

Scottish Hospitals Inquiry

Witness Statement of Questions and Responses

Karen Connelly

This statement was produced by the process of sending the witness a questionnaire with an introduction followed by a series of questions and spaces for answers. The introduction, questions and answers are produced within the statement.

Personal Details

1. Name, qualifications, chronological professional history, specialism etc – please provide an up-to-date CV to assist with answering this question.
- A. Karen Connelly, HND Hotel, Catering and Institutional Management, I was continuously employed by NHSGGC since 1985 until my retirement in 2020. I held various posts over that period and I have noted the most recent/relevant below. The dates I have noted are based on my best recollection as I have no records to refer to.

In 2006 I was appointed Site Facilities Manager for the Victoria Infirmary and associated hospitals as part of that role I was to be responsible for the commissioning of the New Victoria Hospital however it became apparent that role needed a full-time commitment, and I subsequently became the Commissioning Manager from 2006 until the commissioning was completed in the summer of 2009. I was then asked if I wished to go back to my Site Facilities Manager post or join the NSGH Project Team. I opted to join the Project Team as Facilities (soft) Project Manager and I remained in that role until approximately August 2015 when the role came to an end. I was job matched to the PFI/PPP Contracts Manager with responsibility for the Facilities Operational Management of the New Victoria and the New Stobhill Hospitals based at the New Victoria.

Around March/April 2016 I was asked to cover sick leave at the QEUH for the Site Facilities Manager and moved base to there, although I continued with Managing the PFI contracts. I moved back to the New Victoria Hospital towards the end of 2016. I successfully applied for the vacant post of General Manager, Estates and Facilities for the North/East Sector, and commenced that role in January 2017, based at Glasgow Royal Infirmary.

Towards the end of 2017 I was asked to move to the post of General Manager at QEUH and did so from January 2018. I remained there until sometime in 2019 when I was asked to move back to Glasgow Royal Infirmary where I remained until I retired at the end of October 2020.

2. How did your role in the project team come to an end? Was the project team disbanded at this point? If so, why? Did you feel that this job was at an end at this time?
 - A. There was no definitive date set for an end to the project team, as the project neared an end and handover the members of the team were found other jobs and migrated away from the project. Once the project ended I was still available to facilities to address any questions or issues. I did feel that by the time the team was disbanded the job was at an end.

3. Describe what facilities is. What is the difference, if any, between soft facilities and hard facilities? What skills/ experience or qualifications are required for this role?
 - A. Hard facilities are estates: the technical side including water systems, electrical systems etc. With soft facilities, the majority of these are catering, portering and cleaning with security car parking. Also included are helipads, service yards, waste disposal, retail units, linen services, and helpdesks.

In terms of skills, my qualifications were in hotels and institutional management. Initially I was a catering manager and then I broadened out to be more of facilities manager. I have 35 years of healthcare facilities management experience.

Professional Background

4. Professional role(s) within the NHS.
 - A. All my roles within NHS were General Management within Estates and Facilities.

5. Professional role (s) at QEUH/RHC, including dates when role(s) was occupied.
 - A. Facilities Project Manager 2009 to 2015
Site Facilities Manager approximately March 2016 – September 2016
General Manager Estates and Facilities January 2018 – I think August 2019

6. Area(s) of the hospital in which you worked/work.
 - A. Facilities cover all areas of the campus.

7. Role and responsibilities within the above area(s)
 - A. As above, facilities cover all areas e.g. providing, catering, domestic, Portering services.

8. Who did you report to? Did the person(s) you reported to change over time? If so, how and when did it change?
 - A. When I was Facilities Project Manager I reported to Alan Seabourne, Project Director and Alec McIntyre, Director of Estates and Facilities. When they both retired in 2013, I reported to David Loudon, Project Director who would also be the Director of Estates and Facilities when the Project was completed. I also reported to Mary Anne Kane, who was Deputy Director of Estates and Facilities.

When I was PFI Contracts Manager I reported to Mary Anne Kane, and when I covered for sickness absence at QEUH I reported to Billy Hunter, General Manager.

When I was appointed to GM for the Northeast Sector I reported to David Loudon and/or MaryAnne Kane in his absence, and when I was GM for QUEH I reported to Mary Anne Kane until Tom Steele was appointed.

- 9.** Describe your role as Facilities Project Manager, what were you responsible for, what were your day-to-day duties?
- A.** Day to day duties were various. My role was soft facilities, so I was looking at things such as designs for kitchens, waste rooms storage and automated guided vehicles. Also, I was part of the commissioning migration for the new laboratory building in 2012, that was part of my remit also. Both soft and hard facilities management were going to be based in the service yard, which was in the laboratory and facilities management building. On a day to day basis I performed many varied tasks.
- 10.** Describe your involvement in any design aspects of the QUEH/ RHC build?
- A.** I worked with other members of the project team, the One in 200 Project and the One in 50 Project which were named relative to the scale of detail involved within the plans.

The One in 200 Project from facilities perspective would include things such as the main catering dept and equipment, power points within the appropriate kitchen areas, processes in terms of food arrival storage, preparation and despatched for patient meal services. We worked on workflows flows such as those.

The One in 50 Project, an example of that would be dirty dishes in the wash up areas, how they would be processed, how they would be cleaned, workflow storage and all the practicalities of doing all the finer tasks.

The most significant things I would say I worked on in terms of design was the catering dept as there were so many aspects involved. The AGVs were a new process so we had no where to go to look for working examples – we had to design them in – food, waste, linen – this was going to be a huge impact on the hospital because it was so integral to the workings of the hospital.

- 11.** Describe who you worked with on any design aspects of QUEH/RHC build?
- A.** There were different user groups for every department. As well as members of the Project team there were also members of Nightingale, they were the architects, and catering managers from the Southern General Hospital were also involved. If it was a domestic service matter, then the domestic manager would also be involved. We would always have end users involved in any design groups.
- 12.** Who signed off on the final design? What role, if any, did you have in this?
- A.** I think it was the directorate of each separate design group who would sign off on the final designs. I would advise on whether to sign off based on the user group being happy with any final design. I was an interface between the user groups and the facilities directorate managers.
- 13.** Describe your involvement in any technical aspects of the QUEH/ RHC build?
- A.** The majority of what I was involved in were processes. The technical aspects I was involved in were things such as technical specifications for waste disposal machines, also the AGVs which were a technical aspect, also operational fire safety, so we worked closely with the operational fire group who were set up to look at the fire safety technology. I also worked with NHS fire officers to make sure all safety plans were available. I was not involved in any of the technical aspects of ventilation or water within the hospital.
- 14.** Describe who you worked with on any technical aspects of QUEH/RHC build.
- A.** I worked with representatives from Brookfield Multiplex, as well as representatives from other third parties, for example with the AGVs I worked with Swisslog, who were the AGV providers.
- 15.** What is your knowledge of any technical changes during the build, with details of how technical changes were made throughout the build, and who would have signed off.
- A.** From a technical perspective I can't remember any major changes being made from point of origin to development. The process was quite specific for

any changes in that it all had to go through the project director, Alan Seabourne. If there was a cost involved it would also have to go through the Chief Executive, who at the time was Robert Calderwood.

- 16.** What can you tell us about the hospital specification and requirements at the time of the build?
- A.** There were project documents which were called the Board Construction Requirements (BCRs), that was the bible we referred to. They had already been signed off so we had to make sure everything specified in there was adhered to, we were not to vary from those.
- 17.** How were decisions made about the specific requirements for each ward?
- A.** They were all consulted on and agreed through user groups. An example of this would be that each ward had a domestic services room (DSR) which contained kitchen pantries, waste holds, all had designs on finishes and needed surfaces that could be easily cleaned, so these were consulted on and agreed by user group staff.
- 18.** Describe your role in user groups and what was your involvement. What was the purpose and function of the user groups? Describe who you worked alongside with? Describe your day-to-day duties and responsibilities with the user groups.
- A.** If it was a facilities related matter I would take the lead as facilities person, but if it was anything else then I would take on a facilities role. In terms of agreeing the final layout and equipment placement, there were many people I worked with. Whoever was involved in the groups would depend on what we were working on. On a day-to-day basis my role was to make sure all the meetings were scheduled and everyone was able to attend. Everyone had their own jobs to do, so I had to a certain amount of co-ordinating to do to make sure all the relevant people were present depending on what the user group was focussing on. Again, this was only from a facilities perspective.
- 19.** Describe your day to day dealing with infection control staff during this period. Were there regular meetings between infection control staff and the project

team? How regularly was input sought from infection control staff by the project team in design matters and the build of QEUH/RHC?

- A.** There was a member of infection control staff assigned to the project team – this was Jackie Stewart; she was an infection control nurse. Jackie was a member of the time and was there in the office – she was at the majority of the user group meetings I saw her on a daily as she was part of the team. Input was sought regularly from the infection control nurse; they were part of the team and an integral part of the design process.
- 20.** At this time clarify the roles and responsibilities of Currie & Brown, Capita, Mercury, IBI and Multiplex. Describe any involvement you had with these companies.
- A.** I'm not sure if IBI might be Nightingales the architects? These companies were represented at the user group meetings. Latterly Currie and Brown had officer space with the board project team. Mercury and Multiplex were all based in the same building but on different floors, they would all be represented at the user group meetings depending on what was under discussion at the time.
- 21.** Describe any involvement you had in respect of room data sheets? Process, relevance etc.
- A.** The room data sheets (RDSs) had all been prepared before the contract was awarded, these were in the board requirements - however we went through them when we were designing the rooms. Some minor things may have been amended if there were no cost implications such as for example, moving a mirror or a socket point etc.
- 22.** What is your understanding of the employer's requirements? What involvement did you have with them and how did they impact your role during this time?
- A.** I did not have any involvement in writing the employer's requirements up, but we used BCRs as a reference and a baseline for our designs.

- 23.** Describe your understanding at this time of BREEAM. How important was BREEAM in the design and build stage?
- A.** BREEAM is an environmental standard to be achieved in new buildings to make them as energy efficient as possible in new buildings. They were taken very seriously by the project director as it was an important award for us to get for the building. I would describe BREEAM as being a very important factor for the project director, it was a priority for him to achieve this as an award.
- 24.** Refer to the ZBP Ventilation Strategy Document. Were you aware of the ZBP Ventilation Strategy document dated 15 December 2009? If so, when did you first become aware of it? Why were you forwarded the document? What did you do on receipt of the document? Were you consulted? If so, what were your views?
- A.** This was sent by Mark Baird from Currie and Brown on 15 December 2009 – I had only just joined the project team at this point. I don't know why he sent it to me, although it was quite common for members of the team to come in to the office and ask us to print out documents for them at the time as our access to printers was limited. I can only guess that this is what happened as I have no knowledge otherwise of the contents of this document.
- 25.** When did you first learn of the Agreed Ventilation Derogation. i.e. that each 2.5 ACH was the agreed rate? When you became aware to which wards did you understand this to apply to?
- A.** I was not involved in any aspect of the ventilation design.
- 26.** Were your views asked for before the Building Contract was signed in December 2009?
- A.** No, that would not have been in my remit.
- 27.** If you were aware of it and/or consulted about it, what did you think its scope was? eg. did it apply to all wards in the QEUH/RHC including specialist wards and specialist ventilation and isolation rooms then intended to be included in the hospital, and any specialist facilities to be later added to the hospital before it opened?

- A.** I was not aware of or consulted about this, it was not in my remit.
- 28.** Describe the handover process between Alan Seabourne and David Loudon?
How long did the process take?
- A.** This was in 2013. I think Alan and Dave had about a month of a crossover. I was not aware of the formal processes of the handover or what they did, all was done within the confines of their roles and offices.
- 29.** Describe your role at this time, responsibilities, day to day duties. Who reported to you, if anyone, who did you work with, did you work with any teams or other professionals at QEUH/RHC?
- A.** This was after I was on the project team. I went to the PFI October 2015. I reported to Billy Hunter to help out as facilities manager in 2017. I worked there until 2018 when I was moved by David Loudon to the QEUH to be the General Manager there. As General Manager from 2018 my role was GM for Estates and Facilities in the QEUH, I dealt with all aspects of estates and facilities in the QEUH. My two main reports were David McDonald and initially Ian Powrie, but he was replaced quite quickly by Andy Bell. I continued to report to Tom Steele from his appointment until I retired in 2020.
- 30.** Who selected you for your role(s)? When were you selected for your role(s)? Please describe the selection process for appointment to this/these roles?
- A.** My appointment to Site Facilities Manager at the Victoria Infirmary was made following an interview process. Alastair McLean, GM and David Pace GM were on the interview panel. My appointment to NVH Commissioning Manager full time was agreed by Alec McIntyre. My appointment to QEUH Project Team was agreed by Alex McIntyre. My appointment to the PFI Contracts Manager role was through job matching and Mary Anne Kane and HR as I had no substantive post to return to. My appointment to General Manager was made following an interview process, David Loudon, Mary Anne Kane and a General Manager from a clinical service as well as HR were on the interview panel. My move from GM North to GM QEUH was at the request of David Loudon. My move from GM QEUH to GM North in 2019 was at the request of Tom Steele.

- 31.** Had you worked with any of your QEUH/RHC project team colleagues prior your role(s) at QEUH/RHC? If so, who had you worked with before this current role? When did you work with this/these colleague(s)? What role were you in when you worked with this/these colleague(s)? How long were you colleagues in this/these previous role(s)?
- A.** I had worked with Heather Griffin, Adult Hospital Project Manager, when we were both based at Glasgow Dental Hospital in 2001. I was the Facilities Manager and Heather was the Clinical Services Manager. Part of my responsibilities was managing the on-site surgical instrument decontamination service, whilst Heather was working on plans for a new central decontamination unit. I provided Heather with information/statistics re instrumentation. I attended meetings with Marie McLeod, Project Manager for the Children's Hospital, during the commissioning of the New Victoria Hospital as Maria had been involved in the design process.

Specific role(s) at QEUH/ RHC

- 32.** What role did you hold up until 2017?
- A.** I didn't have a specific management role at QEUH until January 2018 when I was transferred there. General Manager as I outlined above.
- 33.** Describe how you came to be appointed to this role?
(No answer provided)
- 34.** What previous working relationships, if any, did you have with those who selected you?
- A.** (No answer provided)
- 35.** Describe your role and responsibilities (including day to day) at QEUH/RHC post January 2015 when the hospital was handed over from Brookfield Multiplex to NHS GGC.

