# Scottish Hospitals Inquiry Witness Statement of Questions and Responses Phyllis Urquhart

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 Phyllis Urquhart,

Glasgow Caledonian University, City Campus, Cowcadden Road, Glasgow

MSc Energy and Environmental Management 2001 – 2003

BSc in Building Control (2nd Class Hons) 1995 – 1997

Glasgow College of Building and Printing, 60 North Hanover Street, Glasgow

Advanced Diploma in Building Control 1993 - 1995

Higher National Certificate in Building Control 1991 – 1992

Glasgow Polytechnic, 70 Cowcadden Road, Glasgow

Higher National Certificate in Public Administration 1990 – 1992

Reid Kerr College, Renfrew Road, Paisley

Scottish National Certificate in Secretarial Studies 1980 – 1984

Scottish Certificate in Word Processing

Scottish Certificate in Office Skills

Business Information Course (Accounts)

Scot Bec Typing and Shorthand I & IIRSA Typing (75wpm) and Shorthand (120wpm),

NHS Training

Legionellosis: Water Systems Refresher Update WH007 26 March 2023

Disinfection Control Training Course 25 March 2022

Leadership Training commenced April 2015BOHS P405 Management of

Asbestos in Buildings May 2013

Asbestos Awareness Training 2015

Legionella Hot and Cold Systems June 2013

Infection Control Training 2015

Datix Training 2013,

**Current & Previous Institute Membership** 

The Emergency Planning Society

Royal Institute of Chartered Surveyors

Institute of Occupational Safety and Health, Subject: Water System.

# **Professional Background**

- 2. Professional role(s) within the NHS.
- A Current employment: 10/01/23-Present Estates Department, Larchgrove, Dykebar Hospital, Grahamston Road, Paisley PA2 7DEPost: Site Manager Operational Estates Duties include overall site supervision and responsibility of 2 hospitals being Dykebar and Leverndale and 36 Health and Social Care Partnerships (HSCP). Supervision of 30 staff and associated compliance across all SCART topics. Supervision and delivery of refurbishment projects across the HSCP sites and management of enabling works across capital projects, human resources management, FM First management, health and safety management, asbestos management, management of healthcare engineering installations, etc. Member of the Scottish Legionella Forums Group, development and delivery of electronic little used outlet project across HSCP and acute sites, responsibility for all aspects of fire safety across all sites and processing of all risk assessments and associated actions across all topics, budget holder responsibility, etc.
- Professional role(s) at QEUH/RHC, including dates when role(s) was occupied.
- A 01/11/2017 01/01/2022 Queen Elizabeth University Hospital, Facilities Corporate Services Department, Central Medical Block, Glasgow G51

4TFPost: Compliance Manager – Duties include provision of technical managerial support and guidance support in meeting the Scottish Governments Legislative and Statutory Compliance, improving compliance and associated action plans across the Greater Glasgow and Clyde Sector. Working across 186 sites consisting of 8 Acute sites and the remainder are partnerships. Responsibilities include supporting improvement, performance reporting, awareness raising and ownership, partnership working, attendance at Acute and Partnership Water Groups, National Water Group, etc. 16/07/12 – 31/10/2017 Estates, Facilities Department, Gartnavel General Hospital, 1053 Great Western Road, Glasgow G12 OYNPost: Senior Hospital Estates Manager – Duties include acting as Senior Operations manager to contribute to the forward planning, development and implementation of effective and efficient maintenance policies to satisfy conflicting user requirements, management of hot and cold water systems, asbestos management, health and safety management, management of the operational estates financial, human and physical resources in a professional, costeffective and efficient manner through the use of maintenance and special contractors and direct labour force. Responsibility for the management of complex healthcare engineering installations. Ensuring that statutory insurance inspections are carried out, experience of taking the lead where delegated in management and coordination of feasibility studies and project implementation for a range of projects. Maintenance of records which are required to meet the needs of statutory bodies, the legal department, planning and building warrant compliance. Responsibility of in-house design of minor capital and backlog projects including the preparation of CAD drawings and specifications to obtain statutory approvals. Responsibility for the preparation and evaluation of tender documents and thereafter supervising the works to completion. Representation of client's interests by active participation at prestart, site progress, commissioning and handover meetings. Autonomy to make decisions on issues such as the allocation of resources to assist during connections to critical services, the timing of such connections, the acceptance or rejection of workmanship and equipment, etc. Supporting the Sector Estates Manager in compilation of specialist technical information for external design consultants on major capital projects. Carrying out surveys to

appraise the condition of the assets and to review and improve estate performance. Provision of cost information to service managers to allow the preparation of business cases for projects. Management of HR issues, through NHSiS PIN guidelines, such as recruitment, discipline, absence management, grievances and staff training in line with NHS HR Policies. Processing training needs of staff and ensuring that agreed training protocols are implemented and that records of training outcomes are kept, including provision of new shared drive for local record purposes. Raising of orders as dictated by the department in providing a maintenance service to the hospitals ensuring compliance with the Standing Financial Instructions. Identification of user needs and provision of budget costs for proposed department and service changes. Responsibility for carrying out investigation following submission of IR1 forms and identifying remedial action to prevent reoccurrence. Promotion of a quality assurance culture to encourage continuous improvement in the delivery of Estates Services. Active participation in the investigation and implementation of an energy saving programme to reduce the hospital's energy expenditure. Member of the major incident team responsible for coordinating the Estates response in emergencies such as loss of power supply, flood, fire, etc. In conclusion I analyse and respond to legal documents concerning claims against the hospital and NHS in respect of Estates matters, etc.

- 4. Area(s) of the hospital in which you worked/work.
- A Previously worked across 186 sites consisting of 8 Acute sites and the remainder are partnerships.
- 5. Role and responsibilities within the above area(s)
- A Compliance Manager Duties include provision of technical managerial support and guidance support in meeting the Scottish Governments

  Legislative and Statutory Compliance, improving compliance and associated action plans across the Greater Glasgow and Clyde Sector. Working across 186 sites consisting of 8 Acute sites and the remainder are partnerships.

  Responsibilities include supporting improvement, performance reporting,

- awareness raising and ownership, partnership working, attendance at Acute and Partnership Water Groups, National Water Group, etc.
- 6. Who did you report to? Did the person(s) you reported to change over time? If so, how and when did it change?
- A Reported to Alan Gallacher, other than a period of approximately three weeks after I produced an Audit of the QEUH when I was then informed that my Manager would change from Alan Gallacher to Ian Powrie.
- 7. 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 Alan Gallacher and Mary-Anne Kane, selected July 2012, selection process interviews held at QEUH via Alan Gallacher and Mary-Anne Kane.
- 8. Had you worked with any of your QEUH/RHC estates and management colleagues before your role there? If so, who had you worked with before your role there? 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 No, I had not worked with any QEUH/RHC estates and management colleagues before my role there. Working with QEUH colleagues when I started from July 2012. The role was Compliance Manager. There was a significant turnover of colleagues in the roles for short periods, with the exception of Ian Powrie who had been in the NHS since being an Apprentice.
- 9. What roles have you occupied since leaving QEUH?
- A Site Manager Operational Estates across Partnership sites being Dykebar and Leverndale Hospitals and associated health centres/clinic sites under both these sites.

- 10. What, if any, professional bodies did you belong to when working at QEUH? Were they relevant to your roles there?
- A The Emergency Planning Society, Royal Institute of Chartered Surveyors and Institute of Occupational Safety and Health. Yes these were relevant to my role.

