yeah. I would expect it to be as part of the delivery from the contractor.

**Q** The FM First system that you told me about, that you were getting jobs sent to you on, was that an electronic system?

**A** Yes.

**Q** And is that-- Did that work off a kind of handheld pager, something like that?

**A** Yes, our technicians would be issued the jobs and it would go down to what we call "PDA"s, and then they would work on their PDAs and take the jobs from their PDAs, do the jobs, complete and then send them back, and then there'd be a record that the job's been done.

**Q** So, where was your role in that kind of network?

**A** My role would be to issue the jobs to our technicians, and obviously I would go on the system and check the job to see if-- what works had come in. You prioritise the works.

**Q** Okay.

**A** There would be some

that could wait, other works you would do immediately.

**Q** How would you know how to prioritise things?

**A** You would pick by your experience.

**Q** Right, so that-- You're talking about jobs coming to you. Is this all firefighting jobs that you're talking about?

**A** Quite a few at the-- At the beginning, yes. Yes.

**Q** The PPM jobs though, they're different.

**A** They are different. They are automatically issued to technicians on certain dates etc. I'm not-- They're programmed by another team.

**Q** Was that happening in April 2015 when you first came on?

**A** I can't remember. I don't-- I honestly don't think so. No, I don't think there was a PPM system in place at that point.

**Q** Right. So, you said you had to improvise?

**A** Yes, we improvised. So we picked what we thought were critical items. So we would go on and we would give job lines out for medical gas, to check the medical gas systems on the site.

**Q** So where did you find these jobs? How would you know a

job needed to be done all?

**A** Well, we decided between the five of us basically, and I'm not sure if there was a senior manager involved with what we picked to-- what we thought were critical. Medical gas is critical so we would get that checked once a night.

It's the same with-- We would check air handling units, i.e. via the BMS, and if there was anything wrong, we would issue a job to our technician on shift to go and look at it, to fix it, repair it.

**Q** And you're saying that there was nothing indicating-- you weren't alerted or told that there was anything in those systems that needed to be done, you were-- it was reliant upon you identifying it yourselves?

**A** I think that, as I say, between the five of us, we made up a plan of, "This is what we will look at." I can't remember if there was a senior manager involved who would have gave us information like that. I just remember that we had like two check sheets beside us then we would go through them during the night and on dayshift to make sure they were complete.

**Q** Where did these checklists come from?

**A** Well, they were--

Somebody made them up. As I said, it was probably the five-- one of the five of us that wrote them up.

**Q** You don't think that this was completed centrally or----?

**A** I don't think so. I can't quite remember to tell you the truth.

**Q** Okay, but presumably, if it was compiled by the five of you, then it was reliant upon the five of you's experience and knowledge of what you were dealing with?

**A** Yes.

**Q** And, for you, that would be primarily plumbing, is that right?

**A** Yes, primarily for me it would be the filtration units to ensure that they were running and that the water system was, like-- the tanks were full etc, then we never ran out of water.

**Q** Okay, thank you. I'll maybe come back to that shortly but we just talked about your background being plumbing and heating. In fact, on the same page as we've already got up, you see question 28 was a question about training and there are three parts to the question, what-- "Did you have any formal training or qualifications in respect to water?" and you detail those, and then ventilation and infection control and, for those ones, you don't have any formal

training.

I think you've probably told us enough about your water training, unless there's anything that you feel you need to add to what you've told me already and what's written here, and just to be clear, these answers, are you talking about-- is that the training that you've had before you ever arrived at the Queen Elizabeth?

**A** The training, yeah. The L8 training was when I was a technician plumber at Inverclyde Royal Hospital. I sat a CP course, a City & Guilds CP course.

**Q** And in fact, if we flick over to the next page at the top, you have set out your courses that have got you there.

**A** Yeah.

**Q** On-- The last sentence there:

"I worked on all systems, mechanical/electrical on the Queen Elizabeth campus due to past work experience and qualifications."

Do you want to explain to me what your-- what you mean by that, past experience and qualifications for mechanical and electrical, as opposed to the plumbing that you've already told me about?

**A** When I emigrated to Canada and worked in Canada for 10 years, and I worked for two years for an industrial heat treatment company, and I was a commissioning engineer with them, and that involved gas, mechanical piping, and the electrical systems.

**Q** Okay.

**A** And I worked for a company for five years on hydrogen generation units. I worked in their research and development as a senior technician.

**Q** Okay, so you've set out in the statement your water plumbing qualifications, but there's actually more to you than that.

**A** Yes.

**Q** Yes, thank you. I'm interested in the next couple of answers because-- it's answer 30. You're saying the training-- you're asked about whether you knew if appropriate training was in place for staff when using the new systems in the hospital, and you've said:

"The training received was minimal, just a rough description of how the systems worked. Training sessions were held and staff were told to attend as per a training schedule. "

Excuse me. Firstly, who are you talking about there when you're referring to staff attending training?

**A** We had-- there was the five managers, the five duty estates managers and there were some technicians that started with the shift managers----

**Q** When you say, technicians, are these the people who were doing the work that were effectively under you, is that right?

**A** Yes, yes. They're multi-skilled trade technicians, and some of them came from the Southern General and some came from, if I remember rightly, the Western, because it was the Western was moving over. So, we had some technicians with the five managers and we would go-- we would go to these meetings, some training to do with water, ventilation, Schneider Electric, etc. It was just a general-- to me, it was just a general overlook of what was put into the hospital, and then-- because you would go and then you signed your name and it was ticked off to say that you'd attended. These were organised by the NHS and Brookfield.

**Q** Was that enough in your-- was it enough training that you received, now you look back on it?

**A** I wouldn't say so, no. I

would have said it was-- No. No, it wasn't enough, no.

**Q** Now, it may be that you've already answered this or part answered it, but when you were doing-- those first years when you were doing the shift work and the firefighting role, as you put it, did you-- were you operating as a specialist in what you were doing or were you simply doing whatever arose and that could be anything?

**A** No, I wasn't. I wasn't doing-- I wasn't operating in the job that I do now. I was doing basically all trades.

**Q** Right, so some of that would have been water, some of it would have been----

**A** Heating, chilled system, electrical-- Not so much electrical because I don't have an electrical bias, my bias is mechanical, but I did, out of interest, follow the electricians around to find out how systems worked, etc., because I felt, being a manager, you need to-- you need to know these things.

**Q** And the training that you had had on those things?

**A** The training-- Yes, well, especially because of my-- with my work abroad, I worked with electrical.

**Q** Right, but the training

that you'd had wasn't enough?

**A** No, not the training that we had from Brookfield etc. No, no.

**Q** Right. Can you recall what training you might have had on ventilation at that time?

**A** If I remember rightly, it was just a general four hours of: this is an air-handling unit, this is what it does, etc., etc. There wasn't really much else.

**Q** Okay. Give me a second. And two pages further on, at the bottom, you've got question 37, which was asking whether you'd worked on a large-scale water ventilation system before. Now, the reason for that question is obviously because the Queen Elizabeth is the largest of the water ventilation systems, and you've said that the Inverclyde had similar but smaller systems. How did they compare? Are we talking much smaller? Are we talking systems that were essentially the same, but they were a bit bigger, or were they different in nature?

**A** No. Both systems-- Obviously, the Queen Elizabeth's system is a lot bigger, extremely big, but they both had roughly the same equipment. They had filtration units, they had boosted pump sets. They had raw tanks and they had filtration

tanks. Inverclyde was just such a really small scale compared to the Queen Elizabeth.

**Q** Right, so when you arrived at the Queen Elizabeth did you - and I'm specifically asking about water - but did you effectively arrive pre-trained or, to put it another way, were you content that you knew enough to deal with the water systems at the Queen Elizabeth?

**A** Yes, I felt, I-- Yeah, because I'd done it at Inverclyde Royal for three to four years. I used to look after the filtration units and I would-- as I said before, I would deal with contractors, L8 contractors. I can't remember the name of the company now, but it's basically the same as what DMA Canyon do. I would work with them on a lot, and a far smaller scale because the hospital was a lot smaller.

**Q** Yes, right so that might be true for the water system, but in terms of the electrical system or whatever else, would you say that you came pre-trained or is that just not----

**A** The electrical-- Yes, you're correct, the electrical system I wasn't trained in. There's certain standards etc., you have to be an electrician. I wasn't trained to be an electrician, but when it came to the

heating etc. and the chilled water, I had a fair knowledge of how those systems worked.

**Q** Right. Well, another way of me-- of asking the question would be for me to say that when you think about the systems at the Queen Elizabeth that you encountered when you arrived, on which of the systems would you have been-- were you content that you were fully trained?

**A** The water system and I would say the heating system as well.

**Q** Okay, and for the other systems, electrical, ventilation, whatever else, you wouldn't-- you would have required further training?