- A.** I was the Facilities Project Manager responsible Co-ordinating soft Facilities service migrating to the new buildings, including familiarisation, tracing and induction. Also commissioning the new helipad and working with staff who would be operating the new automated guided vehicles.
- 36.** Describe the commissioning process for the QEUH/RHC in further detail, what did this entail, were you involved in the commissioning of the water and ventilation system If so, how so?
- A.** I was only involved in the facilities aspects of the commissioning process; the catering, AGVs, helipad etc. I was not involved in the ventilation and the water systems.
- 37.** How did your role change following handover of the QEUH/RHC in or around January 2015?
- A.** Myself and other members of the project team moved into offices within the building and worked through our project plans to get the building equipped, stocked, cleaned etc. in readiness for the migration of patient services.
- 38.** Did you have any concerns regarding cleaning of the hospital at this stage?
- A.** That was the handover time from Brookfield to the board. At that time yes, we had concerns re the cleaning of the hospital due to the ongoing work and the completion of the incomplete work by Multiplex. This was hindering the finishing of areas that we were working on. We needed extra resources at that time all the cleaning was done effectively.
- 39.** Where was your role in the hierarchy of the organisational structure at QEUH/RHC?
- A.** I wasn't on it until 2018.
- 40.** Who did you report to, (name(s) and role(s))?;
- A.** Depending on what role I had it would have been, Billy Hunter, Mary Anne Kane or David Loudon.
- 41.** Describe your relationship with your supervisor in this role.

- A. I believe I had a good working relationship with all managers.
42. When did you start your current role? At this time, how many people worked within hard facilities management at QEUH? At this time, how many people worked within soft facilities management at QEUH? Did the number of people working change during your time at QEUH? If so, how did they change in soft facilities management? If so, how did they change in hard facilities management?
- A. I retired in 2020 When I was GM at QEUH 2018/2019 there were several changes in the Estates and the Facilities Management structure, but the overall numbers remained relatively unchanged.
43. How did hard and soft facilities management operate on a daily basis? How were the operations managed? Was responsibility shared between different teams? If so, to what extent was responsibility shared?
- A. The General Manager was responsible for all Estates and Facilities Operational matters and below them were two separate structures, one for Estates and one for Facilities. They were all based in Laboratory and Facilities Management Building and while most work streams were separate there was crossover in areas, e.g. the Helpdesk, they also worked together when clean ups were required after maintenance work etc.
44. Refer to the **Estates Communications Bundle, document 29 -** Organograms showing the organisational structures within QEUH.
- a) Does the organogram match the organisational structures of QEUH?
- A. As far as I can remember it matches what was in place in 2015.
- b) If not, why not?
- A. (No answer provided)
- c) How did the structure and hierarchy operate across the different sectors?
- A. I understood it to be similar to Estates and Facilities.

- 45.** Please tell us which staff reported to you, and who you were responsible for in this role, and your relationship with them.
- A.** When I was GM, I had a Sector Facilities Manager and a Sector Estates Manager who both reported to me, and they each had an operational management structure below them.
- 46.** How was communication between you and your colleagues? What communication issues, if any, arose?
- A.** We held daily team briefs to discuss any issues and as we were all in the same building, we would have informal face to face catch ups, or by email or telephone. I don't remember any communication issues.
- 47.** How did you keep a record of work delegated?
- A.** There was a note kept of every Team Briefing with actions noted and who was responsible.
- 48.** How was delegated work supervised?
- A.** An update on the actions had to be provided at the daily briefing session.
- 49.** Which other QEUH teams or departments, if any, did you work closely with?
- A.** Members of the Estates and Facilities management team attended the clinical team briefs held 3 or 4 times per day. There was the Adult Hospital Brief, Children's, Maternity/ Retained Estate/INS. We also attended regular scheduled meetings re Health and Safety and Infection Control with clinical colleagues.
- 50.** Please describe your working relationship with these QEUH teams or departments (including areas of hospital work on).
- A.** I believe we had a good working relationship because of our daily meetings with them and we also had 24/7 Facilities Duty Managers available for any wards or departments to raise any issues with.

- 51.** What concerns, if any, did you have about any member of staff? If so, please describe these concerns. What action, if any, did you take in relation to these concerns?
- A.** I don't remember any specific concerns. If there were any issues they were dealt with in accordance to the appropriate policy or procedure.
- 52.** What concerns, if any, were ever raised about management/ managers? If so, please describe these concerns. What action, if any, did you take in relation to these concerns?
- A.** As above any concerns raised would have been dealt with appropriately.

Training

- 53.** What formal training or qualifications do you have in of the following:
- a) Water
- A.** None.
- b) Ventilation
- A.** None.
- c) Infection Control
- A.** None.
- d) If so, can you go into more depth about any training and qualifications? – (When trained? When qualified? Who was the awarding body?) Please describe how the training and qualifications were relevant to your work at QEUH.
(No answer provided)
- 54.** What specific roles or duties within the Project team have you had in water systems operation or maintenance? How long did you have these roles and duties?
- A.** None.

- 55.** Were you aware of any specific legal responsibilities/ obligations when working with the water systems. If so, please provide additional information.
- A.** I did not work with the water systems.
- 56.** If you did not have any roles or responsibilities in relation to the water systems operation or maintenance:
- a) Who did?
- A.** There were appointed or nominated members of the Estates Team who held responsibilities in accordance with the Board's Water safety Policy.
- b) What were these responsibilities?
- A.** I cannot remember.
- c) What did you understand the responsibilities to be?
- A.** I cannot remember.
- d) Were you aware of any specific legal obligations/ responsibilities? If so, please provide additional information.
- A.** There were statutory and mandatory obligations, but I can't remember what they were.
- 57.** What specific roles and duties within the Project Team did you have in the ventilation systems operation or maintenance?
- A.** None.
- a) If you did not have any roles and responsibilities in the ventilation systems operation or maintenance, who did?
- A.** I don't know I was not involved in Estates matters during my time with the Project Team.
- b) What were these responsibilities?
- A.** (No answer provided)

- c) What did you understand the responsibilities to be?
A. I don't know.
- d) Were you aware of any specific legal obligations/ responsibilities? If so, please provide additional information.
A. No.
- 58.** What large scale water systems had you worked on before the QEUH? What large scale ventilation systems had you worked on before the QEUH? If so, when? How did this compare to working on the QEUH? What was your role and duties?
A. I have never worked on large scale water or ventilation systems.

Documents, Paperwork and Processes in Place as at 26th January 2015

We know that handover of QEUH occurred on 26th January 2015:

- 59.** What contractual documentation would you expect to see in place at handover?
A. Whatever was specified in the contract.
- 60.** Describe the process for handover of QEUH:
A. I wasn't involved in the handover process.
- a) What contractual documentation was in place?
A. I don't know.
- b) How was the relevant paperwork handed over to QEUH?
A. I don't know.
- c) Describe your involvement in the process for handover?
A. None that I remember.
- c) Were infection control doctors and nurses consulted? If so, who?

A. I don't know.

61. Was the building of the QEUH complete at handover – if not, what was incomplete? Was QEUH ready at handover? If not, why was it not ready at handover? Refer to **Estates Communications Bundle, document 3 – 'Stage 3 Adult and Children's Hospital Completion Certificate'** defects noted therein when considering this question.

A. No the building was not complete at handover.

62. What concerns, if any, did you have regarding the building not being complete at handover? Was this has you expected? If not, why not? Did you ever discuss any concerns with other members of QEUH/RHC staff? If so, who?

A. I did have some concerns. I was concerned that the work may not have been completed before the patients migrated, also whether there were going to be people still working in the hospital ect. when there were patients in. Some deliveries of equipment etc. could not be made due to workmen still being in the building still. Ultimately the migration program was completed. We did discuss concerns between ourselves, however we managed to coordinate management of the problems between ourselves and overcame them without having to escalate anything.

63. Describe the site when QEUH/RHC at handover in January 2015.

A. There was still a significant amount of work to be completed.

64. Did Multiplex remain on site? How was this managed, and were records kept of Multiplex staff being on site? If so, who was responsible for this and where were such records kept? Did you have any concerns?

A. Multiplex remained on site. I was concerned about the number of Multiplex personnel were still on site as this impacted on us preparing the building for the migration of services. Multiplex appointed security personnel to the front desk and all Multiplex operatives and their contractors signed on and off the premises. The paper records were kept at the time, but I don't remember for how long they were kept.

65. Did you raise or share these concerns with others? If so, what action, if any, was taken?

A. No – this situation did last for a couple of months, however we managed the situation without having to escalate anything.

66. At handover who was responsible for ensuring that paperwork was produced to confirm contractual compliance?

A. I don't know.

a) Paperwork?

A. I don't know.

b) O&M Manuals?

A. I don't know.

c) M&E Clarifications Log?

A. I don't know.

d) Others paperwork as per the contract?

A. I don't know.

Provide as much detail as possible – was anything missing? If so, how was this managed?

(No answer provided)

67. What commissioning and validation documentation for the water system did you see at handover? What commissioning and validation documentation for the ventilation system did you see at handover?

A. None, as it was not part of my remit.

68. Can you distinguish between commissioning and validation?

A. This was not my remit – however my understanding is the commissioning aspect is to make sure something works, and the validation process is to test something to make sure that that thing works within its expected parameters.

a) What documentation would you expect to be available for both the water and ventilation systems?

A. I don't know.

b) Who was responsible for this documentation?

A. I don't know.

c) What was your role?

A. None.

d) Were you ever aware of commissioning and validation having been carried out?

A. It was not something I expected to be aware of.

e) If not, why were you not aware of commissioning and validation having been carried out?

A. It was not my remit.

69. Describe the water flushing regime at handover, describe your involvement, the recording process, why is it important and impact if it is not carried out?

A. Multiplex were responsible up to handover, but I do not know what records were handed over. After handover I arranged with domestic services manager for the domestic staff to incorporate the flushing of taps in clinical areas into their cleaning regime at the request of the Estates Team. Records were completed by the domestic staff and handed into the Estates office.

70. Was any other paperwork missing at handover? If so, would you consider this missing paperwork to be of importance?

A. I don't know.

71. Operating systems at handover:
- a) How many staff were allocated to maintaining operating systems and how was this determined?
A. I don't know.
 - b) What training was put in place for maintaining the operating systems?
A. I don't know.
 - c) Who carried out the training? Refer to **Estates Communications Bundle document 5 – 'Brookfield Multiplex Client Training & Familiarisation Register for Ventilation'**.
A. I was not involved in Estates Training and Familiarisation.
 - d) Were Multiplex involved in the training?
A. I would expect so.
 - e) Was sufficient training provided to allow staff to operate the systems?
A. I can't comment on this.
 - f) Please describe the manuals/ documents that were handed over.
A. I did not see them.
72. What was your involvement/ role in the handover process? How did you manage this?
A. None.
73. Who signed the completion certificates?
A. I do not know.
74. Who was the person with the responsibility to sign the completion certificates under the contract?
A. I don't know.

75. Estates Communications Bundle, document 3 – ‘Stage 3 Adult and Children's Hospital Completion Certificate’:

a) What is this?

A. I have not seen this before.

b) Have you seen it before?

A. No

c) Have you seen other such certificates?

A. No.

d) Who signed off these certificates?

A. I don't know.

e) What checks were carried out prior to sign off?

A. The Board appointed supervisor from Capita carried out the checks. Other members of the Project Team and I were asked to complete a programme of checks shortly before handover. We completed forms and recorded any outstanding or incomplete work.

f) What was your role/ responsibility?

A. We were given a list rooms/areas to check and we then reported our findings back.

76. What concerns, if any, did you have following completing these checks?

A. My main concerns were there was still some work to be completed.

g) Looking at the defects referred to in the completion certificate **documents 3 above: Look also at Estates Communications Bundle, document 4 – ‘Capita NEC3 Supervisor's Report (No 46)’**

(i) What are these defects?

A. Incomplete work.

(ii) What was the impact of these defects?

A. They had to be completed after handover.

(iii) Why two years to deal with the defects?

A. I assume that was what was written in the contract.

(iv) Who decided that it was appropriate to accept handover with outstanding defects?

A. I don't know who made that decision.

(v) Is this usual practice in the construction industry?

A. I don't know.

77. Refer to **Estates Communications Bundle, document 8 – 'Programme for handover to start of migration':**

a) Do you know what this is?

A. I have not seen this before.

b) Have you seen it before?

A. No.

c) What are the numerous defects?

A. Incomplete work.

d) What is your understanding of the purpose of this document?

A. To ensure there a record of the defects being rectified.

e) What comments, if any, do you have regarding the number of defects?

A. There were too many of them.

f) To what extent were you aware of this document at handover?

A. I wasn't aware of it.

g) If not, should you have been aware of this document at handover?

A. It would have been informative.

- 78.** How would it have been informative? What matters would it have assisted with and how so?
- A.** Informative in that I would have known the size and the scale of the incomplete works. Ultimately, we managed to migrate the patients into the hospital. I don't think it would have any impact on how the project turned out.
- 79.** What did the contract say about retention of certain parts at handover? Was this enforced and why?
- A.** I don't know.
- 80.** To what extent did Multiplex retain responsibility for the build following handover? Did Multiplex give any warranties? What were the terms of any warranty relating to Multiplex's work? How long was the warranty period following handover in January 2015?
- A.** I don't remember what responsibilities Multiplex still have. I believe the warranty period was for 2 years.
- 81.** How many companies have on-going responsibility following handover? If so, describe the responsibilities of the companies. How long post-handover were the other companies involved for?
- A.** There were many companies still had responsibilities after handover, some had a 2-year post-handover involvement, some companies still have an input as their equipment systems continue to be used.
- 82.** Please confirm which companies?
- A.** There were a lot of companies – most were subcontractors from Brookfield: Swisslog, the AGV and pneumatic tube system suppliers. And also Mercury, they were in charge of the mechanical and electrical suppliers so they would have still been on site. We were also still dealing with Capita and Currie and Brown in terms of where the defects were and how they were being closed down.

- 83.** What concerns, if any, did you have about the opening of the hospital after handover? Refer to **Estates Communications Bundle, documents 19 and 21 and 21.1** when answering.
- (a) Was there anything missing that you thought should have been constructed/installed? If so, please describe what was missing.
- A.** There were areas that could not be accessed for cleaning or installing equipment, some systems were not installed/commissioned e.g. PA system.
- (b) Which areas could not be accessed? Did you have any concerns about not being able to access for cleaning purposes?
- A.** There were areas that could not be accessed at specific times. I can't remember specifically now where they were. We were concerned at the time but ultimately we were able to get in and get all the cleaning done that we needed to do.
- (c) Did you have any other concerns about areas of the hospital at handover?
- A.** My concern was how much work that was still to be done and the number of Multiples operatives still on site. This impacted on us being able to keep the site secure and to allow the NHS commissioning and equipping Teams to get on with their work. The domestic staff had to repeatedly clean rooms and areas because further work was carried out after they had cleaned.
- 84.** Refer to **Estates Communications Bundle, document 22** at the point of patient migration Mhairi Lloyd states that there were rooms/ areas 'not yet fit for purpose': Look also to **Estates Communications Bundle, document 19:**
- a) Detail your understanding of the concerns – namely what the concerns were any why?
- A.** From a general perspective it was frustrating not to be able to have assurances that room were complete. We were all working to tight timescale to complete the commissioning work before the migration of clinical services.
- b) What was the impact of not getting these assurances?