# Taking on the Role at QEUH/ RHC

- 11. When did you start at QEUH?
- A I started, for record purposes on 16th July 2012 as I had been continuing to cover my previous operational estates role at Gartnavel General Hospital for part of the day, e.g. am and the other part of the day, e.g. pm in the Compliance role.
- 12. What was your role before moving to work at QEUH?
- A Senior Hospital Estates Manager.
- 13. Did that role enable you to gain an understanding of QEUH before starting there?
- A Yes
- 14. What were your impressions of QEUH before starting there?
- A Greater Glasgow and Clyde's Flag Ship.
- 15. What, if any, challenges, did you anticipate you might encounter when you started at QEUH?
- A Challenges/risks in respect of the size of the building and challenges with ensuring staff worked with me to create a safe environment and ensure public safety.

- 16. What challenges did you encounter upon starting? Were those greater or lesser than you had anticipated?
- A Challenges associated with having a significant lack of staff to fulfil the roles and also suitably experience staff to deliver.
- 17. How did you address them, and to what effect?
- A Highlighted concerns to my Senior, Authorising Engineer, worked with the operational and Managers appointment and tried to guide and assist and produced Audits in terms of water systems of the QEUH.
- 18. Please describe your role at QEUH. What was your job title? What did you understand that your responsibilities would be, including your day-to-day responsibilities?
- A Job title, role and responsibilities as follows:NHS GREATER GLASGOW AND CLYDEJOB DESCRIPTION
- 1. JOB IDENTIFICATION

Job Title: Compliance Manager

Responsible to: Head of Corporate Estates Department(s): Board wide role Partnerships/CH(C)P's:

Links to all Acute, Mental Health Partnership and HS(C)Ps

#### 2. JOB PURPOSE

The post holder will be responsible to the Head of Corporate Estates and will play a key role in developing and delivering initiatives, tools, reports and technical managerial guidance to support NHSGG&C in meeting the Scottish Governments Legislative and Statutory Compliance (i.e. SCART) expectations of public sector bodies generally and NHS Scotland mandatory requirements and policy commitments specifically. This will also include working to achieve the change and improvement agenda for Compliance and ensure delivery of the outcomes of Action Plans put in place to deliver same. The post holder will manage key elements of Legislative and Statutory Compliance (SCART) programme across the Greater Glasgow and Clyde area, through the development of specific smaller action plans and audits with clear outcomes and programmes of work. Success requires working with Directors and senior managers across the organisation to develop and

implement work programmes. The postholder will provide expert advice to NHSGGC on interpretation of Compliance data and trends, evidence based practice and national policy, along with developing and delivering initiatives, tools, reports and technical and managerial guidance to support and meeting of Scottish Government's Compliance expectations. The post holder will provide specialist support to colleagues and partners, including workstream management and project management to achieve Compliance outcomes. The post holder will provide support and advice, where required, to other Senior Managers within GG&C and out with the estates field of expertise in Legislative and Statutory Compliance issues. These key elements of Compliance will be assigned to each Compliance Manager by the Head of Corporate Estates and will be dependent on the knowledge, skills and specialism of the individual manager concerned and will be drawn from the NSS HFS SCART Topics, a sample of which are listed below.

- 3. ORGANISATIONAL POSITION
- 4. SCOPE AND RANGE
- NHS Greater Glasgow & Clyde is the largest NHS Board in Scotland with an Acute Division providing provide specialist and general acute care provision on a local, regional and in some cases national basis. There are eight sites which make up the Acute Services Division. These are: Glasgow Royal Infirmary, New Stobhill Hospital, Gartnavel General Hospital, Vale of Leven Hospital, Royal Alexandra Hospital, Inverclyde Royal Hospital, Queen Elizabeth University Hospital, and the New Victoria Hospital. The postholder will also work with Director and Executive leads across the following: - Six Community Health (and Care) Partnerships, migrating to become integrated Health and Social Care Partnerships; - Board Corporate Functions including Public Health, Planning and Policy, Communications, Organisational Development. The post-holder will be required to work closely with partner organisations, including Local Authorities, to influence and implement joint priorities. The post holder will liaise with national organisations to deliver specific policy objectives such as those outlined in Health Facilities Statutory Compliance and Risk Tool (SCART) Steering Group as directed by the Head of Corporate Estates. The postholder will be required to ensure delivery of key

- strategic outcomes, working across the organisation to ensure delivery without direct line management or control of resources. As a compliance specialist you will support GG&C in the following:
- Monitoring the SCART E-tool upkeep and management of GG&C element of this HFS tool including being a vital part of implementing further roll out within the Board.
- SCART Action Plan review.
- Managing the Compliance Smartsheet(s)/dashboard.
- Assisting Operational Estates Managers to find solutions to non-compliance issues on their sites.
- Coordination and management, and collation and review, of Compliance performance monitoring and reporting requirements and tools associated with the above.
- II. Training, guidance or other support to Boards staff on any of the above.
- MAIN DUTIES/RESPONSIBILITIESSUPPORTING IMPROVEMENT-Manage the annual Compliance Action Plan process to ensure identification of ambitious actions and clear targets for improvement.
- Champion the process of constructive challenging and the culture of continuous improvement in relation to Compliance.
- Drive improvements in the organisation's Compliance scores using the SCART e-tool model.
- Provide project management support to specific workstreams agreed in the Compliance Action Plan including developing clear business cases on the options, costs and benefits of individual schemes and co-ordinating implementation plans for agreed initiatives.
- Provide specialist advice and information on compliance issues to Head of Service and Sector Estates Managers.
- To maintain a horizon scan of future developments in Compliance including legislation and emerging best practice, and to provide early analysis of the potential impact on NHSGGC.
- Drive improvement in the Compliance process. PERFORMANCE REPORTING

- Delivering and managing a set of performance indicators at Board and
   Directorate level to demonstrate the impact of Compliance initiatives and opportunities for change.
- Ensure the SCART Steering Group is aware of national reporting requirements and prepare reports to meet deadlines;- Supporting the Head of Corporate Estates to ensure alignment between different reporting requirements.
- Develop and maintain strong links with SCART Steering Group members and senior teams to allow a collaborative approach to analyses and improvement initiatives.
- Monitoring and preparing reports on the progress against the Compliance
   Action Plans and specific aspects of compliance for the SCART Steering
   Group as required.
- Brief at senior internal and external level on any Compliance related issues as instructed by the Head of Corporate Estates
- Provide advice and direction to the board on effective evaluation and
   Compliance impact assessment
- Carry out assurance audits on specific topics reporting on same.
   AWARENESS RAISING AND OWNERSHIP
- Be part of the Compliance awareness raising programme, to increase the profile of the Compliance agenda across estates and facilities.
   PARTNERSHIP WORKING
- Develop links with Local Authorities in the Greater Glasgow and Clyde area to share approaches to Compliance and identify opportunities for joint initiatives.
- Develop links with external support agencies such as the Health Facilities Scotland, Zero Waste Scotland, Resource Efficiency Scotland, supporting joint working and managing specific projects where necessary.

SCART TOPICS

Water

- Scottish Health Technical Memorandum SHTM 04-01 & addendum.
- HSE Approved Code of Practice (ACoP) and Guidance 'L8'.
- HE HSG274 Parts 1,2 & 3.
- BS8580 Water Quality.