**A** Yes.

**Q** Yes. Now, a page or two further on, the next page, question 42. This is the section dealing with handover, so this is right at the start of your period at the Queen Elizabeth and the dates, like, there is a handover date, 26 January 2015, and at that time you were an estates duty manager. Now, you mention there, at question a), that your initial-- what was your initial instruction in respect of the state of the campus, and your initial instruction was it was fit for purpose. How was that communicated to you?

**A** I don't really understand that question, to tell you the truth.

**Q** The question as it's written, or the question I just asked?

**A** No, yeah. I don't understand. I can't remember why I answered it that way.

**Q** Right, well, perhaps if I just ask you a different question then. What was your initial impression of the Queen Elizabeth once you arrived?

**A** It wasn't finished.

**Q** Do you want to elaborate on that? Why do you say that?

**A** We still had 200-250 contractors on site every day that we had to sign in and out to complete the works.

**Q** And when you talk about completing the works, do you want to give me a taste sort of what those works were?

**A** Oh, there was theatre lighting that was getting finished off. There was just-- I honestly don't-- I couldn't say. There was just so much that needed done. There was a lot needing done when we moved in.

**Q** Busy times for you then?

**A** Yes.

**Q** How was the workload?

**A** It was extremely strenuous and long.

**Q** And that was-- The date given there was the end of January. How long did it go on like that for?

**A** It didn't actually stop probably until we went onto our shift pattern.

**Q** Four years later?

**A** No, our shift pattern which would probably have been some time after the hospital opened in 2015. That's when we started on shifts. From November 2014, up until the point of going onto shifts, we were on day shift.

**Q** Okay.

**A** And once the hospital opened, we went onto our shifts, but the day shift guys had to pick up the supervisors, etc., signing in the contractors, because they were still coming into the hospital to do works. I didn't. I wasn't involved so much in the daily works because I was on shift. My job totally changed.

**Q** Right, so I understand. So, there was a period when you arrived, in November 2014, for a couple of months, when you were doing days.

**A** Yes, yes.

**Q** Heavy workload.

**A** Very heavy, aye.

**Q** Then, you went onto shifts.

**A** And it was still heavy. It was still, you know, you started at seven, finished at seven, but

sometimes I wouldn't get home till nine/half-nine at night or nine/half-nine in the morning, because you stayed back because you had to get-- hand over.

**Q** Yes. And then-- and you did that for a number of years, is that-- yes.

**A** In that first-- mm. Well, I-- yeah. I was on shifts for about three and a half years, I think it was.

**Q** Okay, so-- but there was a difference in workload, you're saying, between the initial couple of months of very heavy strain.

**A** Yes.

**Q** And then, there's still heavy workloads, but less strain?

**A** No. There's always-- it's always strained when you work at the Queen Elizabeth. It's the same now. It's just different. I don't know if you get used to it or-- but it is a fast-paced environment to work in.

**Q** Okay, so just thinking about those first two periods, the two months when you're on days and the period afterwards when you move onto shifts. You mentioned firefighting, which I'd had understood to be the shifts period. Was the first couple of months-- were they also firefighting or was that more structured?

**A** No. It was the same. It

was the same. I was predominantly, that I can remember, dealing with the drains in the hospital, the outside drains, and----

**Q** Do you want to give me a taste of what that job was, what that meant?

**A** Yeah. There'd be-- We would get reports that toilets were backing up on the ground floor, and we would go lift manholes and find the manholes to be full of sewage. We would lift manholes outside, and I'll say now, we were very lucky because we had a chap from Brookfield. I think his name was Kevin McGuinness. No. It rings a bell. He was the outside manager to do with the ground works, and him and one of his colleagues were very, very helpful with it, to us and with us, in sorting out all these problems. We found workmen's safety hats, bits of four by two, bricks, coke bottles, balloons, balloons that-- to test the drains, all in the drains, and this is what caused all the blockages.

**Q** Right. So, blockage and backing up right from as soon as you went there?

**A** Yes.

**Q** And that was----

**A** I spent a lot of time doing that.

**Q** And that was coming into

the hospital itself. It wasn't just external drains that (inaudible)----

**A** If they're blocked up outside, it backs up inside, yeah.

**Q** Yes, okay. The hospital started-- became open to the public around the end of, I think it might be May 2015. Did it appear to you, after you'd been there a few months, that it was a hospital that was ready to receive patients?

**A** I wouldn't say so with the amount of contractors that were still coming in the building. It looked on the out-- if you were to look at it and not in depth, it looked as if it was finished, but behind the scenes there was things missing, things that were still having to be done.

**Q** Will you give me a flavour of that? What sort of things were you missing?

**A** For example, there was one day a colleague and I went into one of the theatres in the Adults and we were told that the lights weren't working and my colleague was an electrical technician and we went in above the ceiling in the theatre and there was no cabling for the lights. There was no cabling; there was no cables in.

**Q** Can you remember when that was?



**A** No, that would be on the - at the start, the very start, you know, that very early period.

**Q** Okay, so that's certainly before you had patients around?

**A** Yes, it would have been. It would have been. I think that was-- if I remember rightly, that was raised by clinical staff at the time.

**Q** Okay. A different angle on the handover periods now. You mentioned DMA Canyon yourself earlier and we know that they did an L8 risk assessment in April or May 2015.

**A** I do know. I didn't know at the time.

**Q** Well, if we move on to page 279, there's the section of your answers that we're dealing with that. So you say here that you first became aware of it in 2015.

**A** Yes.

**Q** And it was Ian Powrie who made you aware of it and you didn't know why there hadn't been a risk assessment prior to handover. Can I ask you, when you say that you first became aware of the report in 2015, what do you mean? Did you see it? Did you read it?

**A** No. In my statement I say that I'd seen the-- I was in a meeting regarding the risk

assessment. That's not strictly true. What happened was Jim Guthrie and I were called into a meeting and it was with DMA Canyon and Ian, David and Alan McRobbie, I think it was. This meeting I got confused with the final meeting of the handover of the 2015 risk assessment.

**Q** Right, okay, well, are you able to-- can you recall dates when this might have been?

**A** No, I remember the-- I remember that the meeting-- Jim and I were called to the meeting by Ian just by a phone call and we went down, and the meeting was to instruct Jim and I and one of our plumbing technicians to assist DMA Canyon around the building when they were completing their risk assessment. At the time, I didn't really know the whole ins and outs of what this was-- this risk assessment and there was another meeting after that, but I did not attend it and Jim Guthrie and I believe David Bratney attended a meeting with Ian and DMA Canyon regarding the risk assessment, but I was on shifts at that point -- I think I was on shifts -- but I didn't go to that meeting. I didn't fully know about it and read it until 2018.

**Q** Right. So the meeting that you did attend, which was to accompany DMA around the building

so they could complete the 2015 risk assessment, you don't recall when that would have been?

**A** I can't remember the meeting, but it was before they'd actually completed the 2015 risk assessment.

**Q** If you think about your working patterns at the time, would you have been on shifts then or might you have been----

**A** No, not then, sorry. I was on the day shift because I was dealing-- and I remember I was helping Tommy Romeo with the medical gas, the purging of the gas, and I was also instructed to-- there was a banister that needed altered so that children wouldn't climb on it and fall over glass. I was instructed to do that and I remember that being at the-- we spoke about that at the meeting as well at that time.

**Q** So if it was within your day pattern then, does that place it in November or December or January 2015?

**A** It would have been probably November. I'm guessing November, December at some point before 2015. I'm not really sure.

**Q** Okay, I wonder if we could perhaps get the front page of the risk assessment up, which ought to be

at bundle 6, page 122. Could we see the next page, please, and the page after that? No, I wondered if there might be a list of dates that you could comment on there, but there's not. So we can go back to the statement, please. Now, you started off by saying that it wasn't accurate to say that you saw the report at that date.

**A** Yes.

**Q** What did you mean when you said that you saw it? Were you simply referring to the fact you were involved in some process that ended up with the report?

**A** Yes, yes, yes, that's true.

**Q** You mentioned that it was handed over at a later meeting?

**A** David Watson from DMA told me that it had been handed over.

**Q** So is your position then that you never actually saw the report until much later?

**A** I didn't see it until much later, no.

**Q** I think you said that was 2018?

**A** That's when I went on to day shift.

**Q** Okay. When you saw it then, did you get a chance to read it properly?

**A** Yes, I read through it, but there was also another couple of risk

assessments that had been done as well at that point.

**Q** Yes, I wonder if we might have one of them in front of us if we have it. We may not. No, it's fine. Instead, page 281, at the top of the page here there's reference to the 2017 DMA Canyon report. First question there, you're asked when you first became aware of that report and you say "2018 to 2019." Would that have been the same time as you became aware of the 2015 report?

**A** It was probably around about the same time, yes.

**Q** You say it was Colin Purdon who showed you the report and you say in the third question there, (C), you don't know what works, if any, that had been recommended in 2015 were carried out prior to the 2017 report.