- A.** We were all working to tight timescales – ultimately there was no impact because we managed to work around the challenges.
- c) Your involvement with the dealing with any concerns?
- A.** From a Facilities perspective we tried to support the clinical teams by being responsive to their need for services such as portering and domestic.
- d) Were matters resolved prior to patient migration?
- A.** Yes, to my recollection all facilities matters were resolved prior to patient migration.
- e) If so, how matters were resolved prior to patient migration?
- A.** working longer hours engaging more facilities staff and getting rooms into a condition where the clinical staff were happy.
- f) At the time, did you consider that matters were resolved prior to patient migration?
- A.** Yes.
- g) Who signed off prior to patient migration?
- A.** I don't remember the process for this.
- h) Were you involved at all?
- A.** I think this was more from a patient perspective. As the move became more imminent there were patient migration groups set up. I would have been involved in these as a member. They were led by clinical directors such as Kevin Hill and Anne Harkness. They would ask if we were good to go and we would advise from facilities perspective whether we were or not, but purely from a facilities perspective.
- 85.** Detail the snagging process, refer to **Estates Communications Bundle, documents 90 and 91** when considering your answer detail:
- a) What happened?
- b) How long were Multiplex on-site following handover?

- c) Main areas for snagging?
- d) Records of works carried out?
- e) Sign off – who as responsible and when signed off?
- A. I was not involved in this process

86. Refer to **Estates Communications Bundle, document 132** with the benefit of hindsight do you agree with Frances Wrath's comments that all area were commissioned in line with Employer's Requirements?

A. No.

87. Why do you not agree with this statement?

A. I didn't think Frances was in a position to be able to say. I don't think she would have had the knowledge to be able to make that comment.

Wards and Hospital Occupation from January 2015

88. At the point of taking occupation of QEUH/RHC on 26th January 2015 please confirm whether the following wards were fully handed over from Multiplex to NHS GGC:

Ward 2A/2B

Ward 4B

Ward 4C

Ward 6A

Ward 6C

A. I can't remember.

89. Please also confirm your understanding of the ward specification and patient cohort to be located in each ward?

A. Ward 2A/2B were children's oncology wards, I can't remember the rest.

90. If a ward or wards were not handed over on 26th January 2015, or were partially handed over, please confirm:

a) Why were they held back?

A. I don't remember.

b) Any financial consequence to both Multiplex and NHS GGC of the ward(s) being held back?

A. I don't know.

c) What works were carried out to allow this ward(s) to be handed over the NHS GGC?

A. I don't know.

91. Were any other wards, aside from those referred to above, retained? Answer as above.

A. I don't know.

92. We know that the energy centre was retained by Multiplex.

a) Why was the energy centre retained?

A. Incomplete work.

b) In what way was the energy centre incomplete? Do you recall this being discussed with colleagues?

A. No. I do know that work was incomplete, but I can't remember being party to any discussion about this. I wasn't part of anything that was set up to remedy any incomplete work.

c) What financial consequences, if any, arose for either Multiplex or NHS GGC if the energy centre was retained?

A. I don't know.

d) What works were carried out to allow hand over of the energy centre to NHS GGC?

A. I don't know.

e) Were any other parts of the hospital retained by Multiplex pending works being carried out? Why? What works required to be carried out prior to them being handed over?

A. I don't know.

f) At the point of handover on 26th January 2015 how satisfied were you that all areas accepted by NHS GGC were designed to the intended specification and suitable for the intended patient cohort, meeting all the relevant guidance requirements?

A. As far as I was aware they were.

g) If not, why were the wards handed over? Were any issues escalated to more senior management/ Board level? Please confirm.

(No answer provided)

Asset Tagging

93. Describe and detail asset tagging:

a) What is this?

A. A system of allocating a unique identifier (tag) to equipment and systems to ensure it is serviced and maintained appropriately.

b) Why is this important?

A. To avoid breakdowns and ensure the lifespan of the equipment is maximised.

c) What role, if any, does asset tagging play in respect of Planned Preventative Maintenance (PPM)?

A. This enables each asset to be identified and programmed into a PPM schedule and therefore ensure that everything is correctly serviced and maintained.

d) Who was responsible for this?

A. I understand that Multiplex were responsible for ensuring all equipment was tagged.

- e) What was the impact if this was not done?
A. Possible breakdown of equipment due to incorrect maintenance.
- f) What concerns, if any, did you have about this?
A. It was an estates matter and not my remit at the time.
- g) Did you escalate these concerns? If not, why not?
A. It was not my remit at the time.
- h) Discuss any issues regarding asset tagging and how you managed this?
A. I had no discussions at handover, but it was still an issue in 2018 when I became General Manager at QEUH.
- 94.** Was there a contractual requirement to provide CAMF?
A. I don't know what CAMF is.
- a) Again, what is the purpose of this and who was responsible for providing this?
A. I don't know.
- b) What is the purpose of CAMF?
A. I don't know.
- c) How does ZUTEC differ from CAMF?
A. I don't know.
- d) Should both CAMF and ZUTEC have been provided at handover?
A. Zutech yes, I do not know about CAMF.
- (i) Who was responsible for ensuring provision of CAMF and ZUTEC?
A. Multiplex.
- (ii) What were the consequences of these not being provided?

A. Building user manuals, maintenance records etc would not have been available to the Estates team.

(iii) What action was taken to remedy matters? Were Multiplex contacted?

A. I don't know.

95. Provide information on any issues in relation to CAMF and ZUTEC

a) Operation?

A. I don't know.

b) User suitability?

A. I don't know.

c) Any other matters?

A. I don't know.

d) Who was this reported to, what action was taken to remedy matters?
(No answer provided)

96. Did your team or NHS IT develop a system for asset registration?
If so, when, and how long did it take following handover.

A. I understand that the Senior Estates Managers were involved in this.

HEPA Filters

97. Were HEPA filters installed in the relevant rooms at handover (January 2015)?

A. I don't know.

98. What issues, if any, were there with HEPA filters? Refer to **Estates Communications Bundle, document 22.**

A. I was not involved in this.

99. If so, what issues were you aware of?

A. I don't know.

100. Dr Gibson in her statement refers to HEPA filters not being in place at the point of handover in wards 2A/B.

a) To what extent, if any, do you agree with Dr Gibson's statement above concerning HEPA filters?

A. I am not qualified to answer.

b) What was the impact of HEPA filters not being installed?

A. I am not qualified to answer.

c) What was the potential patient impact of the absence of HEPA filters?

A. I am not qualified to answer.

d) Do you recall there being agreement during the design and build stage, that HEPA filters would be omitted from Ward 2A/B? Please explain your answer.

A. I was not aware of any agreement.

e) What was done to resolve any HEPA filter issues?

A. I don't know.

f) What filters should have been installed at handover?

A. I don't know.

g) Who was responsible for providing HEPA filters and ensuring that they were installed during the build?

A. I would assume it was Multiplex.

h) Who signed off handover without HEPA filters being installed?

A. I don't know.

i) Were infection control doctors and nurses consulted? If so, who?

A. I don't know.

j) Why was handover signed off without HEPA filters?

A. I don't know.

101. Were HEPA filters missing from any other wards following handover?

A. I don't know.

a) Discuss how this was managed.

A. I don't know.

Chilled Beams & Thermal Wheels

102. Tell me about your understanding of the use of chilled beams in areas where immune compromised patients are treated:

A. I have no knowledge or understanding about the use of chilled beams.

103. Describe your understanding at the time of the cleaning regimes in place for chilled beams? If you were not involved, with the benefit of hindsight should you have been?

A. I was not involved and given my role at the time I would not expect to have been.

104. Can the witness recall any specific events in relation to chilled beams?

A. There were issues reported of water leaking onto floors and black spores visible on the surface.

For example:

a) Dripping chilled beams in critical care refer to **Estates Communications Bundle, document 63**.

A. Yes I was aware of this happening.

b) What did you understand about the situation, what was your involvement? Describe any action taken and by whom in response to the issue.

- A.** I can remember that my involvement would have been to make sure the domestic assistants were available to clean up any water on floors. There was also some black stuff leaking from the chilled beams, so I had to ensure that staff were on hand to deal with that also. I believe the black stuff may have been mould or similar.
- c)** Issues with dew point controls refer to **Estates Communications Bundle, document 65.**
- A.** I was not aware of issues with dew point controls.
- d)** Ward 2A cubicles 8-11 refer to **Estates Communications Bundle, document 106.**
- A.** I don't remember specific rooms/areas but there were issues in several areas.
- e)** Water samples being taken from chilled beams in Ward 6A refer to **IMT Bundle, document 73.**
- A.** I don't remember water samples being taken.
- f)** Leakage chilled beams Ward 6A refer to **Estates Communications Bundle, document 138.**
- A.** As above I remember several areas being affected but not specific ones.
- g)** Leakage chilled beams Ward 6A refer to **Estates Communications Bundle, document 139.**
- A.** As above.
- h)** Leakage chilled beams Ward 6A refer to **Estates Communications Bundle, document 142.**
- A.** As above.
- i)** Any other issues/ incidents not mentioned above.
- A.** None that I can remember.

For each event, please tell us:

- a) What was the issue?
- b) The impact on the hospital (include wards/areas) and its patients (if applicable)
- c) Who was involved?
- d) What was the escalation process?
- e) Were any external organisations approached to support and advise?
- f) If so, what was the advice?
- g) Was there opposing advice and by whom, and what was the advice?
- h) What remedial action was decided on and who made the decision?
- i) Was the issue resolved – consider any ongoing aftercare/support/monitoring?
- j) Any ongoing concerns witness had herself or others advised her of?
- k) Was there any documentation referenced during or created after the event. For example, an incident report?
- l) Did anyone sign off to say the work had been completed and issue resolved/area safe.

Write your answers above in the relevant section.

A. (No answers provided)

105. Tell me about your understanding of the use of thermal wheels in areas where immune compromised patients are treated:

A. I have no knowledge or understanding about thermal wheels.

106. Can the witness recall any specific events in relation to thermal wheels?

A. No.

- a) What was the issue?
- b) The impact on the hospital (include wards/areas) and its patients (if applicable)
- c) Who was involved?
- d) What was the escalation process?
- e) Were any external organisations approached to support and advise?
- f) If so, what was the advice?
- g) Was there opposing advice and by whom, and what was the advice?

- h) What remedial action was decided on and who made the decision?
- i) Was the issue resolved – consider any ongoing aftercare/support/monitoring;
- j) Any ongoing concerns witness had herself or others advised her of?
- k) Was there any documentation referenced during or created after the event.
For example, an incident report?
- l) Did anyone sign off to say the work had been completed and issue resolved/area safe.

Combined Heating and Power Unit

107. Describe the Combined Heating and Power Unit (CHP)

A. I have no understanding or knowledge about CHP.

a) What is the purpose of the CHP?

A. I don't know.

b) What condition was the CHP in at handover?

A. I don't know.

c) What information do you have to support your view on the CHP's condition?

A. I don't know.

108. Was commissioning and validation of the CHP carried out prior to handover?

A. I don't know.

a) What commissioning and validation documentation did you see, if any?

A. None.

Refer to **Estates Communications Bundle, document 11 page 90**

b) Who was responsible for ensuring that the commissioning and validation documentation was in place?

A. Multiplex.

c) Where were records of the commissioning and validation for the CHP kept?

A. I assume it should have been Zutec.

109. Who was responsible for ensuring that the CHP was operating correctly?

A. Multiplex.

110. If the CHP was not operating correctly, could this impact patients? If so, how?

Refer to **Estates Communications Bundle, document 12 page 101**

A. It could have impacted on the comfort and safety of patients, staff, and visitors.

a) What concerns, if any, did you raise about the CHP? If so, to whom, and what action was taken?

A. None.

b) Estates Communications Bundle, document 17:

a. What is meant by labs flushing?

A. I don't know.

b. What issues, if any, arose from this?

A. I don't know.

c. What is the importance of this?

A. I don't know.

d. Discuss your knowledge of the reference to a '40 year old system':

i) Explain what the 40 year system was:

A. I assume this was the heating system in the INS which was 40 years old, dating back to when the building was built.

ii) What was the issue(s)?

A. I don't know.

iii) What was the potential impact?

- A. The system would breakdown.
- iv) What actions, if any, were taken to address the issue(s)?
- A. I don't know.
- c) What was your understanding of how the CHP should be operated?
- A. I didn't have an understanding on the operation of the CHP.
- d) What were the cost considerations for the operation of the CHP? What considerations impacted on its operation?
- A. I don't know.
- e) How was the CHP system being operated by GGC?
- A. I don't know.
- f) What operational issues, if any, were encountered by GGC with the CHP?
Refer to **Estates Communications Bundle document 12**.
- A. I don't know.
- g) Refer to **Estates Communications Bundle document 16**:
- a) Have you seen this before?
- A. No.
- b) What is this document?
- A. I don't know.
- c) **Column 274 – 'all CHPs cut out'** – what does this mean? How would this have impacted patients?
- A. Supply of heating and water to wards would have been compromised or interrupted.
- d) Refer to **Estates Communications Bundle, document 36** what was the incident referred to? Were you involved? How was this matter resolved?
- A. I don't know I wasn't involved.

- h) Refer to **Estates Communications Bundle, documents 19 & 20:**
- a. Provide any information about any concerns you had in relation to the building temperature and power.
- A.** I was aware there were reports of high temperatures in some areas and low in others.
- b. What was your involvement?
- A.** None.
- c. Was this recorded on Zutec?
- A.** I don't know.
- d. What was the impact of these issues on patient migration?
- A.** I don't know if it was.
- e. Were matters resolved? If so, how? If not, what was the consequence?
- A.** I assume so.
- i) Refer to **Estates Communications Bundle, document 91, page 754:**
- a. Look at column 78 – what does debris within the AHUs mean?
- A.** I don't know.
- b. Is this something you would expect to see?
- A.** I am not qualified to answer.
- c. What was the impact on the AHUs?
- A.** I don't know.
- d. How was this matter resolved?
- A.** I don't know.
- j) What happened in respect of Zurich?
- A.** I don't know.

k) Refer to Estates Communications Bundle document 113:

a) What is this?

A. Final defects list.

b) Why was it issued in 2017 and not earlier?

A. I assume because it was the end of the two-year defects phase.

c) What was the consequence of this?

A. I don't know.

d) On what basis did Multiplex carry out the work?

A. I don't know.

l) Refer to Estates Communications Bundle, document 135:

a) Please explain what this email was about.

A. I don't know.

b) Was the money released or not?

A. I don't know.

Water Guidance and Obligations

m) What guidance applies to water? How did you/others ensure that guidance was complied with? What contractual documents, if any, would you consult to ensure guidance was complied with?

A. SHTMs and HTMs are the guidance documents for all buildings I do not know which were current at time of handover as it was not my remit.

n) Who was responsible for ensuring a safe water supply following handover?

A. The appointed persons responsible as per the Board's Water safety Policy.

- o) What water safety training was provided to all maintenance staff, estates officers and contractors?
A. Training was provided but I do not know the detail.
- p) What was your knowledge and understanding of Health and Safety regulations on control of legionella at the time?
A. In 2015 none.
- q) What legionella training was provided to all maintenance staff, estate officers and contractors?
A. I don't know.
- r) What water borne pathogens (other than legionella) training was provided to all maintenance staff, estate officers and contractors?
A. I don't know.
- s) Who was the Dutyholder?
A. I don't know.
- t) Were you aware of obligations to appoint an authorised person or the like to discharge water supply safety? If so, who was appointed? When, for what period? If not, why not?
A. I was not aware at the time as it was not my area of responsibility.
- u) Commissioning of water system prior to handover/ patient migration to QEUH:
a) Requirements
A. I don't know.
- b) Who was responsible for this?
A. Estates Manager with the delegated responsibility.
- c) What checks were carried out to ensure that the water system had been commissioned. Refer to **Estates Communications Bundle, document 132.**
A. I don't know.