- BS 7592 Sampling for Legionella Bacteria in Water systems: Code of practice;
   Low Voltage (LV)/High Voltage (HV)
- Scottish Health Technical Memorandum SHTM 06-03 High Voltage
- Scottish Health Technical Memorandum SHTM 06-02 Low Voltage
- Scottish Health Technical Memorandum SHTM 08-03 Bedhead Services
- All relevant electrical regulations (17th Regs); Medical Gas Pipeline Systems (MGPS)
- Scottish Health Technical Memorandum SHTM 02-01Ventilation
   Scottish
   Health Technical Memorandum SHTM 03-01 Pressure Systems
- Scottish Health Technical Memorandum SHTM 08-08
- HSE PSSR 2000Other SCART topics include the following.
- Confined Spaces
- Working at Heights
- Steam Systems
- Control of Substances Hazard to Health
- Lifts
- etc List is not exhaustive.
- 6. SYSTEMS AND EQUIPMENT On a regular basis post holder is required to use general information technology systems/packages including Intranet and Internet, Microsoft Word, Microsoft Access, Microsoft Outlook (email system), Power Point and Microsoft Excel. The postholder will be required to be familiar with emerging technologies and their use in increasing the compliance impact. The postholder is required to be familiar with systems and processes for engaging with wide groups of stakeholder, for example through the intranet, network sites and other web based approaches. Post holder is required to utilise paper files and simple filing systems (manual and computerised) for notes/reports. Post holder responsible for professional obligations in terms of the Data Protection and Freedom of information Acts. This post regularly utilises general equipment such as:
- Desktop computer, laptop, mouse, keyboard.
- Fax machine.
- Photocopier.
- Printers.
- Manual and electronic filing systems.

- Staff Net editing capabilities.
- Telephone and voicemail.
- PowerPoint e.g. in presenting in meetings.

#### 7. DECISIONS AND JUDGEMENTS

The postholder will act as the expert advisor on the development of compliance, with minimal supervision, and will therefore have to exercise significant independent judgement to identify the key Compliance priorities. Post holder is required to operate autonomously on a daily basis including management of own workload, and provision of professional advice to other key agencies, partners and stakeholders. The postholder will need to exercise significant leadership, judgement and initiative in dealings with senior and Executive colleagues within NHSGGC, and when acting as NHSGGC representative on local and national partnerships. The postholder will agree a set of objectives and workplan with the Head of Corporate Estates. The post holder is expected to make decisions regarding the short-term and long-term duration of Compliance projects within their work plans to ensure they achieve the desired direction and outcomes overcoming potential and real barriers based on understanding and application of relevant evidence base. The post holder is expected to chair and manage meetings related to their work plan. The post holder is required to consider their own personal development and keep up to date with Compliance theory and knowledge at a specialist level.

#### 8. COMMUNICATIONS AND RELATIONSHIPS

Post holder is expected to communicate at all levels across the Partnership/HSCP/Acute area and with other partner agencies including the establishment of key working relationships internal and external. Post holder is expected to communicate research, policy, and professional guidance to a wide range of professional and public audiences. Post holder is expected to produce written reports; IT based information and relevant resources for a wide range of professional and public audiences. Regularly undertake presentations and deliver training to a range of partners including professional and community members. The post requires high level of written and oral communication skills, including public speaking and facilitation skills, to engage with a range of stakeholders of varying seniorities and present information to support improvement. The post holder will be required to compile complex suites of

information from different sources against tight timescales and from sources where there is competition for time and intellectual resource.InternalSCART Steering Group members. Local Estates Meetings Acute and Partnership Directors.ExternalScottish Government. Public Sector Organisations e.g. Local Authorities and Community Planning Partnerships. National Organisations, e.g., NHS Health Scotland. Voluntary Organisations, e.g., Community Health Projects. Community reps and members, e.g., service users, young people.

- 9. PHYSICAL, MENTAL, EMOTIONAL AND ENVIRONMENTAL DEMANDS OF THE JOB
  - Physical Demands
- Regular use of computing equipment and VDU.
- Regular travelling across NHS Board area. Mental Demands
- Retention and communication of specialist knowledge and information.
- Frequent intense concentration for varying periods of time.
- Responding to unpredictable demands.
- Development and maintenance of complex set of internal and external relationships.
- Dealing with frequent interruptions that will require him/her to respond to requests for specific information and focus on a different task or activity.
- Concentration required when reading/writing documents and reports, especially when working to tight deadlines.
- Post holder is required to appreciate and understand other partner agencies working environment, limitations and agendas. The post holder is expected, at times, to acquire and understanding of other agencies specialist area.
- Management of conflict and regular problem solving.
- Ability to work with sensitive information and to control the release of that information.
- Ability to manage time and maintain priorities to deliver products against tight timescales to the highest of standards whilst being subjected to competing demands. Emotional Demands
- Challenges associated with partnership working. This can relate to conflicting agendas between partner agencies and the need to work towards an agreed goal or outcome.

- Ability to operate in a stressful environment whilst maintaining focus and decorum.
- Ability to make logical and evidence-based arguments in support of proposed improvement projects where there is often initial resistance to change.

# 10. MOST CHALLENGING/DIFFICULT PARTS OF THE JOB

- The post holder will be expected to complete tasks quickly and accurately with little supervision.
- The post holder will be expected to engage with a variety of stakeholders who
  have competing demands for their time to compile complex reports against
  tight deadlines.
- The post holder will be expected to react to emergent demands whilst still
  maintaining the timely and accurate production of core reports and analyses.
- The post holder will be expected to gain the respect and trust of senior stakeholders and expert influence beyond their direct authority.
- The postholder will work across the whole of NHSGGC and multi-agency
  partnerships to ensure the delivery of planned Compliance work streams and
  to ensure that these work streams are fully implemented and evaluated. This
  will require finding ways to influence people and organisations over which the
  postholder has no direct control.
- 11. KNOWLEDGE, TRAINING AND EXPERIENCE REQUIRED TO DO THE JOB Qualifications
- Educated to degree level (or working towards) in an engineering, construction, environment or sustainability-related subject, or with extensive relevant equivalent experience.
- Further qualification or equivalent work experience or knowledge in a subject related to legislative and statutory Compliance including Health SHTMs and NHS Scotland SCART process.
- Membership or Fellowship of one or more Professional Institutes would be advantageous.
- Specialist knowledge of EU, UK and Scottish government policy, legislation
  and regulation in compliance, gained through extensive experience at senior
  level in the public sector (e.g. NHS, local authority or environmental regulatory
  body), or private sector. Experience:
- Project planning, management and implementation.

- Partnership working and negotiation.
- At least 3 years' experience of working at strategic level within a relevant programme area.
- Be a confident self-starter who can work unsupervised and develop innovative solutions following guidance.
- Proven ability to learn new skills and adapt to challenge, Knowledge:
- In-depth understanding of Legislative and Statutory Compliance within buildings.
- Understanding of NHS or similar complex organisation and related issues and policy; and
- Understanding of inequalities in health. Skills• Ability to analyse and interpret complex information in a variety of forms.
- Ability to communicate complex information and concepts to a variety of audiences in a variety of forms.
- Ability to work in partnership with individuals and organisations to improve Compliance.
- Excellent written and communication skills and ability to produce reports on complex issues.
- Ability to operate effectively under pressure.
- Ability to understand and communicate possibly contentious or sensitive issues.
- Excellent interpersonal skills and the ability to form positive relationships at all levels.
- Strong persuasive and influencing skills with ability to present ideas and proposals at a senior level.
- Clear analytical skills to allow exploration, evaluation and interpretation of information and opinions.