**A** Yes, I wouldn't know that because I was on shifts.

**Q** Right, explain to me that answer, why wouldn't you have known?

**A** Because I worked shifts.

**Q** Which meant that?

**A** I wasn't involved with the daily running of the water system. There wasn't-- I remember that Jim Guthrie came off shifts and went on to work on water and ventilation, and

then Jim left and then Tommy Romeo came off shifts and went on to day shift to do water and ventilation, and then Tommy left and then I was taken off shifts, but I didn't ask to be taken off shifts. I was actually told that I was getting taken off shifts to do day shift and that's the job that I was handed in 2018.

**Q** Okay, so when you say you're on shifts, you've told us that's the firefighting job?

**A** Yes.

**Q** And some of those firefighting jobs would have been water. Is that right?

**A** Yes, filtration units, etc. tanks, burst pipes.

**Q** Are there water tasks that come to you if you're on shifts because something's gone wrong today?

**A** Yes.

**Q** Right. Whereas remedial works that are putting right things that have been identified in risk assessments, where do they go? Who does those?

**A** I would assume that it would have been the day shift manager in charge of the water.

**Q** And so, when you make your way to doing day shifts in 2018, is that the kind of work that you are

involved in doing, allocating, being tasked with?

**A** Yes.

**Q** But it wasn't until 2018 that---

**A** Yes, it wasn't until 2018. I came off shifts on 15 April 2018, became an AP in June 2018 and basically that's when I started working with Keir Clarkson on the 2018/'19 risk assessment to get all the actions completed.

**Q** Right, you mentioned there being appointed AP – that's "authorised person"?

**A** Yes.

**Q** Do you want to tell me about that role? What does it entail?

**A** The authorised person manages the-- in that case it would be the water system for the hospital to ensure that it's compliant and that you are completing the tasks that the SHTM set down for maintenance, etc.

**Q** When were you appointed AP?

**A** I was appointed in June 2018 by Alan Gallacher. I'm almost sure it was June 2018.

**Q** How did the appointment come about?

**A** Because I was moved from shifts on to day shift.

**Q** Did you have to do

anything, any training?

**A** Yes, I had to sit a course.

You sit a week-long course by an independent contractor and then, once you've sat the course – it's a City & Guild's course – you have to pass it. Once you've passed it, you have an interview with the authorising engineer and if you satisfy the authorising engineer that you're capable to do the job, he then recommends you to-- in this case it would be Alan Gallacher to appoint you as an AP for that system. It's the same for all systems.

**Q** Okay.

**A** Just different AEs.

**Q** In actual fact you did another-- you became AP for something else in 2020?

**A** Well, yes, I was an AP for-- I am an AP for ventilation, I'm an AP for medical gas and I'm an AP for water but, before that, I was an AP for HV.

**Q** What's HV?

**A** High voltage.

**Q** What are the dates for these appointments, sorry? You've told us already June 2018 for water.

**A** Yes. My appointment for HV was before that. It would be when we started it was maybe 2016. It was a two-week course you go on down to Leeds and I subsequently done the--

three years later, I done the refresher course.

**Q** Okay. Gas would have been when?

**A** Oh, medical gas would have been also-- it would have been, roughly, 2018/'19. I can't quite remember. It was when I came off shifts.

**Q** Right, and ventilation was the last?

**A** And ventilation was the last one, yes.

**Q** Okay, and you mention having done training and been assessed and that would have been by Dennis Kelly. Would that have been right?

**A** For the water, yes.

**Q** Yes, for the water, sorry. That's the one I'm interested in at the moment. Do you know who held that role before you, if anyone?

**A** For an AP?

**Q** AP for water?

**A** No. I know Tommy Romeo was not an AP for water.

**Q** Yes.

**A** I'm not sure about Jim. Jim did work on the old site. I don't know if he was an AP. I couldn't answer that.

**Q** Now, it's been suggested, I think, to us that nobody

had held the AP for water role before you.

**A** Not that I know of.

**Q** Was that discussed at all at the time that you were appointed?

**A** Not that I-- I can't remember, no. I don't really know.

**Q** Well, discussed with you. Did anybody raise that?

**A** No, I was just asked to-- I was just told I was going on the AP for water course and, because that was going to be predominantly my focus on work, that was what I would do.

**Q** The process that you describe for becoming AP for water, when you became AP for ventilation in 2020, was it a similar process?

**A** It's a similar process. You sit a course, you go through-- The AE will interview you and then you'll get-- it's up to the AE to put you forward, recommend you to-- and, again, it would be Alan Gallacher who was-- sends you a letter in writing.

**Q** Okay, now, you've told us, I think, going by the dates, that your appointment as AP happened around same time as you shifted from shifts on to day work?

**A** Yes.

**Q** And, in fact, it may have been because of that?

**A** I think so, yeah. I think

that's why I was moved over.

**Q** So, it follows from that that you were doing different work because you changed jobs-- well, you weren't necessarily doing different work, because you'd become an authorised person?

**A** My focus shifted to the water system. It was different from when I worked on shifts.

**Q** Yes.

**A** Yeah. My focus was more on the water system.

**Q** What's the practical significance of becoming an authorised person?

**A** Practical significance?

**Q** Do you take on a different role?

**A** Yeah, well, you do, yeah. I mean, if I'm AP for water, as I said, I deal with all-- I'm not the only one, but I deal with the water systems to ensure that they are compliant under the SHTMs. You know, tank cleaning, calorifier cleaning, making sure they get done every year, making sure our quarterly-- the quarterlies get done, your TMTs get serviced, etc. Things like that.

**Q** So, it's a role that carries some responsibility with it?

**A** Absolutely.

**Q** Right, and you might or

might not be in a position to answer my next question because your appointment came at the same time as you changed roles, or that might be a lie, I don't know, you tell me, but the tasks that you would carry out as an AP, were they different tasks from the ones that you would have carried out had you not been an AP?

**A** Yes, because I was specifically-- I believe I was specifically taking off shifts to do the job of AP for water at the hospital. That's what I believe, because of my background.

**Q** So, you mentioned Tommy Romeo earlier and that he was dissatisfied at the idea that he might be appointed AP or asked to do AP work. Were you aware, and you may not be able to answer this, but are you aware of what tasks he was carrying out at the time that he was not an AP for water?

**A** No, I wasn't aware at the time, but it became apparent to me once I took over from Tommy what Tommy was trying to do, and he did try to get the scheduled task completed.

**Q** And, in your view, bearing in mind that you're qualified and appointed as AP by that point, the tasks that Tommy had been left with, were they tasks that were appropriate to be left with him given that he wasn't

an AP?

**A** Well, as I stated earlier, Jim Guthrie was doing the day job as water-- I don't know if he was an AP, but Jim's background is the same as mine. So, Jim, I believe, had put in place parts of the SHTM that have to be done: shower head cleaning etc., flushing, low-use outlets etc., and Tommy inherited that from Jim. So, that's what Tommy inherited basically.

**Q** And was it right that he inherited that when he wasn't an AP for water?

**A** In my personal opinion, no. I think it was-- I don't think it was fair on Tommy. Tommy was an electrical background, not a mechanical background.

**Q** Yes, and that's one aspect of the answer, not fair on Tommy. The other side of it, is it fair on the Queen Elizabeth or on users of the water system to have somebody who's not an AP carrying out those tasks?

**A** No, no, there should-- in my opinion, there should have been an AP in place from the beginning.

**Q** Just give me a moment please. I may be getting mixed up, correct me if I'm wrong but I think you told me that the role of AP is to manage the water system, was that--

that might or might not have been your words, but is that a fair description of the role?

**A** Yeah. Yes.

**Q** Before you started doing that role in the middle of 2018, who was responsible for managing the water system?

**A** Specifically before me?

**Q** Before you.

**A** It would be Tommy.

**Q** Does it follow from that that we can definitely say that Tommy was fulfilling a function that he shouldn't have been doing or that shouldn't have been left to him?

**A** I would say so.

**Q** Now, we covered the 2015 and the 2017 DMA reports and I think you said you did have a chance to read them when you saw them in 2018, perhaps. Looking back, and bear in mind I think you would have become an AP at the time that you read them, that would all have gone hand in hand, is that right?

**A** Yes, I'd say so.

**Q** When you read those, what were your impressions?

**A** There was a lot of "reds", as we call them. You know, it's the traffic light system. A lot of them were temperature issues, which I think sometimes it's a bit unfair in an

assessment because it's a moment in time. It's a snapshot. There could have been a problem with the heating system that day and that-- as the risk assessor goes round, takes a temperature and says, "The temperature is low," etc. There was a lot of-- yeah, there was a lot of actions to be taken, yeah.