- d) Was SEPA/ the Water Board involved? Describe their role and involvement.
A. I don't know.
- e) Which teams (such as infection control) were involved in the water system sign off, who would have signed it off on behalf of those teams?
A. I don't know.
- f) Were L8 testing requirements complied with?
A. I don't know.
- g) Were there any legionella concerns at handover? Is so, what was done to deal with these?
A. I don't know.
- h) What concerns, if any, did you have about water sitting in the system before the hospital opened?
A. I didn't have any concerns as it was outwith my knowledge and experience.
- i) Were you aware of any issues with the testing of the water system?
A. Not at handover.
- j) What was your understanding at the time of the SHTM guidance, particularly SHTM 2027 and SHTM 04-01, in respect of water?
A. Nothing at the time.
- k) How compliant was the QEUH/ RHC water system with SHTM 2027 and SHTM 04-01 at the date of handover – if not, what was outstanding? Who was responsible to ensure that the water system complied with SHTM guidance? What team was in place to regulate compliance? If so, please explain your knowledge, understanding and role within that team:
A. I have no knowledge or understanding of the compliance of the water system to the SHTMs at handover.

v) Was a pre-occupation water test done prior to occupation? Refer to **Estates Communications Bundle, documents 14, 14.1, 14.2:**

A. I don't know.

a) Who carried this out?

A. I don't know.

b) If this was not done, should it have been done and why?

A. If it was a requirement in adherence to the SHTMS then it should have been done.

c) Consequences of not doing it.

A. Risk of water quality being below acceptable standards.

d) What risks assessments were carried out pre-occupation in respect of the water system? If these were not done, should they have been? What were the consequences? What further action did you take?

A. I don't know, not my remit.

111. What was the post occupation water testing regime at QEUH?

a) Was carried this out?

A. I don't know.

b) Who carried out testing?

A. I don't know.

c) Your involvement with the testing?

A. None.

d) How frequent was testing?

A. I don't know.

e) Did this comply with L8 and SHTM 04-01 guidance? If not, why not?

A. I don't know.

- f) What happened to the results?
A. I don't know.
- g) Your role in connection with the results of water testing?
A. None.
- h) Where were the results stored?
A. I don't know.
- i) What action was taken in response to results?
A. I don't know.
- j) Was there an escalation process? How was non-compliance managed?
A. I don't know.
- k) We understand that there were positive legionella results in Ward 2A in around June 2015. Were you aware of this?
A. No.
- l) What concerns did you have about the positive legionella results?
A. I didn't know.
- m) What action did you take in response to this?
A. I was not involved.
- n) Were you aware of legionella being found in any other areas of the hospital? If so, where, and what action was taken?
A. No.
- o) In around June 2015 Dr Christine Peters requested the risk assessment for waterborne infection in the QEUH from Estates, the Project Team and Mary Anne Kane. Were you asked to provide this information? If so, did you provide it? If not, why not? why?

- A.** I did not hold this information and was not asked to provide I did not work in Estates at this time.
- p) How many positive tests, if any, came from Ward 4B? Could you recall how many positive tests at the time?
- A.** I don't know.

Water - Commissioning and Validation (C&V)

- 112.** What commissioning and validation documentation did you see before handover in 2015 – if not, who would have had sight of this?
- A.** I did not see any commissioning or validation documentation before handover. I would have thought the Operational Estates team at QEUH would have had sight of this if they were to take on the Maintenance of it.
- 113.** Where is this commissioning and validation documentation (“C&V”) stored generally on the hospital system?
- A.** I would have thought it would have been stored on Zutec.
- 114.** What is the purpose of C&V?
- A.** To ensure all equipment and systems are operating properly and in accordance with the contract and all statutory and mandatory requirements.
- 115.** What are the consequences of it not being carried out?
- A.** Risk of equipment and system failures impacting on the health and safety of patients staff and visitors.
- 116.** How many records were kept of the cleaning and testing regime? Where were the records kept and what was the retention policy? What concerns, if any, did you have about record keeping and retention?
- A.** I was not involved in the cleaning and testing regime or the record keeping so I would not have had any concerns.

117. What concerns, if any, would you have If the water system were to have no C&V before handover in 2015? Why were you concerned?

A. I was not aware that the water system had no C&V at handover in 2015.

118. Describe the same in respect of verification and the cold-water supply system.

A. Same answer as above.

119. What C&V of the water system was carried out post-handover?

A. I don't know.

a) Who was responsible?

A. The Estates team.

b) How was the C&V recorded?

A. I don't know.

c) Any concerns arising from post-handover C&V? If so, why did these concerns arise?

A. I was not involved so had no concerns.

Water System – General

120. What testing and maintenance protocols and regimes were in place? What should have been in place. If it wasn't, why wasn't it? What did you do about that?

A. I was not aware of what was in place or what should have been.

121. What concerns, if any, did you have about the temperature and movement within the water system? How was this recorded and measured? Who was responsible for this? If Schnieder did these were these reports forwarded to yourself or other GGC employees? How were these reports responded to,

what did they tell you? How were issues flagged in these reports dealt with/ resolved?

A. As above I was not involved in this.

122. What concerns, if any, did you have about testing and stagnant water being in the system following testing? Please describe and provide information on how this was dealt with?

A. I was not involved in this.

123. What concerns, if any, did you have about dead ends/ legs in the system? Please describe and provide information on how this was dealt with.

A. I was not involved in this.

124. To what extent could the water system in QEUH/RHC have been more comprehensive?

A. I am not qualified to answer.

125. To what extent would have the water system have achieved the system objectives if operated correctly? In your answer set out what the system objectives were and how these were/ could have been met.

A. I don't know.

126. Describe any ward/area specific water systems used?

a) Detail the individual ward water specification?

b) What were/ are your thoughts about this?

c) Why, if applicable, did certain wards have different water systems?

d) Was there a standard protocol for sanitising water systems?

A. I don't know.

127. To what extent were the standard protocols for sanitising water systems used on a system of the size and complexity of this one?

A. I don't know.

128. Were consultants brought in to advise on sterilisation of the water systems?

a) If so, who were they?

- b) Had you worked with them before?
 - c) Describe and comment on the methodology used.
 - d) Who decided to accept it or not.
 - e) Did it work?
 - f) What paperwork or records were kept in relation to their installation, maintenance, or flushing?
 - g) How were these kept on paper or electronically?
 - h) What equipment for recording work was used by employees doing day to day tasks?
 - i) How was that then reported back and checked?
- A.** I was not involved in any of this and am not qualified to answer

112. What is your understanding of the GGC protocol for dealing with water testing results? E.g. escalation process, reporting obligations etc.

- A.** There is an escalation process, it would depend on whoever requested the samples as it would be their responsibility for escalating. It would normally be estates so they would escalate to their management. Microbiology would also be made aware. There was a detailed process in place however I can't remember the details at this time.

Water Maintenance

Refer to Estates Communications Bundle, document 10.

113. Explain the cleaning and maintenance of the water system, taps, drains, shower heads etc. When doing so consider:

- a) What is the cleaning regime?

A. The cleaning regime for water systems, taps and drains, shower heads were generally detailed in Standard Operating Practices (SOPS) for Estates and Domestic Staff.

- b) What is the importance of this?

A. To ensure the provision of a safe water supply and prevent contamination.

- c) What responsibilities did you have a result of this?
- A.** In January 2018 when I moved to the GM post at QEUH I assumed responsibility for the operational Estates and Facilities Teams which included ensuring all SOPs were adhered to. which included.
- d) What did you do to ensure these responsibilities were executed?
- A.** Though the line management structure and team briefs. Any new or change to standard practices which arose from the IMTs were actioned as soon as possible. New guidance was issued around the cleaning of drains to domestic and estates staff and also guidance around cleaning the point of use filters on taps which we had no previous experience.
- e) What issues, if any, did you have fulfilling these responsibilities?
- A.** we had to ensure new SOPs were developed with colleagues from Infection Control and that they were circulated to all domestic and Estates staff and provide appropriate training. New concerns were being raised regarding the drainpipe work and about its suitability. We had to react quickly to deal with issues as they arose.
- f) Describe the concerns raised about the drain pipework. Who raised these concerns? What was the potential patient impact?
- A.** I think it was through one of the IMT groups -p possibly Theresa Inkster – she thought the design of the drains could potentially be causing splashback and possible contamination.
- g) Who did you work with from Infection Control to develop the SOPs?
- A.** There were a number of us. Domestic Services Manager Pat Coyne and an infection control nurse for the children’s hospital Susie Dodds: we worked with her to develop an sop in term of how to clean the drains. It was also from estates perspective, normally the drains wouldn’t have been cleaned lower than the plug so we were working with Susie Dodds to do that.

- h) What concerns if any were raised about cleaning practices? **IMT bundle, document 23**. Detail these concerns. Refer to **NHS GGC SBAR Bundle, page 112** when providing your answer.
- A.** Deep cleaning of drains had not been standard practice until these issues arose so having to find solutions and disseminate the information to all the relevant staff groups as quickly as possible was challenging and concerning.
- i) Why had deep cleaning of the drains not been standard practice until these issues arose? Should it have been?
- A.** It was an industry norm. Drains at the point below the plug hole were not routinely cleaned, the thinking was that this would disturb any existing bacteria which could possibly be harmful.
- j) What, if any, matters regarding the maintenance of the water system were escalated? If so, were they escalated BICC or AICC?
- A.** I can't remember exactly which groups the matters arising were reported to but the senior executives of the Borad were aware of the situation.
- k) What is dosing?
- A.** Dosing was when a chemical was added to the water system to remove the bacteria.
- l) Why was chlorine dioxide used in the cleaning regime. **IMT bundle, document 30**.
- A.** This chemical was approved for use via the IMT as it was suitable for use in this environment and would deliver the desired results.
- m) What were the desired results? Did the use of chlorine dioxide achieve the desired results?
- A.** To reduce the organisms being found in the water supply to a safe level.
- n) Clearing of drains in June 2018 following water incident -relevance and purpose. **IMT bundle document 27**. Did this resolve the issue? **IMT bundle, document 38** why was expert advice required?

A. Expert advice was sought as cleaning of drains in this manner was not standard practice and whatever methodology was used needed to avoid contamination of the surrounding areas, there were discussions around where agitation e.g. using brushes etc was required, depending on which method was used would inform whether the bed room/ bed space needed to be empty and what leave of room cleaning was required afterwards.

o) From whom was expert advice sought?

A. There were a number of water specialist brought in – they would have been members of the water technical group or the IMTs but I can't remember who they were now.

p) What happened in response to concerns about on-going maintenance and cleaning? What further action did you take personally?

A. As with all actions from the IMT I worked with Estates and Facilities colleagues to implement whatever resources were required to complete. We sought external expert advice as this was an new issue. Domestic hours were increased to support the additional work and they worked closely with the clinical staff to minimise any impact on the availability of bed spaces.

q) What further steps could have been undertaken?

A. I think we did all we could in the circumstances.

114. To what extent were you involved in the decision to proceed with a drain survey? If so, can you explain your role in this decision? What was the purpose of the drain survey?

A. I supported the decision to proceed with a drain survey but I could not inform the decision as I was unqualified to do so. The drain survey was to try and establish why the contamination was occurring.

115. Why did you support the decision?

A. Because it was part of the IMT – they were experts and qualified people who said this was the correct action to take so I supported this decision.

- 116.** What were the results of the drain survey?
- A.** I don't remember the details but there were issues found.
- 117.** What was found in the water tanks; what if anything significant was found in the water tanks? To what extent would anything found result in a wider issue of water contamination?
- A.** I can only recall that there was contamination in the water tanks not what the nature of it was.
- 118.** Concerns have been raised regarding the hospital design and the increased risk of water contamination; what is your view on the increased risk of water contamination in relation to the following:
- a) Having a single barrier approach water system, resulting in fluctuating water temperatures
- A.** I am not qualified to answer this.
- b) Ensuite bathrooms attached to each room.
- A.** Again, I am not an expert but if en-suite bathrooms were a known risk for water contamination they would not have been part of the design.
- c) Overprovision of water outlets leading to sink removals
- A.** Every sink in place was there because it was requested during the design process usually due from an infection control perspective, so it was surprising they had to be removed for infection control purposes.
- d) How involved were you in the decision to use point of use filters?
- A.** I supported the decision through the IMT process although not qualified to comment on their efficacy.
- e) Who was responsible for the effective management of and installation of the point of use filters?
- A.** An expert 3rd party company provided, installed and replaced the water filters. Estates staff managed the process and reported any issue e.g. if the filter was moved or damaged and arranged for replacement.

f) Did the point of use filters meet the water regulation requirements? Did they have an effective gap between the water level and the filter to prevent contamination?

A. I understood that the water regulation requirements were met.

g) Why were the point of use filters not introduced earlier?

A. I don't remember.

h) How often were you aware of the filters being changed? Were the manufacturer's recommendations followed?

A. I think the filters were initially to remain in place for 60 days as per the manufacturer's guidance before changing but this was reduced to 30 days.

i) How involved were you in decisions relating to water testing?

A. I attended the IMTs and also the Water Safety Group and supported the recommendations made by those experienced and qualified in their fields.

j) If not, who was responsible for these?

A. As above.

k) What do you understand about management of water testing? What do you understand about decisions on when water testing should be undertaken?

A. I knew only what I learned at the IMTs and the Water Safety Group.

119. In her statement Dr Teresa Inkster states '*there was a direction from Mary Anne Kane, who was at senior director level, not to give microbiologists access to water testing results*':

a) What is your reaction to this statement?

A. I was not aware of this and I don't know on what basis Mary Anne would have given this direction.

- b) Why did estates direct that microbiologists should not have access to water testing results?
A. I do not know.
- c) Have you ever been advised not to contact someone/ not to provide water testing information? If so, when? By whom? and why?
A. No.
- d) Have you ever refused, or directed others to refuse to provide water testing information requested by microbiologists or infection control? If so, why? Provide as much information for your rationale and the consequences of withholding information.
A. No.
- e) Provide information on how you dealt with requests for water testing results from microbiologists and infection control - was all the information requested provided? If so, what was provided? If not, why was paperwork not provided?
A. I was never asked for water testing results.
- f) What legal and regulation requirements must be complied with to carry out regular water testing?
A. I don't know.
- g) What situations would water testing not be carried out?
A. I don't know.
- h) What are the consequences of regular water testing being carried out?
A. Provide assurance or highlight any issues.
- i) Dr Christine Peters tells us that in April 2016 water testing results or ARU2 were not available. To what extent is this accurate? If it is accurate, why were results not available, and should they have been?
A. I don't know I was not involved with the water issues at this time.