#### PERSON SPECIFICATION FORM

Job Title: - Compliance Manager Department:

Estates Qualifications Essential (□) Desirable (□) Degree Level or equivalent in either an Engineering, Building Construction or Architectural discipline.
 Chartered Professional in membership of a recognised Institute
 A formal Management Qualification (minimum HNC)

Experience Essential (  ) Desirable (  )Experience of statutory compliance
reporting within a mechanical engineering field and specifically within
healthcare.
Experience and knowledge of auditing procedures, reporting and processes.
Experience of producing compliance reports to senior managers
Have an understanding of IT systems specifically Smartsheet
Be able to produce action plans and report on same.
Behavioural Competencies Essential (□) Desirable (□)High level numeracy
skills
Excellent communications skills
Methodical and structured approach to projects
Analysis and record keeping
Team Player
Other Essential (□) Desirable (□)Knowledge of NHS SCART System
Financial management
Please fully describe where the role was in the hierarchy of the organisational
structure. Which staff reported to you, who did you work alongside, and who
did you report to?

did you report to?
 A Organisation position involved me and my post reporting to the Head of Corporate Estates, Alan Gallacher. No staff reported to me and Gary Cullen and George Walsh were individuals who worked alongside me dealing with

electrical systems and mechanical systems. We all reported to Alan Gallacher.

- 20. Had the role been filled before your arrival?
- A No, this role was a new position and no one occupied the role prior to me as Compliance Manager.
- 21. Had the functions been carried out before your arrival?
- A No.

19.

- 22. Was the allocation of those functions clear at that time?
- A In part, I worked and developed systems which I put in place, still utilised today which greatly assisted the management of water systems within the healthcare environment.
- 23. At the time when you first became involved with QEUH/RHC, did your role and your involvement match your expectations?
- A Mostly, but did allow for additional opportunities to introduce assurance opportunities for the Board.
- 24. To what frameworks or plans did you work to?
- A SHTM 04-01 suite of documents, Building Standards (Scotland) Regulations 1990 (as amended), L8, etc
- 25. How, in general terms, did that role and involvement change over time?
- **A** The role adapted from the beginning of occupation of the post.
- 26. What specific actions did you take once in post? Please give as much detail as possible of specific actions taken by you in order to fulfil the requirements of your role. It would be helpful if you could explain why you considered such actions to be appropriate.
- A Initiate systems via Smartsheet to enable the Board and Management to be aware of what systems were in place to ensure compliance across water systems, COSHH, working at heights and Confined Spaces. I also supported the operational personnel with guidance and direction in respect of SHTM 04-01 associated regulation and interpretation and supported/infilled for operational estates in some areas which I considered to be appropriate, supportive and helpful in relation to ensuring that public safety was assured at any and all instances.
- 27. When did you leave your role at QEUH? Who took over from you?
- A I left this role on 31st December 2022. No one took over from me. Greater Glasgow and Clyde did not take on another Compliance Manager as they made budgetary savings in respect the wages of a Compliance Manager and

decided to take on a Trainee Compliance Manager, therefore until the Trainee Compliance Manager completes their studies and experience, they will not take on the Compliance Manager title.

- 28. How did the role compare at the end of your tenure, compared to when you started?
- A There had been significant changes to my role from the start of the role until the end of my tenure.
- 29. In your opinion, had the nature of the role improved over time?
- A Yes.

# The Water System at QEUH

- 30. What did you understand to be the main sources for governing the operation of the water system?
- A SHTM04-01 suite of documents, L8, Authorising Engineer, Drinking Water Quality Regulator (DWQR) and Water Industry Commission for Scotland (WICS), etc.
- 31. What, in your view, are the most important requirements which those sources set?
- A Patient/Public Health, engineering controls, standards, operational knowledge and safety of water systems, quality control aspects, environmental considerations, protection, sustainability, resilience/emergency procedures, etc.
- 32. Who has ultimate responsibility for the operation of the water system at QEUH?
- **A** Duty Holder Jane Grant.

- 33. When you first encountered the water system at QEUH, was the allocation of that responsibility made clear in the arrangements in place for operating that system?
- A I think responsibility was still being developed when the QEUH initially opened.
- 34. What would you expect to see in place, in order for responsibility to be properly allocated?
- A Many aspects should be in place to understand a building you are being handed over such as Risk Assessment, know now as a Water Safety Plan, schematic drawings, familiarisation periods/introductions/sessions within an individual site, disinfection and associated documentation, awareness of proposed occupancy plans associated with a new building as if you do not understand the proposed use of a building there can be significant risks associated with any building, particularly in respect of immune-compromised individuals which can be significant in terms of patients within the Healthcare environment. Opportunities to review High Risk Areas with infection control colleagues, etc. Building Management Systems and appropriate staff/experienced staff and appropriate numbers, reporting structure to deal with any aspects of the system. Robust resilience plans in place and previously exercised prior to occupation.
- 35. Were the lines of responsibility in fact clear?
- A No.
- 36. If not, what in your view was lacking from them?
- A Points noted in question 34 above.
- 37. How clear was it to you that arrangements were deficient?
- A Very.
- 38. Did you consider improvement of them to be within your remit?
- A Yes.

- 39. If so, what actions did you take in order to improve the situation?
- A Submitted a number of reports to my Senior for escalation and tried my best to support and provide direction for and to some of my operational estates colleagues.
- 40. What effect did your actions have?
- A Positive on some occasions.
- 41. Were you satisfied with the outcome?
- A No.
- 42. In your view, have any such shortcomings been fixed?
- A In part, but I do consider that there are still risks associated with staff turnover, management's understanding of associated risk and resilience.

#### Water Scheme

- 43. Please describe your understanding of the purpose of a water scheme.
- A My understanding is a system or design proposed for water systems via the distribution and supply via, e.g. Scottish Water or in the UK private water supply services and within healthcare to ensure the safety, quality and public safety of water/food systems, e.g. "proficiency testing in respect of food, water and environmental microbiology" published 17th January 2014 and last updated 9th March 2022.
- 44. Where does the requirement for a water scheme come from?
- A Scottish Water, The Water Industry Commission, Drinking Water Quality Regulator, SEPA and private companies in the UK, Ofwat, DWI, Environment Agency, also UK Government and UK Health Security Agency in respect of the microbiology.

- 45. Were you familiar with the requirement before taking up your role at QEUH?
- A In respect of the Healthcare "proficiency testing no, but Scottish Water yes.

# Specific Roles in Governing the Water System at QEUH

- 46. What specific role did you fill in the governance of the water system?
- A Ensuring/advising on compliance in respect of the water system.
- 47. Where did the requirement for such a role come from?
- A Greater Glasgow and Clyde created the role and Alan Gallacher and Mary-Anne Kane interviewed and appointed in respect of the role.
- 48. Did the role allocated to you allow you sufficient scope to meet what was required?
- A Not fully as individuals in posts to carry out all the operational requirements to meet compliance was also required.
- 49. What other specific roles were required in order to meet governance requirements for a water system such as that at QEUH?
- **A** Experienced Authorised Persons.
- 50. Where, as a generality, did those requirements come from?
- **A** SHTM04-01.
- 51. Were those roles in fact in place throughout your time at QEUH?
- A No.
- 52. Who had responsibility for ensuring that they were filled?
- A Chief Executive Jane Grant ultimately.
- 53. Insofar as those roles were not filled, are you aware of why this was not done?
- A Not fully aware, but suspect budget funding.