**Q** Specifically asking you about when you looked-- when you read the 2015 report and then you read the 2017 report, would it be fair in saying that the 2017 report had identified a lot of the same issues from the 2015 report that hadn't been fixed?

**A** Yes because nobody worked on the 2015 risk assessment.

**Q** What's your view on that?

**A** If there was an AP in place, it would have been worked upon but I don't know why any actions in the 2015 risk assessment were not acted upon.

**Q** Because you weren't-- you were engaged in other things at the time, is that---

**A** I was, yes. I wasn't involved because I was working shifts. I dealt with all systems at that point, not a specific-- If you're an AP, you deal with a specific system. There was no AP, so you couldn't-- you didn't

deal with a specific, one system. We were all HVAPs, all of us: plumbers, electrical guys. That's what was asked of us to do. We were never asked to do any other AP duties, never, until, as I said-- until I came on shifts. Oh, sorry. When I come off shift, then I completed other AP duties at the time, and I took the responsibility of the water system at the Queen Elizabeth one.

**Q** As part of that responsibility, did you take on tasks that were outstanding from the 2017 report?

**A** No, because there was a 2018 risk assessment that was in the process-- I can't remember if it was in the process or if it had already been done and I asked the question to Colin Purdon and Andy Wilson, "Why go back to 2015?" You're talking three years ago when, again, say, example, temperatures. The temperatures won't be there anymore. They'll have changed. So, I said if we work through the 2018-19 risk assessment, we will probably wipe out 2017 and 2015, a fair chunk of the risk assessment, because, as you said, if in the 2017 risk assessment there's things still there from 2015, well, if it's not been worked on, it will still be there in 2018, 2019.



**Q** And you said, I think, that-- Stop me if I'm putting words in your mouth, but I took from what you said that the reason why the gaps in the 2015 risk assessment weren't worked on was because there was no authorised person for water in place?

**A** There was no authorised person for water in place, but whoever had the 2015 risk assessment never allocated the work to an individual to go ahead with the remedials of that.

**Q** What ought to have happened?

**A** I would have thought that it would have been handed to a junior manager to complete the actions. I don't know why-- I do not know why that risk assessment was never looked at. I can't answer that question. All I know is what I've done from 2018 onwards.

**Q** How surprised were you when you learned all this?

**A** It did come as a-- Well, it did come as a surprise, but it didn't really----

**Q** Were you shocked? Is that----

**A** I was shocked, but it, kind of, didn't really as well.

**Q** Explain that to me.

**A** Well, I mean, you know, Ian Powrie always handed the work

out. He was always the guy that-- you know, he was the boss. I don't know if Ian ever worked on it. I don't know.

As I said, all I can say is when I took over in 2018, I tried my best to get the-- to do the best to get it compliant with Kerr Clarkson. Kerr and I both worked hard and we completed the 2018-2019 risk assessment. We completed all parts. We done all remedials.

**Q** When you pick this up in 2018----

**A** Mm-hmm.

**Q** -- I mean, you mentioned you were surprised, a bit shocked. Were you able to form a view as to whether you were dealing with a safe water system at that point?

**A** I didn't look at it that way. I just-- as I said, I was given the 2018 risk assessment not long after it and I just set about. My work was focused on the 2018-2019 risk assessment for the site for the Queen Elizabeth and the Royal Hospital for Children. That was my direct focus for quite a while.

**Q** And over the years you've been working on that task, have you made progress?

**A** Yeah, we made progress very quickly. I decided that I needed two technicians, two technicians to work for me alone, two plumbing technicians.

**Q** How did you go about securing that?

**A** I asked if I could have two technicians and I got told no----

**Q** Who did you ask?

**A** I can't remember, to tell you the truth. I'm being honest. I got told-- I can't remember who I asked. It was in a conversation and I got told no, that that wouldn't be possible because we need the plumbers, obviously, for our normal day-to-day works etc., and I----

**Q** Were you specifically saying, "I need two technicians for"----

**A** L8 works, and what I'd done was I went and approached two of the plumbers I knew, very clever, and I asked them if they would-- I took them for a coffee and I asked them if they would like to do the job. I basically tried to sell them my old job that I'd done at Inverclyde Royal, and they----

**Q** Are these-- Sorry, are these people who are already working?

**A** Yeah, yeah, these are technician plumbers who are CP'd for the hospital. One of them knows the retained site and knew the Queen Elizabeth and the Kids and the other chap-- Both of them actually worked in the old Southern. So, I took them for a

coffee. I asked them-- pleaded my case with them. They said no. They came back to me three weeks later and asked me if the job was still open. I said, "There wasn't really, you know, a job as such, as in an official job," I said, "but I would like you to try it for six months," and they've been doing it ever since, and they have full-- their own work. They have their full control of what they do.

**Q** Who are they? What's their names?

**A** Martin Ingles and Mark McAnally are my two L8 technicians. They have their own office. They have their own computers. They have everything they need to complete all works that we require them to do-- ask them to do.

**Q** They're still there and they've been doing that ever since 2019?

**A** Absolutely, and I couldn't do my job-- I couldn't do my job without the two of them.

**Q** Now, we skipped forward a little bit there because you initially started off by telling me about the meeting where you were rebuffed, I think.

**A** Yeah, I can't remember who-- I honestly can't remember who it was. I am not sure if I tried it on as a

tongue-in-cheek but I did ask and I was told, "No, because, you know, we need all plumbers etc," but I managed to sneak them under the radar and they've been doing it ever since.

**Q** How did you do that?

**A** I just told them-- I just, as I said, explained. I asked the two guys if they would do it and I went into the supervisors' office when both lads said they would do it. I went into the supervisor's office and I told the supervisors, "Do not give them any work. Don't give them any, you know, emergency works."

I said, "Give them emergency works if it's a total emergency, but don't give them any normal works on their PDAs because they're working for me from now on," and that's stuck ever since, and I'm very fortunate that that was allowed, that it wasn't stopped.

**THE CHAIR:** Just for my note, Mr MacMillan, Mark McAnally was one of these two?

**A** Yes.

**Q** The other one was Mark---?

**A** Martin Ingles.

**Q** Martin Ingles.

**A** Yes.

**Q** Thank you.

**MR MACIVER:** There are a few specific events I'd like to ask you

about. First of those is-- will be a few pages further on at page 294.

Question 94 there is describing a-- or your answer is describing a bypass pipe.

**A** Yeah.

**Q** Now you're mentioning discovering a connection from Hardgate water main to after the booster pumps, bypassing the filtration units and the water tanks. When you say, "After the booster pumps," what do you mean?

**A** So, the water comes into what we call "raw tanks", goes through the filtration units, goes into what we call the "filtrate tanks", it then leaves the filtrate tanks and goes into two booster sets, which is two sets of pumps. One does the children's hospital, one does the adults' hospital, and they're separated in the middle. It was one of the legs going up from the booster set that this pipe was connected to so it's after the boosted set.

**Q** After the boosted set and after the tanks?

**A** Yes.

**Q** Does it follow-- Are there tanks after this connection as well?

**A** No. So, to my mind's eye, what I thought was the water is getting filled up-- the system's getting

filled up from Hardgate Road, bypassing our filtration units, but the water will only go roughly four floors because of the pressure of the water main. It'll only go up a certain height.

So it possibly filled up the children's hospital but it would maybe only go to about the third or fourth floor in the adults. I don't know how they've-- It baffles me to this day. They must have filled up the filtration tanks and then boosted the water up to the higher level but I can't say that's what they actually done, but Jim and I found that connection and it was live. It was at the time.

**Q** When did you find it?

**A** It was at-- I can't remember the date but it was a Friday afternoon and we went back to report to Ian regarding this pipe that we'd found in the basement. I think it was one of our-- Jim and I's walk-rounds because we were all-- we all went for a walk every day, when we started, around the building.

You know, you would go into plant rooms, you would go and visit wards, you would try and get-- where equipment was, where all your services were running, etc, etc. We were trying to familiarise ourselves with the hospital.

**Q** Well, just to get the

picture clear in my mind then, I've perhaps let you run on too far ahead of me, when you say, "a bypass pipe", should I have a picture in my mind of a metal pipe? Or is it a hose or-- What does it look like?

**A** No. When I talk about the bypass between the two-- Are you referring to the pump sets?

**Q** I'm referring to whatever it was----

**A** Right.

**Q** -- that's connected from the mains into after the booster pumps.

**A** No, it's not a bypass as such. It's been bypassed.

**Q** Explain.

**A** So, what they've done is they have bypassed the filtration units, the filtrate tanks and went straight into the riser, one-- a riser going up the building. So it's not a bypass as a technical term, it's been bypassed.