- j) Both Dr Penelope Redding and [REDACTED] tell us that they asked for information which was not forthcoming. To what extent do you agree with their recollection of events? If you agree, why was testing information not provided to clinical staff, microbiologists, and infection control?
- A. (No answer provided)
- k) Who was responsible for dealing with these requests for information?
- A. I don't know who was responsible at that time.
- l) What was your role in dealing with these requests for information?
- A. At that time, I had no input into Estates matters.
- m) How were these requests for information managed by your department? What steps did you take?
- A. I don't know I was not involved.
- n) What concerns, if any, did you have with how matters were being handled? If so, what steps did you take in response to these concerns?
- A. I was not involved.

DMA Canyon Reports

120. Refer to Bundle 6 – Miscellaneous documents – documents 29 and 30.

- a) Was this the DMA Canyon 2015 report (**document 29**)?
- A. Yes.
- b) Who ordered this?
- A. I don't know.
- c) Who signed off on payment?
- A. I don't know.

- d) How was this signed off or payment processed?
A. I don't know.
- e) Who was the report sent to?
A. I don't know.
- f) When did you first become aware of the DMA Canyon 2015 report?
A. I don't remember, it may have been 2018.
- g) What was the purpose of the report?
A. To report on the water safety in the new buildings.
- h) Who had the report?
A. I don't know.
- i) The Inquiry's investigations indicate that the work and actions recommended in the DMA Canyon 2015 report were largely not actioned by the time of DMA Canyon 2018 report. Were you aware of this at the time? Do you have any views?
A. I didn't find out about the 2015 report at the time – it wasn't until the 2018 report came that I heard about it. I do think that the recommendations in the 2015 report should have been carried out but I don't know why this wasn't done at the time.
- j) When Were DMA Canyon present at QEUH/RHC site between 2015 and 2018?
A. I don't know.
- k) What, if anything, did DMA Canyon say about the report during their time on site between 2015 and 2018? If so, when and what was mentioned?
A. I don't know.
- l) When were the works suggested in the 2015 report actioned?
A. I don't know.

- m) What is your own view of the findings of the 2015 report? Do you agree with it or not? Explain your rationale.
- A.** I am not qualified to answer.
- n) DMA Canyon prepared another report in 2017 (**Bundle 6 – Miscellaneous documents, document 30**). What works, if any, recommended in the 2015 were carried out prior to the 2017 report?
- A.** I don't know.
- o) What happened with DMA Canyon in 2017 – tell me as much detail as possible. Who dealt with matters, what was your role and when did you become involved? Who sanctioned the works in 2017 report?
- A.** I don't know as I was not based at the QEUH at this time.
- p) What was the impact, if any, of the failure to implement the 2015 recommendations on patient safety?
- A.** I am not qualified to answer.
- q) We understand that Infection Control were only advised about the 2015 DMA Canyon Report in 2018. Why were they not told sooner? What happened?
- A.** I don't know.
- r) Whose responsibility was it to be satisfied that the risk assessment had been carried out? Explain how you were satisfied that the appropriate risk assessment had been carried out prior to patient migration to QEUH.
- A.** I do not know who was responsible and at migration I had no involvement with Estates matters.

- s) Dr Christine Peters also states that she asked for *'asked for risk assessments for waterborne infection in the QEUH and they were not forthcoming from the Project Management Team, Estates, or Mary Anne Kane.'*

Do you recall being asked for this information? Did you provide the information requested? If so when and by what means? If not why not?

- A. I was not asked for this information, and I did not have access to it.

February 2016 – Sinks – Ward 2A

121. In early 2016 a PAG took place regarding the *'Contamination of aseptic pharmacy unit at RHC water supply with Cupriavidus pauculus'* a subsequent investigation linked the infection to sink within the Aseptic Pharmacy Unit:

- a) What was your understanding of this incident?

A. None.

- b) What was your involvement with this matter?

A. None.

- c) Do you recall anyone taking action, if so what, in relation to this incident?

A. I was not aware of this incident and was not based at QEUH at this time.

- d) Do you recall any further issues in relation to sinks? If so please discuss, confirming your involvement and action taken in response to any issues.

A. No.

Water Incident 2018

122. Walk through the concerns as they emerged in 2017 into 2018 in respect of the water issues. Initially focus on your recollection of events as they happened. In relation to the concerns:

- a) When did the concern arise?
- b) Nature of concern?
- c) Possible cause of concern?
- d) Action taken in response to concern.
- e) What actions were taken in response to concern?
- f) How sufficient were these actions?

A. When I was moved to the QEUH in January 2018 concerns regarding the water issues had been raised. I became involved when the IMTs had been established. When any actions were raised, I worked with colleagues to complete them.

123. The following IMTs have been highlighted to assist with this. If you are also able to respond to the questions raised in respect of the IMTs below when considering your recollection of events.

a) Refer to **IMT bundle, document 13:**

Cupriavidus bacteraemia in ward 2A at the end of January 2018

(i) What do you recall of this incident/ issue?

A. Only the information contained in the IMT minutes.

(ii) When did it begin?

A. I don't know.

(iii) How did it come to light? Who first reported the incident?

A. I don't know.

(iv) What was your involvement?

A. When I joined the IMT around Jan 2018, I took up ensuring actions for Estates and Facilities were completed.

(v) What enquiries, if any, did you make about replacing all the taps within Ward 2A? What did you do? Did you discuss this with anyone else? What was the outcome?

A. I did not make any enquiries regarding replacing taps or discuss it with anyone else.

b) Refer to **IMT bundle, document 16:**

Multiple positive results Cupriavidus and now Stenotrophomonas, Dr Inkster states that the test results are from taps which have not been replaced in rooms 15 and 26. Shower head in room 12. At that IMT no cause for patient concern.

(i) What was done as result of this meeting and why?

A. Mobile hand washing units were to be installed to stop use of sinks until contamination was stopped.

c) Refer to **IMT bundle, document 17:**

(i) Your involvement and what measures were taken?

A. Attending IMT and working with colleagues to complete actions.

(ii) Did you discuss this with David Loudon?

A. No, David Loudon had left the Board by this time.

(iii) What do you recall about how matters were managed?

A. It was a very intense period and there was a lot of tension and activity. We were dealing with a situation where we were trying to find a cause and a solution at the time. I think everyone was trying their best but there were some tensions.

(iv) How were costs managed?

A. I think special funding was allocated.

(v) Who carried out the work?

A. Estates and 3rd party contractors.

- (vi) How was this reported and managed?
A. Though the Water Safety Group.
- (vii) How involved were you in the decision to use bottled water for handwashing and drinking? Discuss your knowledge and involvement surrounding this matter.
A. I was a member of the IMT which recommended this action and supported it but based on advice from those with knowledge and expertise.
- d) Refer to **IMT bundle, document 18:**
- (i) As above, what was the outcome of this IMT, your involvement, actions and how you followed it up.
A. As before I any actions assigned to me or Estates and Facilities were carried out.
- (ii) What concerns, if any, did you have about *Stenotrophomonas* impacting patient safety at this point?
A. Everyone was concerned for patient safety at this point.
- (iii) Refer to **Estates Communications Bundle, document 121**; how does this link to the IMT? Was this as a result of what was being discussed? What happened following this email?
A. I don't know.
- e) Refer to **IMT bundle, document 19:**
- (i) As above - the fitting of water filter – discuss – why were these filters not on the taps initially?
A. I don't know.
- (ii) What knowledge do you have of dosing the system with silver nitrate? How did this discussion come about?
A. I have no knowledge about silver nitrate dosing.

- f)** Refer to **IMT bundle, document 20:**
- (i) This was scored HAIT red – why?
- A.** The risks in the areas assessed were deemed to be high risk.
- (ii) What were the concerns?
- A.** The contamination did not appear to be eliminated and also the risk to patients' health.
- (iii) To what extent do you recall any request for historical water results during the commissioning of QEUH/RHC? If so, what did you find out as a result? What concerns, if any, did the historical water results raise?
- A.** I don't remember requests for historical water results.
- 124.** Refer to **Estates Communications Bundle, documents 125 and 133** what was the relevance of these document to the water incident?
- A.** I assume to ascertain if there was link between drain blockages and the contamination.
- 125.** Describe any other issues or matters arising from the water incident:
- A.** I can't recall any.

Taps

- 126.** The use of Horne Taps was discussed in the IMTs relative to the water incident. **IMT Bundle.**
- Please confirm:
- a) Your understanding of use of Horne taps?
- A.** These taps half flow straighteners to reduce the amount of splashing.
- b) Who authorised the use of Horne taps?
- A.** There was a tap selection group during the design development process on the Project. I was not a member of this group, but I understand it contained clinical and infection control representatives.

- c) Why were Horne taps selected?
A. I don't know the criteria used to select the Horne Tap as I was not involved.
- d) How involved were you in the decision to use Horne Taps – **NSS SBAR Bundle, document 1** - please discuss your involvement and understanding?
A. I was not involved.
- e) What is your recollection of the use of Horne taps?
A. There seemed to be an issue with the flow straighteners being the source of bacterial growth.
- f) At the time, were you aware of the incidents in Northern Ireland with Horne Taps?
A. No I wasn't.
- g) If so, why did you decided to proceed with the installation of these throughout QEUH/RCH? What was the deciding factor?
A. I was not involved in the selection process.
- h) Discuss **Estates Communications Bundle, document 121** explain the situation and your involvement?
A. I was not involved in the discussions regarding the Horne taps unless it was covered in a Water Safety Group meeting which I attended.
- i) Refer to **Estates Communications Bundle, documents 127 and 128** explain the situation and your involvement?
A. As above I did not have the knowledge or expertise to contribute to the tap selection.
- j) Flow straighteners – when did you become aware that they were non-compliant with SHTM 2027 and SHTM 04-01 guidance? Were they non-compliant at handover? **IMT Bundle, document 27.**
A. I don't know.

k) How involved were you with testing in high risk areas?

A. I wasn't involved.

l) What if any, new taps were replaced in January 2019? If so, why were they replaced? Was the replacement related to the use of chlorine dioxide? **IMT Bundle, documents 29 & 30.**

A. I don't remember.

Water Technical Group

Refer to Water Technical Group Bundle.

127. The water technical group (WTG) sat between 2018 and 2019. **Estates Communications Bundle, page 938:**

a) What is the purpose of WTG?

A. To address the water safety issues arising from the hospitals.

b) What issue/ event prompted the setting up of the WTG?

A. The water contamination issues in NHC.

c) What was your involvement with the WTG?

A. I was a member of the group while I was General Manager at QEUH.

d) Tell me about specific work which you carried out in respect of your involvement with WTG, why did you carry out this work, what was the impact? **Estates Communications Bundle, page 938 & 939**

A. I did not carry out any specific work in respect of my membership of this group as I did not have the knowledge or expertise to do so.

e) Was this within your remit within estates?

A. As above.

f) Who was in the WTG, what were their names and their roles within WTG?

- A.** There were water experts from various organisations as well as microbiologists and infection control. Senior Managers from Estates and Facilities were also members, I can't remember all who participated.
- g) Why was the WTG set up?
- A.** To address the water safety issues rising from the hospital.
- h) What qualifications were required in order to be chair of WTG?
- A.** I don't remember from the terms of reference for the group that there were any qualification requirements for the chair.
- i) Discuss focus of WTG – what was the purpose – why was WTG required – what issues came to light as a result and what action was taken. What were the concerns of the WTG and how did this impact on patients? Refer to **Estates Communications Bundle, document 127, 128, 129 and 130** to assist and confirm how these relate to issues before WTG.
- A.** The focus of the group was to find solutions for the issues arising in the water system, including water dosing, drain cleaning and taps.
- j) How did clinical staff and estates get along at these meetings?
- A.** To my recollection there was a lot of expert knowledge around the table, some disagreements on the correct solutions but generally speaking there was a willingness to solve the issues.
- k) Refer to **IMT Bundle documents 39 onward, and any other IMTs as a result of WTG**. Go through and discuss issues – impact of patients – what was cause of these issues?
- A.** The WTG water experts had advised there was not a need for monthly water testing, however at the IMT meeting the representatives from HPS and HFS said they advised the water should be tested monthly. The group agreed that the water would be tested and that the results would inform the frequency going forward. Professor Gibson wanted assurance that all members of the WTG had the appropriate knowledge and expertise to give advice on these matters. I don't know if this assurance was given to Professor Gibson.

- l) Refer to **Estates Communications Bundle, document 129**, why were NSS involved, guidance issued, actions taken?
 - A.** My understanding was that NSS were the experts in terms of sourcing and procuring equipment suitable for NHS properties.

- m) Refer to **Estates Communications Bundle, document 131**, explain the background, your involvement, the purpose, guidance issued, actions taken.
 - A.** My involvement was limited to membership of the IMT and WTG I was not there as an expert but as an operational GM to coordinate and implement the recommendations made by each group.

Board Water Group

128. Refer to the **Water Safety Group Bundle:**

- a) What is the purpose of the Water Safety Group (WSG)?
 - A.** To provide assurance of water safety across all NHSGGC properties.

- b) Why was the WSG set up?
 - A.** To have an overarching group for water safety.

- c) What was your involvement with the WSG?
 - A.** I attended my first Board WSG in December 2018, prior to that I was a member of Sector or Site WSGs which reported into the Board's WSG.

- a) Who was in the WSG, what were their names and their roles within WSG?
 - A.** The names of members are noted in the minutes and would vary as roles and personnel changed. The Group was jointly chaired by Senior managers from Estates and Facilities and Senior Infection Control Managers, there was representation from Health & Safety and all sectors within the Board, as well as microbiology and public health and the Board's authorising engineer for Water.

- b) What qualifications were required in order to be in the WSG?
- A.** Membership was based on job role held and qualifications were based on job requirements.
- c) Look through the **Water Safety Group Bundle** – explain any issues discussed, your involvement and any action taken by you, and why, in response to issues raised at the WSG meeting?
- A.** Issues regarding water testing, chilled water dispensers, ice machines were all discussed and actions taken, as the responsible persons for water safety sat with Estates the majority of actions were carried out by them and associated reports were submitted by them.
- d) Was this within your remit within Estates?
- A.** My membership of the group was due to my role as General Manager for Estates and Facilities.
- e) How did clinical staff and estates get along at these meetings?
- A.** My recollection is there was a good working relationship.

Review of Issues Relating to Hospital Water Systems' Risk Assessment 26th September 2018

Refer to Estates Communications Bundle, document 134.

- 129.** Who commissioned/ordered the report? What issues prompted the instruction of this report?
- A.** I have not seen this report before and do not know who commissioned it or on what basis.
- 130.** What concerns, if any, did you have about the water system?
- A.** My concerns were those raised in the IMT meetings.

- 131.** When did these concerns arise? Was anyone else in estates concerned?
Why?
- A.** When I moved to my post as GM at QEUH in Jan 2018.
- 132.** What was the impact on patients?
- A.** Patient infections/harm and disruption to care.
- 133.** What concerns, if any, did you raise with anyone?
- A.** As noted before the concerns were already raised before I became involved.
- 134.** What happened in response to the report?
- A.** I don't know, I didn't see the report.
- 135.** What matters if any, arising from this report did you escalate? If so, to who, and if not, why not?
- A.** I didn't escalate anything.
- 136.** What works, if any, were carried out in response to any findings in this report?
- A.** I don't know.