- 54. When did they become filled? Was there a concerted effort to fill them? What prompted this?
- A Melville Macmillan appointed Lead Authorised Person on 31st May 2018 and Kerr Clarkson Authorised Person on 25th July 2018, Darren Hopkins appointed Authorised Person 25th July 2018 and Scott Macer appointed Authorised Person 6th March 2018. James Guthrie appointed an Authorised Person role at QEUH on 24/08/2018 for the duration of 3 years. There were efforts to fill posts at QEUH and incidents at the QEUH and SHTM 04-01 prompted this.

#### **Authorised Person for Water**

- 55. Where did the requirement for this role come from?
- A SHTM04-01, Water Safety Group, AE and Board.
- 56. During what period was this role filled during your time at QEUH?
- A Melville Macmillan appointed Lead Authorised Person on 31st May 2018 and Kerr Clarkson Authorised Person on 25th July 2018, Darren Hopkins appointed Authorised Person 25th July 2018 and Scott Macer appointed Authorised Person 6th March 2018. James Guthrie appointed an Authorised Person role at QEUH on 24/08/2018 for the duration of 3 years.

  Reappointment of Melville Macmillan and Kerr Clarkson was undertaken for the reappointment at the end of their 2018 appointment. Authorised Person appointments are now undertaken via Alan Gallacher for an indefinite period for the tenure of the Authorised Person appointment.
- 57. What was required of this role? What functions would it address?
- A Management of the water system. Water safety and management function were addressed.

- 58. Who had responsibility for ensuring that it was filled?
- A Ultimately Jane Grant, Chief Executive via delegated responsibility via David Louden and Alan Gallacher.
- 59. What skills, knowledge or experience would be required of a person filling this role?
- A Skills involving an awareness, knowledge and experience of having fulfilled the role of Authorised Person in respect of water systems.
- 60. During any period where it was unfilled, what happened as a result?
- A There were a number of periods when the Authorised Person role was unfilled as individuals moved to other posts within the Board and steps were undertaken to advertise and fill the post via the Site Manager Operational Estates.
- 61. Was this satisfactory?
- A No.
- 62. What action, if any, was required of you as a result?
- A Expectation to assist where required in respect of arranging audits, support and advice where required and establishing systems.
- 63. Upon whom did the functions of this role fall during that period?
- A Melville Macmillan appointed Lead Authorised Person on 31st May 2018 and Kerr Clarkson Authorised Person on 25th July 2018, Darren Hopkins appointed Authorised Person 25th July 2018 and Scott Macer appointed Authorised Person 6th March 2018.
- 64. When was it filled?
- A Posts filled via Melville Macmillan appointed Lead Authorised Person on 31st May 2018 and Kerr Clarkson Authorised Person on 25th July 2018, Darren Hopkins appointed Authorised Person 25th July 2018 and Scott Macer appointed Authorised Person 6th March 2018. James Guthrie appointed an Authorised Person role at QEUH on 24/08/2018 for the duration of 3 years.

- 65. Who filled this role?
- A Role filled via Melville Macmillan appointed Lead Authorised Person on 31st May 2018 and Kerr Clarkson Authorised Person on 25th July 2018, Darren Hopkins appointed Authorised Person 25th July 2018 and Scott Macer appointed Authorised Person 6th March 2018. James Guthrie appointed an Authorised Person role at QEUH on 24/08/2018 for the duration of 3 years. I was Compliance Manager over this period.
- 66. What prompted the filling of this role?
- A The opening of the QEUH from 2015 and subsequent awareness of operational requirements/incidents/deaths.
- 67. What input did you have into this process?
- A Appointment of Compliance Manager and active participation in ensuring Smartsheet and systems put into assist operational estates and Board reassurance.
- 68. Once filled, were you satisfied that the holder possessed the proper skills, knowledge and experience to carry out its functions?
- A No for such a large site there is always a requirement for a new appointee to familiarise themselves with the system/plant which would generally take approximately 6 months if the individual was solely focussed upon the single topic of water systems, but the challenge within the Healthcare environment is that often an operational estates individual works across various systems.
- 69. Please provide any other comment which you feel appropriate. Insofar as this role may have been unfilled at any point at which it should have been filled, what effect did that have on the operation of the water system at QEUH, in your view?
- A I think there were a number of pressures of a number of individuals who became very stressed and pressured with decision making requirements in terms of dealing with the water system, operational requirements and staff appointments.

# **Designated Person for Water**

- 70. Where did the requirement for this role come from?
- A SHTM04-01, Board Water Safety Group, AE and Board
- 71. During what period was this role filled during your time at QEUH?
- A Upon email request of a copy of this appointment letter today, 29th May 2024
  I am pleased to confirm that this appointment has now been filled and the
  appointment letter is dated 12th March 2024 and this is the first knowledge I
  have ever received within Greater Glasgow and Clyde of this appointment for
  Designed Person for Water having been filled.
- 72. What was required of this role? What functions would it address?
- Α There have been a number of different descriptions for the responsibilities of the role of Designate Person for Water within a number of different Water Policies over my tenure in the role of Compliance Manager, but the current Water Policy states the Director of Estates and Facilities (DE) states on page 17 "A2.3 Director of Estates and Facilities (DE) – Designated Person (Water) DP(W) The DP(W) has delegated executive responsibility with accountability to DH(W) for all safety, health and risk matters relating to Water Systems in NHSGGC, with the exception of the responsibilities delegated to the Designated Person (Pseudomonas)DP(P). The Responsibilities of the DP(W) include: ☐ Identify and ensure the efficient formal record of Water System risks and raising those considered appropriate from the BWSSG to the CMT via the BICC; ☐ Provide formal reports from the BWSSG to assure the Health Board via the CMT that the Board's statutory responsibilities relating to Water Systems are being safely and appropriately discharged; ☐ Participate in a Compliance defined training programme for this role to maintain personal knowledge and a level of expertise allowing the efficient discharge of the DP(W) responsibilities; Identify to the CMT a risk-based prioritisation of necessary resources required to effectively manage and control water system risks arising from the Water Systems in the NHSGGC estate, to an acceptable level; ☐ Effectively manage the resources provided to safely maintain and to manage and control identified risks, to an acceptable level, as far as

reasonably practicable; ☐ Ensuring the implementation of all 'Statutory Instruments & Mandatory Guidance' related to Water Systems, (see examples in section, 'Guidance', in this Policy), and adherence to the NHSGGC Water Systems Safety Policy at all levels within the Directorate of Estates; Ensuring that Estates, through the Directorate management structure, are fully aware and appropriately trained in the Statutory and Mandatory requirements and standards for the provision and maintenance of Safe Water Systems; ☐ Ensuring, with the RP(P), that the Water System Safety Policy is regularly reviewed and updated; ☐ Chair the NHSGGC BWSSG (or nominated deputy) as per SHTM requirements; ☐ Formally appoint a DDP(W), who will deputise for the DP(W) as required, undertaking delegated responsibilities; ☐ Formally appoint (or delegate the responsibility) to RP(W) at sector level, DRP(W) and AP(W) at site level and on larger sites also LAP(W)." Functions address would be as detailed/linked above.

- 73. Who had responsibility for ensuring that it was filled?
- **A** Duty Holder Jane Grant.
- 74. What skills, knowledge or experience would be required of a person filling this role?
- A Skills/knowledge and experience should include an understanding and awareness of water systems and associated risk which was historically delivered via the Legionella Awareness Course that many Managers and Senior Managers attended within Greater Glasgow and Clyde historically.
- 75. During any period where it was unfilled, what happened as a result?
- A Business as usual.
- 76. Was this satisfactory?
- A No.
- 77. What action, if any, was required of you as a result?
- A Information, knowledge and SHTM, water systems interpretation as and when required.