**Q** Please don't assume that I know technical terms.

**A** Sorry. Sorry.

**Q** No, not at all, but you're making a distinction between one kind of bypass and another?

**A** Yes. Like the bypass between the two boosted pump sets is, as we call it, a spool piece. It's a piece-- It's a stainless steel pipe, two

flanges. Now, the reason that's there, that's a bypass. It's if-- For example, say the adult's boosted set fails and we can't get it on, what we do is we open that bypass and we can turn the pressure up on the other boosted set, which will supply the adults and children's at the same time, and vice versa with the adults' set. That's a bypass.

**Q** So that would be to bypass a faulty piece of equipment in order to make the system work properly by diverting double, effectively, through another piece of equipment.

**A** It's redundancy. It's redundancy, that's what it is.

**Q** Right, and that would be a built-in feature of a system----

**A** That's a built-in

**Q** -- in order to give it spare capacity?

**A** Yes, and there's another bypass built into the two-- There's four filtration tanks and there's a bypass between two and two.

**Q** So if two of them go offline----

**A** Exactly. Then you can open the bypass and you can supply it with the other two tanks, yeah.

**Q** Right, but the bypass you saw, the "bypass" that you saw, wasn't

like that?

**A** No, that was just a 2 inch alkathene tube or pipe going from a connection on Hardgate Road right across the plant room and then into another pipe, a riser pipe that goes up the building. I can't remember which-- I can't remember which pipe it would be. There's like four or five of them go up the building. I can't remember where it would go.

**Q** It's effectively a way for the building to run directly off the mains?

**A** Basically they would-- Basically what they were doing, they were filling that part of the building up off the mains----

**Q** When you say, "filling it up," you're meaning that the taps can work off it rather than it filling in----

**A** Yes, but only to a certain height, as I said, because the mains water will only go a certain height. That's why you've got boosted sets, to take them to the 12th floor because your water main will only go maybe up to the 4th floor.

**Q** Okay. So, it may be within that answer, but my question was going to be, "What struck you as significant about that?"

**A** It shouldn't have been connected in the first place.

**Q** Because?

**A** Because it was bypassing the filtration tanks so you're basically putting Scottish water, mains water, straight into the hospital system. So it wasn't being filtered. So you're possibly seeding the system.

**Q** When you say, "seeding the system," can you explain that to me?

**A** There's-- Scottish water, the water isn't exactly the cleanest, believe it or not. It looks clean. It's just particulate etc. There could be microorganisms in it as well. It passes all tests for Scottish water, which is fine – potable, wholesome drinking water – but we're putting it into a hospital system which should be put through a filtration unit down to 0.2 micron, which takes everything out.

**Q** And the reason for that high standard is because of----?

**A** Because it's a-- Because it's in a health-- it's in a hospital, a clinical building.

**Q** And the reason for that presumably is because of immune systems and so on that you find in a hospital?

**A** Yeah. Yeah, yeah. You want to try and keep your system as clean as possible.

**Q** Right. So this wasn't like

the proper bypasses that you're describing----

**A** No.

**Q** -- whereby a faulty bit of equipment can be compensated for by turning up other bits of equipment? This is just taking certain bits of equipment out of the loop entirely.

**A** You would never do that. You would never do that. You would never pipe it up like that.

**Q** Can you-- I think you may have answered this already but can you explain why this might have been done?

**A** Why it was done? I think it was to fill the-- certain parts of the hospital up. I think that's why they done it. There's no other reason why they would have it.

**THE CHAIR:** Is it something to do with the pressure available? I mean, presumably you could fill up the hospital if the water goes through the filtered tanks?

**A** Yes.

**Q** I'm guessing because I simply don't know, if you bypass the filtered tanks, do you get the benefit of the mains pressure or is there any obvious advantage in doing what you found had been done?

**A** No.

**Q** No advantage?

**A** The only thing that I can see is they were trying to fill up a part of the system by bypassing the filtration units, and I don't know why. They can only fill it up, as I said-- it's roughly-- 1 bar is 10 metres' height. So your 3½ bar will be 35 metres/40 metres, say. So you're only going to go 40 metres in the air with that pipework where the water will go and then it will just stop.

So they've only filled it up X height on the opposite side of the booster. You cannot turn the booster pumps on because, if you do, you won't do anything, it'll-- you won't do anything, it'll not do anything. It won't work, it's impossible. You need the tanks, the filtration tank water to be going through the boosted set, because it's a sealed system.

You turn the pumps on because you're sitting at zero bar. As soon as you turn the pumps on, you set them and they'll put it up 7½ bar. 7½ bar will take you X distance and that will fill the system up.

**MR MACIVER:** Effectively, if it's coming in the bypass at 3½ then you can't—the "closed system" becomes 3½ bar max?

**A** Yes, you can't fill it up.

**Q** So the booster couldn't do anything to that?

**A** No. No, no, no. You can't-- You can't-- You wouldn't be able to turn the boosters on.

**Q** And you simply can't explain why anyone would have thought that was a good idea?

**A** No, I can't explain why that would be. It wasn't a good idea but I don't know why it was done. I can't explain that.

**Q** Okay. Well, in any event, you said, I think, you reported it to Ian Powrie?

**A** Yes.

**Q** Then what happened?

**A** Jim and I-- If I remember rightly, Jim and I were back in on the Monday morning, we weren't working the Saturday/Sunday that weekend, and when we went back down to the tank room, the pipework was gone. So, the blue alkathene pipe was gone and it was-- if I remember rightly, it was coiled up in that plant room. It was just sitting coiled up.

**Q** Did you ever find out how that came about?

**A** No. Jim and I just thought that Ian had contacted Brookfield. This is what we thought, and that Ian had went ahead and got it removed.

**Q** Okay. Now, a number of pages further on at page 300, that

should be question 110. Another issue. This time the water tanks are involved. You're asked about debris, including sponges, being found in the water tanks and asked about the significance of it, and this overlaps a little bit, your answer here, with what you've just told me. You said:

“Possible contamination.

However, leaves were found in the raw water tanks, which are before the filtration units. The purpose of the filtration unit is to remove any microorganisms to 0.2 microns. In this case the water would be safe.”

The scenario you're describing there is where filtration is working properly, everything's hooked up properly. Possible contamination will be dealt with by filtration. Is that right?

**A** Yes.

**Q** However, the scenario that you described with the bypass pipe was one where we know that, at least for some time in the hospital's life, the filtration units had been taken out of the equation?

**A** Yes.

**Q** So does it follow from that that it's not inconceivable that debris, such as the sponges found in the water tanks, could be a source of

contamination for the hospital?

**A** No, they can't, because they're in the raw tanks, and if the filtration units don't work, that water in the raw tank can't get-- there'll be no water going into the filtrated tanks. And the water main-- You cannot get those sponges back into Hardgate water main to pump them over and into the system. It's impossible, the way the tanks are installed. The water will not go backwards from the raw tanks to the main.

**Q** Right. Okay, so it follows from that then that this would-- the sponges would be a contamination risk if the filtration units-- if there were a separate bypass put in place that went round the filtration units?

**A** Yes.

**Q** In that hypothetical?

**A** Hypothetically, yes, but then you wouldn't have any pressure from the raw tanks because the raw tanks are filled up. Storage, there's no great height. There's only one and a half, two meters, maybe, height of water in the tank, so that will give you a negligible pressure. It wouldn't-- the water wouldn't even leave that plant room going up the way. The only damage the sponges could do could be that they could get blocked in the pre-filter of the filtration unit and that's



it. It wouldn't go any further. If it did go down the pipe that's all it could do, and then your filtration unit wouldn't run.

**Q** Okay, no, I understand that. Moving back to page 295, "bypass" again is mentioned at the top there in 95, but at 97 and 98 you're being asked what concerns there were at handover about temperature and movement within the water system. And you say there that James Guthrie and you "were concerned there was not enough flushing of the water systems by Facilities and Mercury."

**A** Yeah.

**Q** And you raised this with Ian Powrie. Firstly, what were your concerns?

**A** Well, if you don't-- if the system's not getting flushed regularly and it's just sitting-- obviously just sitting with no movement, the water can heat up and we know the parameters that, you know, microbial growth, etc. So what happened was - and this is me going back to the meeting - the meeting for the 2015 risk assessment, the one that I said that I'd got a little bit confused. In that meeting with DMA Canyon, they'd brought up the fact about flushing, and I had asked Ian about the flushing records, because I would have thought

that GMA-- not GMA Canyon, sorry, I apologise, that Facilities and Brookfield would have records of the flushing of the system before handover. And that's how this came about, about how Jim and I were asking about flushing records and are they doing-- are they flushing? Can they prove that they're flushing the system? But I don't remember-- Ian said there was flushing records, but I don't remember seeing them.

**Q** Did it ever come back to you, that issue?

**A** We-- no. What ended up-- what ended up happening was we ended up hiring, and I can't remember the exact date for this, but we hired, through an agency, temporary workers to go around specific areas and flush the building. So, they were working for the NHS. Ian delegated the task and he picked the areas that were to be done, and I think, if I remember rightly, it would be the areas-- they were just prior to when they were moving in. So, if there was a ward moving in, we sent the team up to flush it constantly for a couple of weeks, three weeks or so. I remember there was agency staffing doing that.