Tap Water- Ward 3C – 2019.

- 137.** What were the issues in relation to tap water?
- A.** I don't remember.
- 138.** What was your understanding and involvement with these issues?
- A.** I don't remember being involved at all.
- 139.** What action was taken?
- A.** I don't know.
- 140.** How were matters resolved?
- A.** I don't know.

Other Water Incidents

141. What other specific events do you recall in relation to water? For example, do you have any recollection of debris in the water tanks? If so, please explain:

- a) What the issue was.
- b) The impact on the hospital (include wards/areas) and its patients (if applicable)
- c) Who was involved.
- d) What was escalation process.
- e) Were any external organisations approached to support and advise.
- f) Detail role and function of HPS and HFS, advise if they were involved and any reports prepared by them.
- g) Detail advice given from external organisations; what was the advice, did you agree with it, how was any advice managed/ communicated with others in your team and your superiors.
- h) Was there opposing advice and by whom.
- i) What remedial action was decided on and who made the decision.
- j) Was the issue resolved – consider any ongoing aftercare/support/monitoring.
- k) Detail any ongoing concerns you had, or which you were made aware of.
- l) Was there any documentation referenced during or created after the event? i.e. an SBAR/ minutes from a meeting – use the bundle provided to assist.
- m) Did anyone sign off to say the work had been completed and issue resolved/area safe?

A. I was not involved in any other water incidents.

142. What were the NHS procedures for raising concerns about water or water infections?

a) How were these dealt with by you?

A. If anyone had approached me directly with concerns about water or water infections that were not already known I would have escalated to the Estates Manager responsible and given the sensitivity around water at the QEUH I would have alerted Mary Anne Kane and Infection Control. All Health and Safety concerns were formally reported via the DATIX system.

- b) How was it confirmed they had been dealt with?
A. I would confirm my actions taken and ensure a DATIX was raised.
- c) Do you recall specific ones and in particular any that gave you concern?
A. No.

143. What was your understanding at handover in January 2015 of water guidance and regulations specifically SHTM guidance (at the time being SHTM 27 and 40 and now being SHTM04-01) and L8 guidance?

- a) What is the purpose of the guidance?
A. I was unaware of what the SHTM guidance was at handover.
- b) What are the consequences of non-compliance with the guidance?
A. Compromise water safety.
- c) To what extent was the water system in compliance with the guidance at handover?
A. I don't know.
- d) How satisfied were you of the compliance?
A. I wasn't involved.
- e) What documentation did you see that satisfied you? Where was that documentation stored? How often were you able to access the stored documentation?
A. I didn't see any documentation.
- f) Was the water systems non-compliance discussed with any colleagues? What further action, if any, was taken to ensure that the water system complied with the guidance?
A. I was not involved.

Ventilation – Guidance and Obligations

144. What was your understanding at handover in January 2015 of water guidance and regulations specifically SHTM guidance?

a) What is the purpose of the guidance?

A. I didn't have any understanding other than compliance with the SHTM would provide safe water assurance.

b) What are the consequences of non-compliance with the guidance?

A. Water maybe unsafe.

c) To what extent was the ventilation system in compliance with the guidance at handover?

A. I don't know I was not involved as it was out with my remit.

d) How satisfied were you of the compliance?

A. I was not involved.

e) What documentation did you see that satisfied you? Where was that documentation stored? How often were you able to access the stored documentation?

A. I was not involved.

f) Was this matter escalated? If so, to whom? Was the ventilation systems non-compliance discussed with any colleagues? What further action, if any, was taken to ensure that the ventilation system complied with the guidance? Was there a team in place to regulate compliance, if so, please explain your knowledge, understanding and role within that team:

A. I was not involved.

g) Tell me about your role and involvement in the Specialist Ventilation Group? Explain the purpose of the Specialist Ventilation Group?

A. I had no involvement.

Ventilation - Commissioning and Validation

145. Describe the commissioning and validation process in respect of the ventilation system in the QEUH/RHC?

A. I don't know, I was not involved.

a) Who was this carried out by?

A. I don't know.

b) Who signed off?

A. I don't know.

146. To what extent, if any, did infection control have input prior to sign off? **Refer to Estates Communications Bundle, document 22.** For reference in this email Christine Peter's states that Craig (Williams) has not seen anything in writing about the ventilation.

A. I don't know.

a) If so, who did have input?

A. I don't know.

b) When should this have been done?

A. I don't know.

c) Were you involved?

A. No.

d) Were you aware of any concerns raised at any point about the ventilation system and its commissioning?

A. No.

e) What commissioning and validation documentation did you see before handover in 2015?

A. I don't remember seeing any.

- f) If not, who would have seen commissioning and validation documentation?
A. I would suggest but I don't know: Board's Technical Advisors, Curry and Brown, Capita, Peter Moir, David Loudon, Ian Powrie.
- g) What concerns, if any, would you have if the ventilation system was not commissioned? Likewise what concern, if any, would you have if they ventilation system was not validated?
A. I was not involved in the commissioning or validation of the ventilation system, and I do not have the knowledge or expertise to answer that.
- 147.** Discuss the concerns about Ward 4B. Refer **Estate Communications Bundle, document 30** - What was the purpose of the SBAR?
Refer to **Estates Communications Bundle, documents 30, 31, 32** to assist with your answer.
A. I was not involved in any discussions regarding Ward 4B.
- 148.** How does commissioning differ to validation?
A. Commissioning is a process that ensures facilities, systems and equipment are designed and installed as specified and function as expected. A validation process confirms the parameters within which it works.
- 149.** Was there a validation document to accompany this for handover?
A. I don't know.
- 150.** What is the purpose of Commissioning and Validation (C&V)?
A. As per my answer at 147.
- 151.** What are the consequences of it not being carried out? What concerns did you have, if any, that the QEUH/RHC had not been signed off without C&V?
A. The systems/equipment may not have been safe to operate. I was not involved in the C&V.

152. What concerns, if any, would you have if there were no C&V of the ventilation system?
- A. That it wouldn't work correctly, and people were at risk.
153. Why would no C&V of the ventilation system give rise to these specific concerns?
- A. Because there was no assurance for the contrary.
154. In her statement, Dr Teresa Inkster discusses concerns regarding Ward 4B:
- a) What commissioning and validation data did you have in June and July 2015?
- A. I did not have any.
- b) Did you provide the commissioning and validation data to Dr Teresa Inkster?
- A. No.
- c) What testing and maintenance protocols and regimes were in place?
- A. I don't know.
- d) Refer to **Estates Communications Bundle, document 47, page 5/18 of document** - this states that air permeability tests were not carried out to 36 isolation rooms.
- i) Were you aware of this? If you were not aware, who would have been aware?
- A. I was not aware I don't know who would have been aware of this.
- ii) What was the consequence of this?
- A. I don't know.
- iii) Why did handover take place in these circumstances?
- A. I don't know.
- iv) What happened following this report?
- A. I don't know.

v) What concerns, if any, did the contents of the report give you? Why did the report give rise to these specific concerns?

A. I was not involved in this issue.

155. Have regard to the following emails when considering your answers to the above:

Estates Communications Bundle, documents 64, 67 and 68.

a) What concerns, if any, did you have about the ventilation system at the point of patient migration to QEUH?

A. As it was not part of my remit, I did not have any concerns.

b) Where was the documentation for C&V stored at that time?

A. I don't know.

c) Have you seen the ventilation system validation documentation as at handover (Jan 2015)?

A. No.

d) If yes – who carried this out, who signed off, who authorised?

A. (No answer provided)

e) If no – should you not have sought this? Who is responsible for ensuring it is in place? Who should have chased this up? Would this not be part of ID remit?

A. This was not my remit at the time.

f) Where would the paperwork have been stored/ Who would have been responsible for it?

A. I don't know.

g) If validation was not in place at handover, how did the hospital open? Who would have had the authority to allow the hospital to open without validation in place?

A. I don't know.

- h) Were you asked by microbiologists or Infection Control to provide information regarding the ventilation system and validation? Refer to **Estates Communications Bundle, document 27**. Who was supposed to provide this information? If it was not provided, why not? What action was taken to ensure that information was provided – if it was not, what was done to escalate this? Who was responsible for providing this information?
- A. I was not involved in this issue.

Ventilation system – General

156. What testing and maintenance protocols and regimes were in place? Refer to **Estates Communications Bundle, document 62**.
- A. I don't know.
157. What concerns, if any, do you have relating to the ventilation? What concerns, if any, do you have relating to the water temperature? What concerns, if any, do you have relating to the movement within the water system? Refer to **Estates Communications Bundle, document 123**.
- A. I wasn't involved in this issue, I was not qualified to comment.
158. Was it possible to incorporate a comprehensive ventilation system into the QEUH/RHC?
- A. I am not qualified to answer.
159. Describe any ward/area specific ventilation systems used?
- A. I am not qualified to answer.
160. What are your thoughts about these ventilation systems that were used?
- A. I am not qualified to answer.

161. Refer to **Estates Communications Bundle, document 48**. Explain your concerns and actions taken?

A. I was not involved in this matter.

162. Refer to **Estates Communications Bundle, document 136**. Explain the concerns regarding latent defects and actions taken?

A. I was not involved in this matter.

163. Explain your involvement with a review of specialised ventilation areas?

A. I was not involved I am not qualified.

164. Dr Teresa Inkster tells us that there was little progress with this matter. To what extent, if any, is this statement accurate?

A. I couldn't comment.

Specific Events in Relation to Ventilation System

165. Can you recall any specific events in relation to ventilation?

For example:

a) In 2015 prior to patient migration there were checks to the ventilation in Ward 2A in particular, with there being issues in relation to breaches around the trunking, ceiling lights etc with the extract grills not being compliant with SHPN.

A. I have no recollection of this issue.

b) Lack of HEPA filters and general concerns ward 2A/B refer to **Estates Communications Bundle, documents 35 and 37**. Detail how the issues managed, what was your responsibility, outcome? Highlight any concerns you had with regards to work/ testing being carried out?

A. I was not involved in anything related to this issue.

c) Dr Brenda Gibson raises their concerns refer to **Estates Communications Bundle, documents 17 & 18.**

Describe your involvement and any actions taken in respect of this matter?

A. I was not involved in this issue.

d) Air permeability tests not carried out? Refer to **Estates Communications Bundle, document 47 Capita NEC3 Supervisor's Report (No 53) - dated September 2015.**

A. I was not involved in this issue.

e) Issues with rooms 18 & 19 Ward 2A? **Estates Communications Bundle, documents 46, 67 and 68.**

A. I was not involved with this issue.

f) Dr Christine Peters raised issues with the air change rates in Ward 2A?

A. I was not involved in this issue.

g) In December 2015 Ian Powrie emailed David Wilson, Brookfield Multiplex stating that the *'pressure in the isolation rooms presenting an unacceptable risk to the vulnerable patients present within these protective environments.'*

h) Were you aware of these concerns?

A. No.

i) If so, detail the issues?

A. I don't know.

j) Potential patient impact?

A. I don't know.

k) What was done to resolve matters and your involvement?

A. I was not involved.

- 166.** In February 2016 Ian Powrie prepared a report regarding the action plan for proposed increase of extract in the ensuite rooms in the Schiehallion ward.
Refer to **Estates Communications Bundle, document 93:**
- a) Explain your knowledge of the issues?
A. None.

 - b) Detail the issues?
A. I don't know.

 - c) Potential patient impact?
A. I don't know.

 - d) What was done to resolve matters and the extent of your involvement?
A. I wasn't involved.

 - e) Issues in respect of the safety of the PPVL rooms and adequacy for isolating infectious or immunosuppressed patients?
A. I wasn't involved.

 - f) Issues detailed in **Estates Communications Bundle documents 94, 95 and 96?**
A. I wasn't involved.

 - g) Issues detailed in **Estates Communications Bundle, document 104?**
A. I wasn't involved in this matter.

 - h) Fungal growths in a number of rooms in ward 2A?
A. I was not involved in this matter.

 - i) Dr Inkster tells us that she wrote an SBAR regarding Ward 4C and recommended a feasibility study for the ward to improve the specification. This was discussed at the Specialist Ventilation Group in July 2019. What was your involvement, understanding of the issues and what action did you take?
A. I wasn't involved.

j) Any other issues/ incidents not mentioned above?

A. None that I was involved in.

In providing your answers, please tell us:

a) What was the issue?

b) The impact on the hospital (include wards/areas) and its patients (if applicable)?

c) Who was involved?

d) What was the escalation process?

e) Were any external organisations approached to support and advise?

f) What was the advice?

g) Was there opposing advice and by whom?

h) What remedial action was decided on and who made the decision?

i) Was the issue resolved – consider any ongoing aftercare/support/monitoring?

j) Any ongoing concerns witness had herself or others advised her of?

k) Was there any documentation referenced during or created after the event. For example, an incident report?

l) Did anyone sign off to say the work had been completed and issue resolved/area safe?

167. What level of awareness should a General Manager of Estates have of the ventilation issues?

A. They should be aware and seek expert knowledge and guidance to resolve.

Isolation Rooms

167. In the Stage 3 Sectional Completion Certificate **Estates Communications Bundle, document 3** on 29 January 2015, HEPA filters in isolation rooms were listed as incomplete **Estates Communications Bundle, document 3, page 25:**

a) What was missing?

A. I don't know.

b) Why was the completion certificate signed when there were incomplete works to the isolation rooms?

A. I don't know.

c) Was this discussed with other members of staff? If so, who?

A. I don't know.

d) Was this issue escalated to Board level? If so, to whom and who escalated matters?

A. I don't know.

e) Explain what works were carried out to resolve this matter, your involvement and when matters were resolved?

A. I was not involved.

168. What was the issued referred to in the email at **Estates Communications Bundle, document 34**? How did this happen?

A. I don't know.

169. Discuss the air permeability testing carried out in respect of the isolation rooms **Estates Communications Bundle, documents 37 & 41**:

a) Why was this work carried out?

A. I don't know, I wasn't involved.

b) What was the result of this work?

A. I don't know.

c) What was your involvement in the work?

A. None.

d) What if any issues arose?

A. I don't know.

Refer to **Estates Communications Bundle, document 47 Capita NEC3 Supervisor's Report (No 53) - dated September 2015. Estates Communications Bundle, documents 51 & 55.1.** to assist with your answer.

i) Were patients in these isolation rooms at this time?

A. I don't know, I was not involved in this matter.

ii) Potential impact on patients?

A. I don't know.

iii) Your involvement with the HAI Scribe?

A. I was not involved with the HAI Scribe.

170. There were issues in August 2015 with isolation rooms refer to **Estates Communications Bundle, documents 44 & 45:**

a) Detail your understanding of the issues?

A. I don't know what the issues were as I was not involved.

b) Were the affected wards/ areas compliant with the relevant guidance at the time?

A. I don't know.

c) Your understanding of whether the affected areas/ wards had been built to contractual specification at the time?