- 78. Upon whom did the functions of this role fall during that period?
- A Alan Gallacher.
- 79. When was it filled?
- **A** 12th March 2024.
- 80. Who filled this role?
- A Tom Steele.
- 81. What prompted the filling of this role?
- A The requirement would have been prompted through the SHTM 04-01, Water Safety Group, AE and historical events at the QEUH and possibly the Duty Holder, I think.
- 82. What input did you have into this process?
- A I historically verbally asked and emailed my senior for copies of the appointment letters for the holder of Designated Person as this document was regularly asked for by Waters Systems colleagues and enables SCART, AE Audit and Risk Assessment questions/points to be closed down.
- 83. Once filled, were you satisfied that the holder possessed the proper skills, knowledge and experience to carry out its functions?
- A I am unaware of the knowledge and experience of the holder in respect of the functions required, but I am hopeful that the assessment system now in place at GG&C is robust in respect of satisfying the Duty Holder Jane Grant to issue the appointment.
- 84. Please provide any other comment which you feel appropriate. Insofar as this role may have been unfilled at any point at which it should have been filled, what effect did that have on the operation of the water system at QEUH, in your view?
- A There are lessons to be learned in respect of not having previously filled the role of Designated Person as senior posts and for other staff holding appointments in respect of Water Systems it is important to set good role

examples and provide Board reassurance. Effect being possibly lack of control at the QEUH.

# **Competent Person for Water**

- 85. Where did the requirement for this role come from?
- A SHTM04-01, Water Safety Group, AE and Board.
- 86. During what period was this role filled during your time at QEUH?
- A On the following dates the following individuals were trained David Fickling 20th March 2018, Andrew Hamilton 21st March 2018, Peter McCabe 20th March 2018, Mark McInally 24th July 2018, Shawn O'Neill 24th July 2018 and Jason Weir 24th July 2018, however no appointment letters were held centrally on record for these individuals. A further 12 off individuals were proposed Competent Persons who had attended WHH02 training during 2018, 2019 and 2022, but had not been recommended being Paul Shorts, Jennifer Materne, William Murray, Thomas Ramsay, Inglis Martyn, Stephen Gilmour, Brody Johnston, Chris Quinn, Daniel Martin, Grant Bennett, Stuart Lapping and William Fenn. I created records on the Smartsheet for these CPs, but there was initially no official appointment documentation.
- 87. What was required of this role? What functions would it address?
- A Water systems knowledge, experience and qualifications to carry out effective healthcare maintenance on water systems. Functions such as planned preventative maintenance tasks and dealing with emergencies and breakdowns, such as thermostatic mixing valve maintenance, temperature monitoring and maintenance related activities, repairs to damaged pipework/outlets/water systems. flushing, etc.
- 88. Who had responsibility for ensuring that it was filled?
- A Duty Holder Jane Grant, Designated Person, Authorised Person, Authorising Engineer, Infection Control and Senior Management involved in decision making in respect of water system.

- 89. What skills, knowledge or experience would be required of a person filling this role?
- A Experience of practical plumbing/water systems work within the Healthcare environment and time served plumber, qualified to HNC level with 5 years post apprenticeship experience and cross trade duties related to HVAC and electrical systems.
- 90. During any period where it was unfilled, what happened as a result?
- A Some works were covered by Contractors and generally business as usual.
- 91. Was this satisfactory?
- A No.
- 92. What action, if any, was required of you as a result?
- A Raising concerns to Management of lack of resources/personnel.
- 93. Upon whom did the functions of this role fall during that period?
- A Site Management being Ian Powrie, Andy Wilson and Colin Purdon to escalate to Management the lack of personnel on site and requirements for more staff.
- 94. When was it filled?
- A David Fickling 20th March 2018, Andrew Hamilton 21st March 2018, Peter McCabe 20th March 2018, Mark McInally 24th July 2018, Shawn O'Neill 24th July 2018 and Jason Weir 24th July 2018, however no appointment letters were held centrally on record for these individuals. A further 12 off individuals were proposed Competent Persons who had attended WHH02 training during 2018, 2019 and 2022, but had not been recommended being Paul Shorts, Jennifer Materne, William Murray, Thomas Ramsay, Inglis Martyn, Stephen Gilmour, Brody Johnston, Chris Quinn, Daniel Martin, Grant Bennett, Stuart Lapping and William Fenn.
- 95. Who filled this role?

- A David Fickling 20th March 2018, Andrew Hamilton 21st March 2018, Peter McCabe 20th March 2018, Mark McInally 24th July 2018, Shawn O'Neill 24th July 2018 and Jason Weir 24th July 2018, however no appointment letters were held centrally on record for these individuals. A further 12 off individuals were proposed Competent Persons who had attended WHH02 training during 2018, 2019 and 2022, but had not been recommended being Paul Shorts, Jennifer Materne, William Murray, Thomas Ramsay, Inglis Martyn, Stephen Gilmour, Brody Johnston, Chris Quinn, Daniel Martin, Grant Bennett, Stuart Lapping and William Fenn.
- 96. What prompted the filling of this role?
- A Senior Management understanding the associated risk and filling the role.
- 97. What input did you have into this process?
- A Raising verbal concerns and producing Audits.
- 98. Once filled, were you satisfied that the holder(s) possessed the proper skills, knowledge and experience to carry out its functions?
- A No as there is still the important role of site familiarity which cannot be underestimated, particularly on a site such as the size of QEUH, also I would always have concerns about handovers in respect of annual leave and sickness.
- 99. Please provide any other comment which you feel appropriate. Insofar as this role may have been unfilled at any point at which it should have been filled, what effect did that have on the operation of the water system at QEUH, in your view?
- A Yes, there were risks associated with the lack of personnel in post at the QEUH, but this particular site suffered many negative impacts from the start, design, build, assessing the correct and suitable number of staff required to manage such a sizeable site, therefore there are significant lessons to be learned for all involved.

# **Authorising Engineer for Water**

- 100. Where did the requirement for this role come from?
- A Commodity Action Report and Eps Bulletin (CAREB NP813) via National Procurement and National Services Scotland due to requirements of the SHTM04-01 and ultimately Scottish Government.
- 101. During what period was this role filled during your time at QEUH?
- A My memory is that the role always appeared to be filled.
- 102. What was required of this role? What functions would it address?
- Α This role changed via a number of Water Policies which were approved during my tenure, but the following details the current role and functions of the Authorising Engineer. A2.8 Authorising Engineer (Water), AE(W)The AE(W), is appointed in writing by the CRP(W) and is employed independently of NHS GG&C. The AE(W) acts as an independent professional advisor to NHSGGC with a brief to provide services in compliance with relative 'Statutory Instruments & Mandatory Guidance', and particularly with Scottish Health Technical Memoranda(SHTM) 04-01, mandatory guidance for the NHS in Scotland. The AE(W) will have specialist knowledge of large scale domestic and commercial hot and cold water services installations including incoming supplies and Other Risk Systems as detailed in Appendix 3 and in particular, those installations for which an Authorised Person (Water) will assume responsibility for. The AE(W) is free to comment on the performance of the organization against the operational risk base. The AE(W)'s main duties will include: ☐ To be a formal Assessor, making recommendations to the CRP(W) for the appointment of AP(W) in terms of skills, training and site familiarity; □ Formally monitoring the performance of NHSGGC against 'Statutory Instruments & Mandatory Guidance', particularly, ACoP L8, HSG274 (Parts 1,2 & 3), and SHTM 04-01 guidance; ☐ The provision of a formal, annual L8 Audit at all NHSGGC Acute sites including our large hospitals where there are in/outpatients and an audit every 3 years for all remaining sites. Reporting of potential risks (operational and through potential improvements).