**THE CHAIR:** And just to help me follow this, flushing can be satisfactorily done simply by going

around all the taps and running them for two minutes or so.

**A** Yes.

**Q** Yes, thank you.

**MR MACIVER:** Now, you mentioned that this issue came to your attention because DMA had been talking about it.

**A** If I can recall, that's how it came around. That's how I asked the question at that meeting.

**Q** Right, and if we can go back in time, that would be at the end of 2014.

**A** It would have been, yeah.

**Q** Can we date the concern maybe, that James Guthrie had raised from that?

**A** Probably. That's probably where my answer came from, was that, at that meeting, that Jim and I were concerned. We just wanted to know if the hospital was getting flushed properly.

**Q** Okay, and so you raised that and you never found out any more?

**A** No, but we did end up, and I can't remember when exactly, but we did end up, as I said, getting agency staff to flush various parts of the hospital, as well as Brookfield and Facilities were still doing it, apparently.

**Q** Okay, thank you. The question immediately above that, 96, the question is reasonably lengthy:

“What testing and maintenance protocols regimes were in place at handover in 2015? What ought to have been in place,” and so on.

Your answer there is, “Not in my remit.” Explain the answer again.

**A** I wasn't involved as the AP for water at that time.

**Q** You're the AP for water now?

**A** Yes.

**Q** Are you able to answer that question in retrospect, or even parts of that question?

**A** Yeah. Well, I mean we now-- we test all our sentinel points. We do it according to the SHTMs and we actually do more than-- you know, what we do in the SHTMs, and we do-- our maintenance protocols would be checking the temperatures of the calorifiers etc., checking the tanks, daily checks of the flotation units etc. I'd have expected all of that to be done then.

**Q** Do you know if it was?

**A** No. I couldn't answer that question. I wasn't focused on the water at that time. My focus became on the water and only water predominantly in 2018.

**Q** I appreciate that. I guess the question I'm putting to you is that we don't know what the situation was as regards testing maintenance protocols at time of handover and, as you say, it never came to your attention.

**A** The only thing-- there's only one thing I done, and again, Ian instructed this to be done, and it was he gave me a list - and this is before I was on shifts - he gave me a list of areas that he wanted potable samples taken, which I got done, and they were put to the lab in Hillington, I think it's-- I think if I remember rightly, they were called Alcontrol, was the lab, and the results were sent to me and Ian, but Ian actioned. If there were any actions to be taken Ian would do that, not me.

**Q** You did the sampling and some results came back, but you didn't find out more about it thereafter.

**A** No, no. It was just because it was the sampling. Ian would give me a list of where he wanted it sampled. I would then instruct some technicians of mine to go and take the samples. Then, they-- Sometimes, I took the samples in my car over to Hillington, and other times they were picked up to be sampled by Alcontrol.

**Q** Were you or are you

familiar with sampling protocols, sampling practice?

**A** Then-- I wasn't at the time of how strict the sampling protocols are now.

**Q** Were your technicians that you instructed, would they have been familiar with how to do samples?

**A** They-- we'd done the sampling, to the best of my knowledge, as per-- If I'm right, I think we asked DMA for-- on some instruction on how to-- wearing gloves, how to take the sample, etc., and that's what we followed.

**Q** The fact that that happened, was that simply your own initiative?

**A** No, no, that was Ian. No, Ian instructed that.

**Q** No, sorry. I appreciate that he instructed that sampling should be done.

**A** Yes.

**Q** I'm interested in-- about the techniques of doing samples.

**A** Yes. I think it was-- Yeah, we asked-- I think we asked David through DMA how we-- you know, how would we go about doing this, and I can't remember where we-- Oh, Alcontrol supplied all the bottles for us, because it's specific bottles because there's a-- the bottles have a-

- I don't know what it is. I don't actually know what's in the bottle, but it keeps the bottle sterile, so they have to be sterile.

**Q** The reason I ask whether it was your initiative that brought about the instructions as to how to do it is because I'm trying to ask did the instructions come with the instruction to do sampling at all? Did it come with instructions to do it this way?

**A** I can't remember. I can't remember. I just remember Ian giving us a list, get the sampling done in these areas, and went-- and then we asked our technicians – I think there was only two of them – to do the sampling for us. And we had a system of, obviously, marking up where they came from, etc. where the sample was taken from.

**Q** I mean, putting the last two things I've been asking about, about the concerns about temperature and movement that you and Jim raised, and the sampling being done that you asked DMA, you say, to do in a particular way, was there any particular mechanism by which-- “mechanism” is the wrong word, but was there any particular system which would have brought about your raising these concerns or having the sampling done in a particular way, or did it

depend entirely upon you and Jim having something in your mind on a particular day or you asking questions, particular questions?

**A** Well, it was-- In my case, it was because of my past work at Inverclyde Royal, working with an L8 contractor, Legionella contractor.

**Q** But that depends upon it being you that was asked to do the sampling.

**A** I think it was Jim and I who were both asked to do the sampling, but I'd done-- I'd done most of the-- basically, the running around. I took the samples to Alcontrol, etc.

**Q** The other way of asking the question is, can you imagine or do you know about scenarios where similar tasks might have been asked of people who didn't know what you knew?

**A** No. No. That was a specific task to Jim-- I'm sure it was to Jim and I, both of us, because we were-- or because of our backgrounds.

**Q** Okay, thank you. We probably have only two short sections to do. I've got a few questions, firstly, about taps. The first one is a general one. It's about point-of- use filters. What are your views on those items? What do you think of them?

**A** Taps first or----

**Q** Point-of-use filters.

**A** Oh, sorry, point-of-use filters. Yeah, my point-of-use filter will not allow any microbes through it at all. So, if you have a system that has deemed that it's not wholesome water etc., it will ensure that the water through the filter coming out the other end is fit for purpose, basically.

**Q** Are these good things or do they bring risks with them?

**A** Yeah, they are a good-- They are a good idea, but the maintenance of them, i.e., the cleaning regime of them, would raise a-- I would say would raise an issue, because if you don't clean them in a certain way, which I don't know, it's Facilities would do this, you can get retrograde contamination on them.

**Q** You're not familiar with the actual requirements that would need to be done, is that-- that's a task for-----

**A** I don't deal-- Kerr Clarkson deals with Facilities when it comes to the-- any results coming back from filters which we deem to be retrograde contamination.

**Q** Okay. Could you take a look at page 301? At the top, there's a particular question I'll just ask you to elaborate upon. The question was whether the point-of-use filters met

water regulation requirements? Did they have an effective gap between the water level and the filter to prevent contamination? And you've said, "No".

**A** Yeah, they didn't. The gap should be for the overflow of the wash-hand basin. So, there's a gap. There should be an air gap by the byelaws.

**Q** Right. Explain that to me bit by bit. I think I understand it, but I'd like you to explain it rather than me try to summarise it.

**A** Okay. So, your tap, when you install a tap, it's a certain height. There's a certain height from the wash-hand basin, the rim of the wash-hand basin.

**Q** Yes.

**A** So, if the wash-hand basin fills up and your overflow is blocked etc., and it starts spilling over, it means you've got an air gap between your tap and your wash-hand basin, right? That means that you'll never be able to get any water from that wash-hand basin back through into that tap, right? The problem with some of the point-of-use filters, they could have been below the rim of the wash-hand basin, so when you put it on, it could be that much further down. I believe that the point-of-use filters, you cannot get water back through

them, they only go one way, but you would still have retrograde contamination on the outside of the filter, if that answers the question.

**Q** Perfect, thank you. Did you see this?

**A** I have noticed that some of the filters were below the rim of the wash-hand basin.

**Q** Moving on a little bit to page-- it will be 304. There's a section about taps. It starts off by asking about Horne taps and I think I'm right in saying the full name of those is Horne Optitherm taps. Is that right? Are you familiar with these items?

**A** Sorry? Oh, sorry.

**Q** This is a section about Horne taps.

**A** Yes.

**Q** And I believe the full name of these items is Horne Optitherm taps. You're familiar with these items?

**A** Yes, I am.

**Q** Can you describe them please?

**A** A Horne Optitherm tap is a TMT, which is a thermal mixing tap. It has a hot and cold going in. The good thing about the Optitherm tap is that you can flush the cold water on its own. So you can have a full cold water flow with no hot water mixture,

which in my mind is a good idea because some other tap manufacturers-- it's very hard to get a flow of cold water on its own because of the way it works as a mixing tap. So the Optitherms are very good at that.

**Q** But those taps bring problems of their own?

**A** I wouldn't say that. I don't think they do, but that's my opinion.

**Q** Okay, if we go over one page, 305, the next question is about flow straighteners and the question after that is about replacement of taps. Now, am I right that flow straighteners are part of the Horne Optitherm taps?