A. I don't know, it was not something I was involved with.

d) Your involvement in carrying out/ instructing work to remedy any issues?

A. None.

e) Whether there were patients in the affected wards/ areas at the time?

A. I don't know.

f) Your understanding of the potential impact on patients?

A. I don't know.

171. There remained issues regarding testing in September 2015 refer **Estates Communications Bundle, document 61:**

a) Explain the issues?

A. I cannot comment, I wasn't involved.

b) Your involvement?

A. None.

c) Work carried out to resolve any issues.

A. I don't know.

d) Potential patient impact?

A. I don't know.

172. Refer to **Estates Communications Bundle, document 70**, David Loudon stated that the Board would not be taking handover until they were confident that the rooms were fully compliant:

a) At the time how were the rooms not fully compliant?

A. I don't know I wasn't involved.

b) Explain your involvement?

A. None.

c) What work was carried out and how was this recorded?

A. I don't know.

d) When did the rooms become fully compliant?

A. I don't know.

e) When did the Board accept handover of the rooms?

A. I don't know.

- f) Who advised the Board to accept handover of the rooms?
A. I don't know.
- g) What document did you see to confirm that the rooms were fully compliant?
A. I wasn't involved so I didn't see anything.

173. Discuss the issue with the manual controller in isolation rooms in ward 2A
Estates Communications Bundle, document 83:

- a) Your understanding and involvement?
A. I wasn't involved.
- b) Work carried out?
A. I don't know, as I wasn't involved.
- c) Potential patient impact?
A. I don't know, as I wasn't involved.

Pentamidine Rooms

174. Discuss Pentamidine Rooms:

- a) What are Pentamidine Rooms?
A. I don't know.
- b) Your understanding of the purpose of these rooms?
A. I don't know.
- c) The guidance applicable to these rooms for water and ventilation?
A. I don't know.
- d) Discuss any issues with the specification of these rooms during 2015 **Estates Communications Bundle, document 38.**
In particular consider any issues with:-
- i) the air change rates

- ii) air pressure **Estates Communications Bundle, document 78.**
 - iii) compliance with guidance
 - iv) any issue(s) arising from the testing
- A. I wasn't involved in matters relating to this.

Ward 4B

175. What was the intended purpose of Ward 4B?

A. I can't remember.

176. Did this change prior to January 2015? If so, what changes were made?

A. I don't remember.

177. What, if any, changes were required to the ventilation system? Why were they made?

A. I don't know.

178. How involved were you with the changes?

A. I wasn't involved.

179. There were issues with Ward 4B though almost straight away with an SBAR being prepared on around 7th June 2015:

a) Discuss the concerns about Ward 4B. Refer **Estate Communications Bundle, document 30** - What was the purpose of the SBAR?

A. I don't know.

b) How long after migration to ward 4B were patients decanted back to the Beatson?

A. I don't remember.

c) To what extent were issues raised in the SBAR from June 2015 present at the point of NHS GGC taking occupation in January 2015, and when Ward 4B was handed over to NHSGCC?

A. I don't know.

180. How could these issues arise immediately between handover and patient migration when the Ward was signed off and handover accepted?

A. I don't know.

181. Refer to Estates Communications Bundle, document 36:

a) What were the early testing being carried out?

A. I don't know, I was not involved.

b) Why were tests being carried out?

A. I don't know.

c) Explain your involvement.

A. None.

d) To what extent, did the test result provide assurance regarding Ward 4B's suitability for the intended patient cohort? If so, how?

A. I don't know.

182. Refer to Estates Communications Bundle document 23:

a) Was there issue(s) with the particle counts?

A. I don't know I wasn't involved in this issue.

b) If so, when was the issue(s) identified?

A. I don't know.

c) What was your role?

A. None.

d) What action was taken and by whom?

A. I don't know.

e) Did the action taken resolve the issue(s)?

A. I don't know.

183. Refer to Estates Communications Bundle document 39:

a) What were the issue(s) with the pressure gauges?

A. I don't know.

b) When was the issue(s) identified?

A. I don't know.

c) What was your role?

A. None.

d) What action was taken and by who?

A. I don't know.

e) Did the action taken resolve the issue(s)?

A. I don't know.

f) Why was the issue(s) not identified sooner than July 2015?

A. I don't know.

184. Refer to Estates Communications Bundle document 40:

Tell me about the upgrade works referred to, what the works were, why they were required, when the matter was identified and by who, what was your involvement. Were matters escalated, if so, by who and who was the situation escalated to?

A. I wasn't involved with this matter and had no involvement.

185. Refer to Estates Communications Bundle document 62:

a) What is this document?

A. A ventilation report.

b) Have you seen it before? If so, when?

A. I have not seen this before.

c) What was the purpose of carrying out a ventilation report in October 2015?

A. I don't know.

d) Did any issues arise from this report?

A. I don't know.

e) How involved were you?

A. I wasn't involved.

f) What matters, if any, did you escalate arising from this report? If so, to whom and why?

A. I did not escalate anything I was not involved.

g) If yes to (f) what action was taken?

A. Type your answer here.

186. Refer to Estates Communications Bundle document 66:

a) Discuss the issues referred to in this email chain.

A. I am not qualified to comment and was not involved in the issue.

b) What was your involvement?

A. None.

c) What works were required?

A. I don't know.

d) Why were works required?

A. I don't know.

e) Were all necessary works carried out?

A. I don't know.

187. Refer to Estates Communications Bundle document 69:

a) What is his document?

A. A report on air permeability testing.

b) Have you seen it before?

A. No.

c) How did this document inform your decisions and actions taken?

A. I didn't make any decisions or take in any actions as I was not involved in this matter.

188. Refer to Estates Communications Bundle document 71:

In this email Peter Moir states that Ward 4B was ready for handover:

a) How confident were you that the ward was ready for handover?

A. I was not involved in this work.

b) To what extent did the ward meet the relevant SHFN and SHTM 03-01 guidelines for the intended patient cohort?

A. I don't know.

c) What reservations, if any, did you have at that time?

A. As I was not involved, I did not have any reservations.

d) If so, when did you escalate these concerns and to whom? If not, why not?

A. No concerns.

e) Was any further work carried out to Ward 4B at this time?

A. I don't know.

189. Refer to Estates Communications Bundle document 73 detail the remaining defects at this stage, did this prevent handover of Ward 4B?

A. (No answer provided)

190. Refer to Estates Communications Bundle documents 77 & 77.1:

a) Discuss this email?

A. I haven't seen this email exchange before and as I wasn't involved in the changes to Ward 4B, so I can't comment.

b) Explain your involvement?

A. I had no involvement.

c) Explain any assurances given?

A. I can't comment as I wasn't involved.

191. In her statement Dr Teresa Inkster tells us that at a meeting on 7th December 2015 in respect of the proposed patient move back to Ward 4B that *'Ian Powrie highlighted that it was still unclear what specifications the original design team worked to.'*

To what extent is this statement accurate? What concerns did you have at the time regarding Ward 4B? What concerns did you have at the time about the ward specification? If so, explain what your concerns were and why? Had any of your concerns been resolved by December 2015?

A. I was not involved in this issue and had no input.

192. Refer to Estates Communications Bundle, document 87 – Why was NSS involved in the issues? Actions taken in response, your involvement.

A. I don't know.

193. Refer to Estates **Communications Bundle, documents 88 and 89**

a) Describe the situation?

A. I don't know and am not qualified to answer.

b) Any action taken?

A. I don't know.

c) Your involvement?

A. None.

d) Any concerns and whether matters were escalated and if so to who?

A. I was not involved and I don't know if matters were escalated.

194. Refer to **Estates Communications Bundle, document 101.**

a) Describe the situation?

A. I was not involved in this issue.

b) Any action taken?

A. I don't know.

c) Your involvement?

A. None.

d) In respect of Ward 4B describe the works carried out, why, your involvement and when. Use the below to assist and detail issues you were aware of in respect of Ward 4B, your involvement and any remedial works – works done and why?

A. I had no involvement in this issue.

Refer to the following when answering, if relevant to your involvement:

1. Estates Communications Bundle, document 71

2. Estates Communications Bundle, document 72

3. Estates Communications Bundle, document 97

4. Estates Communications Bundle, document 115 - why was there 'pre-start' meeting – what was the issue with this?

A. (No answer provided)

e) Involvement and knowledge to HAISCRIBE – what was this and what was the issue? Refer to **Estates Communications Bundle, documents 117 and 118.**

A. I don't know.

- f) Refer to **Estates Communications Bundle, documents 120 & 122**
- i) Describe the situation?
- ii) Any action taken?
- iii) Your involvement?
- A.** I was not involved in this issue.
- g) Ward 4B:
- i) When were Ward 4B patients decanted from Ward 4B back to the Beatson?
- A.** I don't remember.
- ii) Why did this happen?
- A.** My understanding was to allow changes to be made to the ward.
- iii) When patients initially transferred from the Beatson to Ward 4B was the specification of Ward 4B the same spec as the Beatson?
- A.** I don't know.
- iv) If not, then why were patients transferred from the Beatson initially if the specification?
- A.** I don't know.
- v) What works were carried out to Ward 4B during this time? Why, Was it an issue when the ward initially started taking patients? who signed off on the works? how did it become known that the works were required.
- A.** I don't know any of that detail.

Decision to Close Wards 2A/B and Move to 6A and 4B

195. Discuss the issues surrounding and leading up to the decant of patients from Ward 2A in 2018.
- a) What was the lead up and background to this refer to **Estates Communications Bundle, document 133?**
- A. My recollection of why the decision to decant patients from Ward 2A was a culmination of the water, drain and ventilation issues and the continuing cases of contamination. A decant would allow the required building works to be carried out.
- b) What was your involvement?
- A. As a member of the IMT and GM for Estates and Facilities I worked with clinical and non-clinical colleagues to facilitate the transfer.
- c) What risk assessment and additional measures were put in place to ensure patient safety?
- A. I am afraid I can't remember the detail of any risk assessments or any additional measures.
- d) Who would have signed off on the move?
- A. There is no single person who makes these decisions. The IMT would have recommended the move and it then would have gone to the executive: Jane Grant, Kevin Hill, etc. who would have acted the recommendation from the IMT.
- e) Do you recall a risk assessment(s) being carried out? Who would have been responsible for carrying out the risk assessment(s)?
- A. I remember one being carried out, but I don't remember who would have been responsible for the risk assessment. I think it would have been within the clinical specialty: senior management microbiology and infection control would all have been involved. I don't believe that estates and facilities would have been involved in the risk assessment aspect.

- f) What concerns, if any, did you have about where the patient cohort was being moved to? If so, why did you have these concerns?
- A.** I did not have any concerns as colleagues who had a greater understanding of clinical and environmental needs had approved the move and I supported them. Perhaps my only concern was that it was an adult ward they were moving to and it did not have some of the rooms which ward 2A did i.e. playroom, parent room.
- 196.** Discuss and detail the works done to Ward 2A/B what was required to be done and why, what had been done and when the work was completed? Please include details of your involvement. **Reference IMT Bundle to assist.**
- A.** I don't know the detail of the work to be carried out as I was not involved. The work was still ongoing when I left the QEUH campus in 2019.
- 197.** Any other relevant information, for example mould behind the IPS panels in Ward 2A, the plasterboard used in the en-suites in 2A/B?
- A.** I remember this being found and the whole ward needing surveyed there was concern that would require further work and extend the decant period.
- 198.** Discuss the issues surrounding the ward 2A patients when in occupation of ward 6A. In particular, views you may have in respect of:
- a) Chilled beams?
- A.** There were reports of water dripping onto patient beds.
- b) Gram Negative Bacteraemia?
- A.** I don't remember any detail regarding this, I was not a member of the IMT, and at this time I had either moved or was about to move post to GRI.
- c) Water filters?
- A.** As above, I was not closely involved in the Ward 6A issues.
- d) Ventilation, including HEPA filters?
- A.** As above.

- e) Issues/ testing/ escalation/ response/ IMTs/SBARs impact on patients?
A. As above.
- f) Patient communication?
A. No involvement.
- g) Internal escalation - HAIT scoring?
A. No involvement.
- h) External escalation?
A. No involvement.
- i) SBAR relating to Ward 6A **Estates Communications Bundle document 141?**
A. No involvement.

Reports prepared by Innovated Design Solutions October 2018

199. Refer to Bundle 6 – Miscellaneous Documents – Documents 33 and 34.

These documents are feasibility studies regarding increasing ventilation air change rates within Wards 2A and 2B by Innovated Design Solutions.

- a) Who commissioned these reports?
A. I don't know, I was not involved.
- b) What was the background to these reports being commissioned?
A. I assume it was in order to make the required changes to the ventilation in Wards 2A and 2B to allow the patients to move back.
- c) Why were these reports commissioned? What issues prompted the instruction of these reports?
A. There were concerns regarding the suitability of the ventilation for the patient cohort.

- d) What concerns, if any, did you have regarding the ventilation system in Ward 2A?
- A.** I was not qualified to know what the technical concerns were, but I was concerned that it meant it wasn't suitable for the patients.
- e) What aspects of Ward 2A lead you to be concerned that it wasn't suitable for patients?
- A.** Because others who were experts said so, infection control, ventilation specialists and microbiology.
- f) When did these concerns arise? Was anyone else in estates concerned? Why?
- A.** I don't know when the first concerns were raised and who with.
- g) What was the impact on patients?
- A.** the ward had to be decanted from the Children's Hospital to a ward in the adult hospital.
- h) What concerns were raised with anyone?
- A.** there were concerns that the ventilation system was not suitable for the very high-risk patients.
- i) Can you provide more detail about what these concerns? With whom were these concerns raised?
- A.** No, I was not aware of the specifics.
- j) What concerns, if any, did you have regarding the ventilation system in Ward 2B?
- A.** I did not have any technical concerns as I wasn't qualified, but I was concerned that clinical colleagues, infection control and microbiology had concerns.
- k) What concerns of Clinical colleagues, infection control and microbiology were you aware of?
- A.** Just that the concerns were not suitable for the patient cohort that was on the ward.
- l) Why were you concerned that they were concerned?
- A.** Because they were experts in their field.

- m) When did these concerns arise? Was anyone else in estates concerned?
Why?
- A.** I can't recall when concerns were first raised and other colleagues in Estates and Facilities were concerned as there was questions around the specification of the ventilation system.
- n) What was the impact on patients?
- A.** Patients had to be decanted to another ward.
- o) What concerns were raised with anyone?
- A.** I don't know.
- p) What happened in response to these reports? For example, the SBAR you prepared.
- A.** I don't know of the reports referred to and I did not prepare an SBAR.
- q) What matters were escalated arising from these reports? If so, to whom, and if not, why not?
- A.** I do not know what this refers to.
- r) What works, if any, were carried out in response to any findings in these reports?
- A.** I do not know.
- s) Following the works being carried out, what was the ward specification? To what extent did it meet the requirements of SHTM 03-01 guidance?
- A.** I don't know and am not qualified to answer.
- t) What was your understanding of SHTM compliance of the Ward following works being carried out?
- A.** I was not involved in the proposed work so I wouldn't know the compliance with SHTM.