- 103. Who had responsibility for ensuring that it was filled?
- A Alan Gallacher managed the contract for filling the role via delegated powers from Alan Gallacher's Seniors.
- 104. What skills, knowledge or experience would be required of a person filling this role?
- A Knowledge of the requirements of the role of the Authorising Engineer.
- 105. During any period where it was unfilled, what happened as a result?
- A I have no memory of the post being unfilled as even when the Contractor became out of date an extension was generally given to the Authorising Engineer.
- 106. Was this satisfactory?
- A No not ideal, but the role was always covered and sometimes due to human input tendering processes can take longer due to retirements, sickness, annual leave for example.
- 107. What action, if any, was required of you as a result?
- A No action required of me in this instance.
- 108. Upon whom did the functions of this role fall during that period?
- A Dennis Kelly.
- 109. When was it filled?
- A Alan Gallacher retained the contract documentation in respect of the Authorising Engineer, therefore I did not see the initial contract documentation, but Dennis Kelly was the Authorising Engineer from my tenure in the role.
- 110. Who filled this role?
- A Dennis Kelly.
- 111. What prompted the filling of this role?

- A The CAREB, SHTM04-01 and Duty Holder.
- 112. What input did you have into this process?
- A I provided feedback later in my appointment in respect of additional points to include in the future CAREBs.
- 113. Once filled, were you satisfied that the holder possessed the proper skills, knowledge and experience to carry out its functions?
- A Dennis Kelly is a very knowledgeable and experienced individual in respect of microbiology and water systems, however I would have to say no as any lives lost represents dissatisfaction and more as there are unique challenges in respect of fully managing and understanding what needs to be delivered across a new site in terms of individual patient and staff situations in terms of their immune-compromised state, environment, occupation, risk, personnel number, personnel experience, dissemination of information, etc.
- 114. Please provide any other comment which you feel appropriate. Insofar as this role may have been unfilled at any point at which it should have been filled, what effect did that have on the operation of the water system at QEUH, in your view?
- A My experience is that I have been fortunate to have been assessed and worked with both appointed AEs in respect of the Authorised Person for Water Systems' role within GG&C and both have different approaches, which is a unique opportunity, however like other personnel each AE have different approaches, accreditation, focus, etc. Effects on the operation of the water system at the QEUH, once again is whilst loss of life is tragic and completely unacceptable, lessons can be learned in respect of planning, preparation and resilience for future sites, although I do not personally think another Hospital the size of the QEUH will be constructed again.

#### Requirements in Respect of Legionella

115. What roles are specifically required in respect of Legionella?

- A Roles such as Duty Holder responsibilities, risk assessment and associated requirements, landlord considerations, legionella management, monitoring and testing, engineer controls, suitably qualified delegated and Responsible people appointments, appropriate contractor appointments, ensuring adequate systems insitu and taken into account. Specific risk assessment management and consideration in terms of ionisation, also individual and specific risk assessment systems, e.g. dialysis systems, etc and consideration of personnel being suitably qualified to fulfil important roles within the Healthcare environment.
- 116. Where does the requirement for this role(s) come from?
- A The Health and Safety at Work Act and Management of Health and Safety at Work Regs.
- 117. What functions are required of this role(s)?
- A Functions in respect of the management of water systems for employers, employees and landlords including legionnaires' disease and subsequent control of legionella bacteria in the water systems.
- 118. During what period was this role(s) filled during your time at QEUH?
- A During tenure of my employment.
- 119. Who had responsibility for ensuring that this role(s) was filled?
- A Duty Holder and Senior Management with delegated powers.
- 120. What skills, knowledge or experience would be required of a person filling this role?
- A Knowledge and understanding of their requirements.
- 121. Who was appointed to this role(s)? When?
- A Duty Holder, Senior Manager, Responsible Persons, Authorised Persons, Competent Persons, Competent Contractors, Infection Control. I am aware of

the appointments across Estates and Contractors as per the Smartsheet Appointment Register, but not fully aware in respect of Infection Control.

- 122. Was this satisfactory?
- A No as there was still loss of life, therefore I would not regard this as satisfactory.
- 123. Were you satisfied that the holder(s) possessed the proper skills, knowledge and experience to carry out the required functions?
- A No.
- 124. Please provide any other comment which you feel appropriate. Insofar as these role(s) may have been unfilled at any point at which it should have been filled, what effect did that have on the operation of the water system at QEUH, in your view?
- A Important and essential lessons to be learned in respect of the operational of the water system at the QEUH.

# Specific Measures for Governing the Water System at QEUH

Please refer to the **Water Safety Group Bundle** to assist with your answers to this topic.

- 125. Please set out your understanding of the requirement to have a Written Scheme in place for governing the water system at QUEH. What is the significance of this?
- A Vital as a Written Scheme is the main document centre for all aspects of effective water scheme and system management. This document is significant because the management, their roles, responsibilities, tasks, personnel, appointments, system, control, engineering, plant, records, occupants, permits, procedures, safe systems, schematics, PPMs, checks, sampling, emergency information/procedures, action response guidance, HAI

Scribe requirements, Little Use Outlet guidance, microbiologic risks, contact and associated details are all required to deliver compliance.

- 126. Was such a Scheme in place when you started work at QEUH?
- A Yes.
- 127. Whose responsibility was it to put a Scheme in place?
- A Duty Holder and Senior Managers with delegated powers.
- 128. Who prepared that Scheme?
- A Alan Gallacher, Gerry Cox, Melville MacMillan, Colin Purdon and Phyllis Urquhart.
- 129. From when was it in place?
- A December 2016 as detailed on the QEUH Water Systems Compliance Tool Smartsheet page.
- 130. Did this meet your expectations?
- A No.
- 131. Please make any other comments which you feel appropriate regarding the Written Scheme.
- A Written Scheme is almost a living document in terms of the QEUH and requires regular review.
- 132. Please set out your understanding of the requirement to have a Water Safety Plan in place at QUEH. What is the significance of this?
- A Water Safety Plan is essential at the QEUH and I have previously emailed a report which was raised at the Board Water Safety Group, with particular emphasis on BS8680:2020 which provided useful guidance on development and implementing a water safety plan as this can have significant effect/impact of the safety of the water systems within the QEUH and throughout the Board.