**A** Yes, they are.

**Q** You've described the-- you've quoted the SHTM guidance about potential colonisation of flow straighteners.

**A** Mm-hmm.

**Q** And the context here in these questions is about replacement of the Horne taps. Are you able to answer the following? I'd like to know about maintenance and cleaning of the Horne taps. Do you know when that started?

**A** That was started by DMA Canyon. I can't remember the date. I can't remember the date.

**Q** Are you able to give us a

year even?

**A** Year? Year and a half, two years ago maybe. I think this might be possibly into their second year.

**Q** Question 129 is a little bit different. It's about replacement, which I take to be replacement of the Horne taps with, as you say, the Armitage Shanks Markwik taps. Did you carry that out?

**A** No.

**Q** Do you know when it was done?

**A** No, I can't remember.

**Q** The date in the question is January 2019.

**A** Right. That would have been in----

**Q** Did you know that?

**A** No, that wasn't my job.

**THE CHAIR:** Just picking up what you said, is that a correction, 2018, to the question at 129, "in January 2019"?

**MR MACIVER:** No, I asked for the date and then I realised that the question itself offered a date. So I was drawing that to the witness's attention.

**THE CHAIR:** So 2019 is what you intended to ask about?

**MR MACIVER:** Yes, I'm not intending to correct that.

**THE CHAIR:** Thank you.

**MR MACIVER:** We might have an answer actually to one of the questions. Could we have bundle 18, volume 2 up, please, page 1423. Then this is the 2022 DMA L8 report. Is that right?

**A** Sorry?

**Q** This is the 2022 DMA L8 report, this version of it.

**A** That's what it says, yes.

**Q** Can we move on to page 1483, please? If we look, the first big box is about microbiological sampling, and if we look at the very foot of what's on the screen at the moment, there is an action point: "Are suitable remedial actions and resamples taken out after specification sample results recorded?"

The narrative that's given there is:

"Yes, all Markwik 21+ taps were swapped out during January 2022 as microbiological results indicated that the taps were potentially the source of the out of specification results."

This appears, as I read it to be, recording that Markwik taps themselves were replaced at that date?

**A** Yes.

**Q** Are you aware of this? Can you comment on this having happened?

**A** I'm aware that the taps were replaced and I think it was-- well, they were replaced during the works in Ward 2A, the refurbishment works, by Capital Planning.

**Q** Perhaps more relevantly, in bundle 1, page 487, there's a minute here of an Incident Management Team meeting about Serratia or Serratia colonisation. Firstly, are you aware of that particular incident outbreak?

**A** I can't quite remember it, but I do remember it was NICU, yes, yes.

**Q** Okay, you're recorded as being among those present at this meeting.

**A** Yes, I was, yes.

**Q** If we go down to page 491, we'll see a drains report from you being recorded.

**A** Yes.

**Q** So, "A report was received from Melvin MacMillan regarding the drains...written in response to an email," and then some jobs are recorded. The actions are, firstly, "All taps replaced by it with Markwik thermostatic mixing taps". Do you recall this?

**A** Yes, I do.

**Q** Was that across the board replacement of----

**A** This was only in NICU.

**Q** Across the board within NICU?

**A** Oh, sorry, yes it was.

**Q** NICU being neonatal?

**A** Yes, Neonatal Intensive Care Unit.

**Q** So you're aware of that. So we've got Horne being replaced with Markwik in Wards 2A and 2B and also in the neonatal?

**A** Mm-hmm.

**Q** Right, to close this off, there's been a suggestion by another witness, Mr Purdon, to the effect that there was a widespread replacement of taps around January 2019 with Armitage Shanks Markwik taps, "sequential mixer taps" they're described as. Your Lordship may find that at question and answer 120 of Mr Purdon's statement.

**THE CHAIR:** Thank you.

**MR MACIVER:** Does that ring a bell for you?

**A** No, unless Colin's talking about Ward 2A. The taps in NICU were only replaced once because it was quite extensive works we'd done in NICU at that time. I'm almost sure the Royal Hospital for Children, 2A, the taps were replaced twice. I'm not 100 per cent sure, but something tells me that they were replaced twice.

**Q** The specific point I'm



interested in is has there been widespread replacement of Horne with Markwik, across the hospitals?

**A** No. No, only certain areas.

**Q** The last question is a bit of a tangent, but 129 here is you're giving the indication that-- the last of these questions was, "Was the replacement related to dosing with chlorine dioxide?" and you say, "Not that I'm aware of." Do you see that?

**A** Yes, well, we do know that the chlorine dioxide does attack the Markwik taps, the internals, because the Markwik, they'll not-- sorry, Ideal Standard will not give you any guarantees if you put chemicals through their taps. In fact, most manufacturers won't give you a guarantee if you put chemicals through their taps, but we were finding-- we found a breakdown with Markwick taps, sorry. So I'm sure they changed them to Marwick 21+ and I can't quite remember the difference between the + and the 21s.

**Q** Is that related to chlorine dioxide?

**A** Yes, when it started being dosed, yes.

**Q** In short, in summary, you may or may not wish to elaborate on this, but the basic point is chlorine

dioxide can be corrosive of materials.

**A** To only certain materials I would say. I'm not an expert, but to only certain materials and maybe within the make-up of that tap, it has that material, that's when it will break down.

**Q** Okay, there was a chlorine dioxide programme started around-- I've got noted around January 2019. You're aware of that?

**A** I am.

**Q** Were you involved in it?

**A** I was only involved to facilitate the installation of the alpha units and the bravo units within the hospital. I took directions from Ian Powrie regarding where they were getting fitted in.

**Q** What are the alpha and the bravo units?

**A** So the chlorine dioxide units, there's units in the basement on one side of the tank room which dose directly into the filtration tanks. When they come out of the filtration tanks they are measured electronically for the level of chlorine dioxide. If, *per se*, the chlorine dioxide isn't high enough, the dosing system will kick in, right, which feeds the tanks. If the tank dosing system fails, there's what we call the alpha units. Now, the alpha units are after the filtration tanks. They

can be turned on to safely dose the hospital if there's an issue with the dosing system before the filtration tanks. The bravo units are smaller units and they're divided up through the hospital in the plant rooms. Now, if the alpha units break down, we've got the beta units that we can use on certain legs in the hospital. So we've basically got three points for redundancy. That's what the alpha and the beta are in the system, to dose chlorine dioxide.

**Q** And there are a lot of these units?

**A** Yes.

**Q** And that was extending-- your involvement was fitting these or having them fitted?

**A** Yes, I managing the installation of them through-- it was-- Livingston Mechanical were installing the units. Scotmas were the manufacturer.

**Q** Given that you're an authorised person for water by then, so you're responsible for management of the water system, might you've expected to be involved a bit more in the chlorine dioxide program?

**A** No, I wouldn't-- I wouldn't have been involved in the decision-making for that, for the insulation, for choosing these units,

etc. whatever. No, I wasn't involved in that. If you think I-- Should I have been?

**Q** That's the question.

**A** Sorry.

**Q** Do you think you should've been?

**A** Possibly. It was a project run by Ian.

**Q** I've only got one last set of questions for you, I think. They're on a different subject entirely. It's to do with your ventilation functions that I haven't really touched on very much, but you're aware of an issue regarding pigeons in the premises?

**A** Yes. Yes, after being told about it, yes.

**Q** All right, I'll ask you to take a look please at some pictures. We've got bundle 12, page 1236. Now it's an email by-- Well, I shan't read it out, but it's an email by one of the doctors warning about-- or relating to ventilation and relating to a particular infection, Cryptococcus. Are you familiar with that issue?

**A** Yes. Yes.

**Q** The paragraph I'm interested here is just below halfway. Section 3.4.5 states that-- thank you. States that:

“The plant room has been

categorically ruled out. It's not possible to categorically rule out any hypothesis on a retrospective basis. It's a strong epidemiological link to the plant room and given the emergence of new photographs just last week taken in November which show contamination with bird faeces and dead birds, this investigation is not concluded. Chair of the group has in fact arranged to revisit the plant room in light of this new evidence. It is of huge concern that these photographs and a subsequent set from the first week in December were not shared with the IMT at the time of the expert advisory group until now. Pictures in email below..."

And if we do go below down to page 1238, we see a series of pictures. There's perhaps not very much in the first one, but on the next page you'll see there, evidence of bird droppings.

**A** Mm-hmm.

**Q** Yes. The page after that, more of the same. Would you agree?

**A** Yes.

**Q** And again, likely the same?

**A** Yes.

**Q** Next page, please.

Seems to be the same photograph, and the page after that, not bird droppings this time, but a dead bird.