200. When did you instruct Innovated Design Solutions before these reports if at all? If so, in what capacity? Describe any further action taken in response to any recommendations by Innovated Design Solutions.

A. I did not instruct Innovated Design Solutions in anything.

Cryptococcus

Refer to the Cryptococcus Bundle and NHS SBAR bundle 4, document 35 to assist.

201. Recall your understanding of the Cryptococcus infections in 2018:

a) What is Cryptococcus?

A. It is a fungus that causes an infection particularly in immune-suppressed patients.

b) What was your experience of Cryptococcus in a healthcare setting prior to QEUH?

A. I had no experience.

c) What were the issues with Cryptococcus at QEUH? When did you first become aware of these issues? What happened in response to these issues? Who, if anyone, did you report these issues to?

A. I first became aware in January 2019 on return from leave. Mary Anne Kane informed me that there were concerns regarding infections and that they were inspecting all the plant rooms for signs of pest infestation.

202. What issues, if any, were you aware of in respect of pigeons prior to January 2019? Please describe any issues and confirm how these issues were dealt with and your involvement, if any?

A. The Southern General site had always had a well-known pigeon issue – contractors changed occasionally depending on who won the contract. When the new hospital was built, we did have issues with pigeons, especially around the helipad. Because of this we had regular monthly cleans of the helipad and we also did pigeon proofing where we installed spikes and nets to stop them nesting – this was done by the specialist contractors, mostly by GP

environmental. We also had problems with them in the open spaces – many of these weren't accessible to the public but were designed into the building to let the light in. There were other areas such as walkways such as between the institute of neurological sciences and the hospital where there was a particular problem. We also put up nets there to stop them from roosting. We were restricted in some ways in the actions we could take in terms of controlling the pigeons due to animal welfare concerns. For example, we were not allowed to shoot them for control purposes for reasons of public perception. Most of the methodology we used was pigeon proofing, which did have its limitations.

I was always involved with pest control on the site, the regular inspections for pests were reported to me and therefore I was involved in a number of pest control methods including monitoring and controlling insects and any likely hazards for example in the kitchens. Latterly I would not be involved directly in the minor pest control, however I was involved personally in dealing with the pigeon issues surrounding the helipad.

In terms of the helipad, because the helipad was right at the top of the building the pest control company did employ methods such as shooting the pigeons as we deemed this proportionate to the potential risk of helicopters arriving with patients.

203. Describe your visit to the plant rooms? When did you go, why did you go at that time, what did you see? Did cleaning take place before the visit – if so why – what was evidence prior to the cleaning?

A. I joined the planned plant inspection visit with Mary Anne Kane and I think Colin Purdon and Theresa Inkster were also there. We found evidence of pigeon infestation and pigeon guano. This was my first visit to the plant room since the concerns were raised. There may have been some cleaning carried out before the visit but as it was my first day back after two weeks of annual leave I couldn't confirm.

204. Tell us more about your comments that ‘some cleaning may have been carried out before the visit’? What lead you to think this? Did that surprise you?

A. My understanding was that on hearing that the IMT had suggested that there was a link between pigeon infestation, Mary Anne Kane instructed Ian Purdon to carry out deep cleaning to be carried out on the affected areas. It was an appropriate reaction carried out in relation to the concerns – using a specialist professional company.

205. Describe your involvement, if any, with cleaning of the plant rooms at any time but in particular early 2019, including instructing cleaning to be carried out, to whom, why and when?

A. When it comes to the plant rooms, prior to 2019 I wasn’t aware of a pest issue in the plant rooms – access to those was restricted so it should only have been estates and contractors who had access in them. If there had been any issues prior it would have been reported directly by estates staff through the helpdesk – the helpdesk would then contact the pest control company directly who would then come out and deal with them, so I would not have been directly involved if this had been the case.

Alternatively, if it was Estates staff then through their own estates managers they would be able to contact companies such as GP Environmental directly to get them to come out and deal with it.

Early in 2019 it all escalated because the IMT identified pigeons in the plant rooms as being a potential issue. I had been on leave over Xmas and new year. I think I may have returned on 8 January and that’s when I had the first meetings about the plant rooms.

GP Environmental had already been out before I returned from annual leave – on my return I picked up the work. Alan Brydon from GP environmental was the ops director and I spoke to him directly. They were very quick and efficient in getting reports out so if I remember correctly that report came back to me the same day. They were very responsive, so they had already been in to

start the work in the plant rooms– after that they were in on a regular basis to carry out the work which was described in the report.

206. If cleaning was carried out, why was it carried out?

A. A programme of cleaning was carried out because pigeon guano was found in the plant rooms, and a programme of cleaning was then planned and carried out in order to remove it.

207. Refer to document from GP Environmental Ltd dated 8th January 2019: What concerns, if any, did you have on reading that there was '*a very large population of feral pigeons present at various locations...*'

A. I was always aware there was a feral population on the campus, but I was very concerned about there being a very large population as described in the report. My reaction to that would be to get the problem dealt with as soon as possible.

208. What concerns, if any, at the time did you have about the '*Significant Health and Safety Issue*' - what further action was taken, was this escalated? If so to whom? Were HPS/ HFS involved? If not, why not? What concerns, if any, in this regard do you have now?

A. As soon as possible we instructed GP Env to go ahead with their proposed works as soon as possible. In terms of escalation, I did not escalate it to HFS/HPS – I reported back either personally or through Colin Purdon to the IMT to keep them updated and reassure them that we were taking appropriate steps to deal with the problem. Any escalation to HFS/HPS would have been done through the route of the IMT, as they were the group who had direct contact with them. Also, there were members of HPS who sat in the IMT. Possibly In hindsight we could have had regular inspections of the plant rooms and other inaccessible areas carried out by pest control companies which may have prevented the problem arising to such a level. There are a substantial number of plant rooms throughout the hospital, about thirty I believe.

- 209.** What action, if any, was taken follow receipt of this document from GP Environmental Ltd?
- A.** GP Environmental were instructed to carry out all the work they recommended and to begin work straight away.
- 210.** What methods of cleaning were used by GP Environmental Ltd and why? Did this resolve the issue(s)?
- A.** GP Environmental would have used industry approved chemicals for cleaning the areas required as well as the cleaning they would have installed pest proofing measures such as plugging gaps and vents where possible and also installing spikes. As far as the plant rooms were concerned this resolved the majority of the issues. In terms of any other issues that arose, Estates were instructed to report it directly to pest control so that it was dealt with immediately. In some of the open spaces GP Environmental also caught and caged a large number of pigeons and removed them from the site. This proved to be an effective measure for reducing to population due to this interrupting their breeding cycle.

For months afterwards GP Environmental were a daily presence on site, and they monitored the pigeons on a daily basis taking action where necessary. After the work recommended in the report was initiated, I met with Alan Brydon daily to discuss any issues and progress. If any issues arose, he would make the necessary recommendations and I would approve them.

- 211.** Were GP Environmental Ltd instructed previously in respect of pigeons at QEUH/RHC, if so when, and by whom?
- A.** Yes, GP Environmental were our main contractors for pest control including kitchen safety/insects, any reports of ants etc. As soon as any insect hazards were reported GP Environmental would be called, and they would deal with the issues as appropriate spraying with insecticide as required.

- 212.** Do you recall photos – what did they show?
- A.** Yes, I was shown photos of pigeon infestation and guano in the plant rooms and on the external ledges of the building.
- 213.** What action, if any, are you aware of having been taken to deal with these matters?
- A.** A specialist pest control company, GP Environmental Services were called in to clean the guano and install pigeon proofing.
- 214.** What concerns, if any, did you have about water cascading down the walls? Is so, why and what was the consequence of this?
- A.** I don't remember seeing water cascading down walls.
- 215.** Discuss your involvement, if any, with the Cryptococcus Sub-Group Meetings - actions taken, internal escalation: HPS involvement?
- A.** I was not a member of the Cryptococcus Subgroup.
- 216.** What, if any, external reporting occurred?
- A.** I don't know
- 217.** PAGs/ IMTs/ AICC and BICC involvement.
(No answer provided)
- 218.** What steps were taken in response/ precautions put in place?
- A.** I don't know.
- 219.** Did you read John Hood's report?
- A.** No.
- 220.** When did you read John Hood's report?
- A.** I didn't.
- 221.** What observations, if any, did you make after reading John Hood's report?
What actions were taken following the John Hood report?

A. None.

222. What else could have been done? How could matters have been handled differently? What concerns, if any, did you have about how matters were dealt with?

A. I can't comment on that.

Staffing and Working Environment

200. What were the staffing levels like in estates at the point of handover? Where did the staff come from – were they mainly transferred from old site?

A. Estates staffing levels were not my remit at handover. At handover there had been a core team of Estates staff identified to work with Ian Powrie. As the hospital sites who would move into the new QEUH were still operational at this time their Estates Teams remained on those sites. So, there was only a small Estates Team working on the new buildings. As the old hospitals closed the Estates staff moved with them during the migration period

201. Concerns if any about staffing following handover – to what extent did the staffing levels manage the workload? **Refer to Bundle 8, document 40.**

A. I was aware Ian Powrie had concerns about Estates staffing levels. Ian had developed a workforce plan for the new Hospitals, but it had not been approved and he had to reduce the staffing. Given there were so many issues and defects with the new buildings the Estates staff were under extreme pressure.

202. Was appropriate training in place for new and existing staff on using new systems and working within the QEUH? How did you ensure that new and current staff were appropriately trained? Refer to **Estates Communications Bundle, document 5** - what was this and what was the training like? How did this assist you and staff with working at QEUH – was it equipment focus, asset focused? Please describe?

A. There was a training programme developed based on the identified training needs for each member of staff depending on their job function. This included

the training and familiarisation sessions provided by Multiplex and their contractors as well as building familiarisation and internal training. Attendance at training would often be impacted by staff having to respond to issues within the buildings and having to miss or leave training early. All efforts were made to ensure sufficient training was provided but more sessions and more in-depth training would have been beneficial. The work and training required to be undertaken during the 12-week commissioning period was extensive and with hindsight was not a sufficient length of time. Training also continued during the migration period as staff moved over from the remitting sites and also continued when the buildings were operational.

- 203.** Who was responsible for providing staffing? Who was responsible for ensuring staffing was maintained at sufficient levels?
- A.** The line management structure for Estates and Facilities were responsible for providing staffing in accordance with the manpower plans and budgets that had been approved. Heads of departments, duty managers and supervisors were usually responsible on a day-to-day basis for ensuring the correct staffing levels were on duty through agreed duty rotas. Discretion to use overtime, excess hours or agency staff was normally allocated by senior managers. Agency staff were used extensively by domestic and catering staff initially until staff had migrated from other sites. I don't know if Estates used agency staff to fill in gaps on rotas.
- 204.** What concerns did you have regarding staffing levels?
- A.** Staffing levels were a concern within the new buildings because there was new equipment, new systems and new methodology applied and it was unproven whether what had been forecast would meet the reality. Some staff were also anxious about moving due a new site especially the size and scale of the QEUH and additional support and reassurance was required.

- 205.** What was the working environment like when QEUH opened – work life balance/ workplace culture? What issues, if any, did you have? If so, what concerns did you raise? Who did you raise these concerns with?
- A.** The working environment was intense, staff had to be very reactive and working days were long and exhausting many people were working 12 hours or more a day and sometimes 7 days a week. Managers tried where possible for staff to work with colleagues they knew. There were members of staff reluctant to have been moved and some did resist working in new ways.
- 206.** Who was on site to manage and assist with carrying out works relating to equipment? How did this assist your workload in estates? To what extent, if any, was there a reliance on commercial third parties such as Multiplex when it came to staffing levels?
- A.** I can't comment on Estates staff at this time as I was not managing them but I am aware within Facilities Staff we did rely on third parties to support the Automated Guided Vehicles system and also, we had very many problems with the pneumatic tube system.
- 207.** Generally – discuss the workplace environment and culture – what concerns, if any, did you have?
- A.** Within Facilities we had a very good management team and while concerned about the excessive hours they were working we did not have too many HR issues.
- 208.** Describe the handover process – did it run smoothly or not? What concerns, if any, did you have in the run up to handover? What matters did you feel went to plan and what, if any, matters, had not gone to plan?
- A.** From my position as Facilities Project Manager I was anxious about the handover because I was aware how much work had to be done during the commissioning and migration period. I did not anticipate or appreciate the volume of work to be carried out by Multiplex and the members of their operatives who would remain on site after handover. The work by the Equipping and Placement Team during the commissioning period went very well and the patient migration went very well.

- 209.** GGC took handover from Multiplex earlier than initially contracted for – what did you think about this? Why did it happen? What was the rationale for the early handover?
- A.** I did not think taking the building early was a good idea and I was not party to the reasons for this or taking the decision.
- 210.** Were the concerns raised by infection control colleagues regarding the general build of QEUH/RHC taken seriously? What action did you take in response to these concerns, not already mentioned in your answers?
- A.** I don't recall specific issues being raised but to me about the General build but I wouldn't not take issues raised by Infection Control seriously.
- 211.** Dr Teresa Inkster tells us in her statement that she raised concerns regarding the cleaning in NICU, PICU and haematology wards in 2016 and again raised concerns to you and Mary Anne Kane in 2018 raising concerns in relation to level 4 QEUH, Ward 2A, RHCG, PICU and Ward 3C, with further issues in relation to Ward 4C cleaning being raised in 2018:
What were the concerns raised and what action did you take?
- A.** If there were cleaning concerns raised in 2016, they may have been directed to Billy Hunter as General Manager. I do remember meeting with Dr Inkster and Suzie Dodds in early 2018 just after I was moved there as GM. They had raised concerns about the cleaning standards and as result additional cleaning hours were allocated to the ward as the cleaning standards were not what was required.
- 204.** Do you agree with Dr Inkster that the *'response was reactive rather than proactive'*?
- A.** We regularly monitored the areas highlighted and our monitoring results were not highlighting any issues, so we were initially reactive to Dr Inkster's concerns. But I do believe we became more proactive after this and further concerns were not raised.

205. Is there anything further that you want to add that you feel could be of assistance to the Inquiry?

A. Just that everyone worked very hard to overcome a very difficult set of circumstances.

Declaration

I believe that the facts stated in this witness statement are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

The witness was provided the following Scottish Hospital Inquiry Documents for reference when they completed their questionnaire statement:

Appendix A

A32993814 – Email from Currie and Brown to K Connelly – Ward Ventilation
A49267796 – GP Environmental survey to K Connelly - Feral Pigeon Infestation
A43255563 – SHI Bundle 1 – IMT Meeting Minutes
A43273121 – SHI Bundle 3 – SBAR Documentation
A42959603 – SHI Bundle 4 – SBAR Documentation
A43293438 – SHI Bundle 6 – Miscellaneous Documents
A43955371 – SHI Bundle 8 – Supplementary Documents
A47175206 – SHI Bundle 9 – QEUH Cryptococcus Subgroup Minutes
A47395429 – SHI Bundle 10 – Water Technical Group/Review Group Minutes
A47390519 – SHI Bundle 11 – Water Safety Group
A47069198 – SHI Bundle 12 – Estates Communications