**A** Yes.

**Q** Did you see anything like this?

**A** I've seen, one day – don't ask me when because I can't remember – I was walking through plant room 41 and it was on the far side, as I call it, "the racetrack", and I was walking through the plant room – I can't remember what I was going to check – and I seen pigeon droppings outside. There's a double door that takes you across the plant room, that you go outside, takes you into the other side of the plant room, and I seen bird droppings there and I heard a noise and then there was a gap. There was a gap in fabric of the building and I looked down and I looked through and all I could see was-- I could actually see to the outside, to the--

So, I then went outside and I just turned to my left as I went through the door and looked and I could see the gap. So the fabric-- whoever had put the outer fabric on hadn't sealed it up, probably.

That's all I remember, and the rest-- those pictures were just what I've seen in the past from other colleagues

telling me.

**Q** Okay, so, evidently, there was a route in.

**A** There was definitely a route in, yeah.

**Q** The route was being used----

**A** Yeah.

**Q** -- by the evidence.

**A** And I can't remember who-- I reported that right away but, oh, I cannot remember who I reported it to.

**Q** All right, well, in that case, actually, this may be the answer that ties up in some ways. In bundle 24, volume 1, first document here starts at page 7 and is described in the table, perhaps not on the page itself, but it's a table of QEH jobs 2015-2021. I'm interested in page 16. Page 16, please. If we look at, maybe, eight lines from the bottom, "14/06/2018. 8.29," which I assume is the time in the morning, "Plant room 31, main hospital. Pigeon, male." Might that have been you?

**A** That's me. I remember that.

**Q** Right, okay. Is that the incident you were talking about?

**A** No.

**Q** No, that's something else? That's----

**A** That's not the same plant room.

**Q** You said 41, this is 31, I was thinking that might be close enough but----

**A** Yeah. I said 41 when I seen the gap in the building.

**Q** Okay.

**A** I remember this but-- so, I seen that and I'm sure I called one of the secretaries, our secretary, and Liz would have phoned GP Environmental and said there's a dead pigeon in plant room 31. It wasn't in plant room 31. It was actually outside, outside the building in plant room-- outside to the right of plant room 31 where we-- where the MRI chillers are, and I've walked back, there's a big piece of glass, and you walk past, because I was heading towards plant room 32, I think, and I just turned and I noticed there was a dead pigeon lying. So, I've phoned-- I'm sure I phoned Liz, and said, "Liz, could you get GP Environmental? There's a dead pigeon lying up on level-- outside plant room 31," but it's been written down as plant room 31. It definitely wasn't in plant room 31.

**Q** Outside plant room 31.

**A** Outside plant room 31.

**Q** What was your concern?

**A** None. It was a dead

pigeon. I know I don't-- It was just a dead pigeon. I don't know how it got there but it was open to-- it's open to outside. There was no netting or anything up at that point-- at that time, to stop them.

**Q** You said it was near items of equipment. I didn't take a note of what they were.

**A** MRI chillers.

**Q** What are they?

**A** They're just big chilling units that cool down the MRI scanners. The MRI scanners heat up but they need to be cooled down. It's the gas that's in them needs to be cooled. If you don't cool the gas down, they'll expand and they blow off and then the scanner becomes inoperable. So, it's a chilled unit that sends chilled water down in a loop to keep the MRI scanner cool for operation. There's four of them on that roof.

**Q** Okay, and am I right in saying-- in picking you up that you didn't see any particular concern from the dead pigeon, except that it was a dead pigeon?

**A** Yeah, there was no concern. I didn't have any concern. It was just a dead pigeon. It could have-- I don't know how it got there.

**Q** Okay. Now, I don't have any further questions for you at this

point.

**THE CHAIR:** What I need to do now is just check with the room as to whether there's any further questions for you, Mr MacMillan. So, what I'll do is ask you to return to the witness room, and we should be able to find out within the next 10 minutes whether there are any other questions or no further questions.

**A** Okay.

**Q** So if Mr MacMillan could go to the witness room, please.

**A** Thank you.

**(Short break)**

**THE CHAIR:** Mr Maciver?

**MR MACIVER:** Some very short questions, my Lord.

**THE CHAIR:** Right. Mr MacMillan, just maybe a few more questions.

**MR MACIVER:** The first one relates to air handling units and I haven't asked you a great deal about your ventilation work, but air handling units in wards 2A and 2B, did you ever do maintenance on those?

**A** No, I didn't.

**Q** Did you instruct maintenance on them?

**A** If there's any work on those air handling units it would have

been on emergency breakdowns etc.

**Q** Can you recall----

**A** No.

**Q** -- any events?

**A** There's that many air handling units. They may be-- the only thing I could maybe think on is if they went off on a frost stat. A lot of them go off on frost stat in the winter because of the position that the intake grills are, and it would be, again, BMS, check the system, write down the ones that have went off, and then instructing a technician to go and turn them back on again.

**Q** A specific question that I would have had for you would have been, if you've done maintenance in the handling units in 2A and 2B, did you ever see water in those units?

**A** No, I never seen-- no.

**Q** Okay. Second question relates to the sampling that you spoke about that Ian Powrie had directed you to do. I didn't ask you, and perhaps I should have done, where was that sampling?

**A** It was around both hospitals in various locations that Ian had instructed me to take from. I can't remember the actual location. I can't remember every single room, etc.

**Q** Were there a lot of sampling to be done?

**A** There was quite a lot, yeah.

**Q** Right. Can you estimate a number?

**A** Honestly-- I honestly can't remember. I could fill my car up with the sample bottles, to tell you the truth. I honestly don't know. The records from Alcontrol would be able to tell you how many samples were taken.

**Q** If you can remember, would it have been hundreds, would it have been less than hundreds?

**A** No, probably-- yeah, it would be about a hundred, maybe more than a hundred.

**Q** Okay, and you did also say that the results came back to you and to Ian Powrie.

**A** Yes.

**Q** And it was him that actioned them----

**A** Yes.

**Q** -- is what you said.

**A** Yes because I was too busy with other stuff.

**Q** But do you recall whether any of the results were of concern, were out of specification?

**A** I didn't actually look at them, to tell you the truth, and I don't remember. I mean, now when I look back, because I have them, I have the

results because I kept them, I've got them on my pen stick, and if you look through them, you can see that there were some out-of-specs, but nothing of any great significance, but I can't remember to tell you the truth.

**Q** Last question is a general one about when you became the authorised person for water. At that time, did you consider the water system to be in a state of compliance?

**A** When I first started in 2018?

**Q** Yes.

**A** It took me a while to get my head around what actual work had been done, i.e., you know, maintenance, PPMs, etc.

**Q** Of course.

**A** We struggled because of manpower to-- I would say we struggled because of manpower to complete all the tasks. So, I decided-- I'm sure Kerr as well was involved with me, and we decided to ask DMA to assist us with various tasks. One of the tasks, for example, would be the shower heads and hoses which get cleaned, but all the records aren't there for that because it was too much of an onerous task to do. So, we decided to basically go to a company called Dupal and buy throw-away hoses and shower heads, and they have a colour

code system for every three months. So, that's what we use now, and we've used that ever since 2019, I take it-- I believe. It means that we can install them, leave them for three months and take them out and dispose of them. They get sent back to Dupal and they re-use them again. Well, you know, they recycle them, sorry.

**Q** Yes. No, I follow that, but my question was simpler than that really, which was just if you imagine a snapshot of the system at the time that you became AP for water, would that be a snapshot of a compliant system or a non-compliant system?

**A** In my mind, the system was working, but you need to delve deeper to make that decision or that comment to say it wasn't compliant. You know, it wasn't compliant in that some of the maintenance wasn't getting done, yes, I agree, but to say that the system wasn't safe is-- that's-- you'd need to-- you need to look deeper into it than that.

**Q** Well, did you come-- well, you did have-- obviously, you will have looked deeper on it over the years since you took over as AP for water.

**A** Yes.

**Q** Did you ever come to a view that the system wasn't safe?

**A** Sorry, did I? **16:21**

**Q** Did you ever come to a view, during that time that we're dealing with a unsafe system?

**A** No, I didn't, no.

**Q** Okay, that's no further questions, my Lord. Thank you.

**THE CHAIR:** Do I take it that Mr Maciver has accurately picked up questions he was asked to ask? Thank you.

Mr MacMillan, that is now the end of your evidence. Thank you very much for coming and giving the oral evidence today but thank you also for the probably quite considerable amount of work done in preparing the written statement. So, I'm very grateful for both your attendance and your preparatory work. As I say, you're now free to go.

**A** Thank you.

**THE CHAIR:** Now, Mr Maciver, my understanding is that Mr Mackintosh is taking one witness tomorrow and that's Ms Imrie?

**MR MACIVER:** I believe so.

**THE CHAIR:** All right. Well, I wish you a good afternoon and we'll see each other tomorrow at 10. Thank you.

**(Session ends)**