- 133. Whose responsibility is it to have a Plan in place?
- **A** Duty Holder Jane Grant.
- 134. Was such a Plan in place when you started work at QEUH?
- A I was informed by my Senior Alan Gallacher that the Water Safety Plan in place was the entire picture of all water documentation within GG&C, but there was no sole document that I was aware of that was titled "Water Safety Plan".
- 135. From when was it in place?
- As per the Board Water Safety Group Meeting of Tuesday, 12th August 2020 (which unfortunately I was unable to attend due to annual leave), "It was suggested that an interim water safety plan is created for the site and MR/TF/AG and DK meet to discuss the areas that can be mitigated. Tanks are cleaned yearly and contractors on site to eliminate the dead legs as they are found but with staff being located all over the building this proves difficult to progress. By carrying out the suggested above will provide due diligence. SCART will be update and AG will discuss with PU to ensure that the question set is complete. Additionally MR stated that additional staff for maintenance had been requested but not fulfilled and Gartnavel maintenance staff have been used to fulfil tasks on site."
- 136. Who prepared that Plan?
- A I do not know.
- 137. Did this meet your expectations?
- A Difficult to answer as I do not have the full details.
- 138. Please make any other comments which you feel appropriate regarding the Water Safety Plan.
- A As stated previously in point 134 I am not aware of a single document named "Water Safety Plan" but was informed that the composition of documents

- across off the water systems in terms of Logbook, Water Policy, SHTM requirements, etc all made up the Water Safety Plan.
- 139. Please set out your understanding of the requirement to have a Water Safety Group in place for governing the water system at QUEH.
- A Water Safety Group is very important in respect of the health, safety for patients and visitors, Board assurance for the organisation and compliance.
- 140. Was such a Water Safety Group in existence when you started work at QEUH?
- A There have been individuals focussed on Water Safety who meet as a group in terms of the Board Water Safety Group and also the historical South Sector Water Group Meetings. This is difficult for me to answer as I was not provided with the full details.
- 141. From when was it in place?
- A From the beginning of my tenure the above-mentioned groups were in place.
- 142. Did you participate in the Water Safety Group? From when?
- A I participated in the Water Safety Groups I was invited to, which were dependent upon who wanted me to attend the meeting.
- 143. How well did the group function? Did the group achieve appropriate engagement among necessary participants?
- A Not always, but there were times when the group were effective.
- 144. Were its activities properly recorded?
- A Not always as some activities may not have been recorded historically.
- 145. What use to you, in your role, was your attendance at the Group?
- A Yes, useful as I could confirm/clarify some of the works complete/undertaken, raised operational concerns, etc in relation to across the Board.

- 146. What contributions did you make? Page 71 within the Water Safety Group Bundle.
- A Many contributions and with reference to Page 71 within the Water Safety Group Bundle I assisted each and every Authorised Person responsible for Water Systems across the Board, and not just the QEUH, with populating and developing the Water Safety Written Scheme Template, to ensure that it reflected their individual site(s) that was introduced to each and all sites within the Board. This does not necessarily mean each Written Scheme is the same as each individual site within the Board can have varying staff/plant, etc which needs to be taken into account whilst populating the template.
- 147. How effective was the Group as a whole in contributing to the proper operation of the water system at QEUH?
- **A** There were some individuals more proactive and effective than others.
- 148. Did it meet your expectations?
- A Not completely.
- 149. Please make any other comments which you feel appropriate regarding your experience of the Water Safety Group.
- A There has been significant change and advancement in all Water Safety
  Groups across the Board not only during my tenure, but there are important
  works/direction/joined up thinking/dissemination of information required to
  date.

## Online Water Compliance Tool Page

Water Safety Group Bundle page 96

- 150. Please describe this innovation and how it came about? What is a 'Smartsheet'?
- A From memory I first heard of Smartsheet via Joe McIlwee who was a work colleague in GG&C.

## 151. What was its purpose?

A I was informed the purpose of Smartsheet was to detail and deliver compliance records across as our Information Technology systems within NHS GG&C presented too many barriers/fire walls in terms of being able to invite contractors/Authorising Engineers, etc to review individual site details. I was suspicious of the Electronic System initially as I could not understand why the organisation wanted the NHS to utilise an American Electronic System and had some reservations about data protection requirements.

### 152. How did it operate?

A There was a requirement for each "Admin" type user of the Electronic System to possess an individual licence which would enable each Compliance Manager to create systems and records to aid site input via operational teams.

## 153. How did it assist you in fulfilling your role?

A The system was very useful in respect of fulfilling the Compliance Manager role for many reasons such as creating a document centre which benefited all concerned.

#### 154. How effective was it?

A This system was essential in respect of providing information across Estates,
Property and Facilities in terms of assurance and compliance situation reports
for Responsible Persons, Designated Persons, Authorising Engineer,
Authorised Persons, Capital Staff and Senior Management.

#### 155. What significance did it have for record-keeping at QEUH?

A This system enabled me to create a document centre to create and develop systems which permitted a central document centre and avoided the

embarrassment of Authorised Persons flapping and struggling to locate the necessary documentation required for Board assurance, management support information, audits and Authorising Engineer Reports.

- 156. How satisfactory was record-keeping before this innovation?
- A Not very effective from my initial observations in QEUH.

### **DMA Canyon 2015 L8 Report**

#### Refer to Bundle 6 - Miscellaneous documents - documents 29 and 30.

- 157. DMA Canyon prepared a Legionella Risk Assessment in April/May 2015.
  Were you aware of this report before you moved to take up your role at QEUH?
- A No, I started in the post in 2017.
- 158. When did you become aware, and in what circumstances?
- A 3rd July 2018 when Smartsheet created and circumstances in relation to providing support to evidence closure of RA actions.
- 159. What was the purpose of your becoming aware of it?
- A To assist operational estates with closing and evidencing actions from RA.
- 160. Who brought it to your attention?
- A Alan Gallacher.
- 161. Did you see the assessment at that time, or were you only aware of it?
- A I saw it on 3rd July 2018, and I was not aware of the assessment previously.
- 162. What, if anything, did you do in regard to that assessment at that time?
- A Create a document centre and provide estates support to evidencing closing down actions.

- 163. What did you understand to be the significance of the report, at that time?
- A Urgent and important significance in respect of incidents at the QEUH.
- 164. What knowledge did you have at that time of the extent to which the report and its contents were known about at QEUH?
- A No knowledge.
- 165. Do you know, or are you able to say whether it is likely, that the following people became aware of the report at the time it was received at QEUH:
- a) Alan Gallacher
- A No, I cannot say, sorry.
- b) Jane Grant
- A No, I cannot say, sorry.
- c) Mary Anne Kane
- A No, I cannot say, sorry.
- d) Ian Powrie
- A No, I cannot say, sorry.
- e) Tommy Romeo
- A No, I cannot say, sorry.
- f) David Loudon
- A No, I cannot say, sorry.

166. When did you first see the DMA 2015 risk assessment in full?

- A I did not see the document as it was Andy Wilson who emailed me a comparison document in respect of some actions closed between the 2015 and 2017 risk assessment.
- 167. Who brought it to your attention?
- **A** Andy Wilson.
- 168. What was the purpose of doing so?
- A To create a document centre in respect of assisting estates to close and evidence the closure of actions.
- 169. What view did you form upon seeing it?
- A I considered the document to be very important in respect of health and safety.
- 170. What did you do as a result?
- A Create a Smartsheet record to ensure evidence of closure of actions was held to provide some form of Board assurance and record.
- 171. At that time, what was your understanding of the extent to which the assessment and its contents were known at QEUH? Please comment on this.
- **A** Little understanding.
- 172. In your view what action ought to have been taken when the DMA Canyon assessment was received at QEUH?
- A The assessment should have been actioned upon in respect of risk, closing actions, providing evidence, highlighting actions at Water Safety Group Meetings for instance.

173. Are you aware of why that action was not taken (if it was not)? If you are not aware, in your view what is the likely reason why?

- A No, but I suspect a lack of understanding and awareness of individuals involved not understanding the importance of taking action legally and responsibly.
- 174. Please comment on the significance of that failure (if action was not taken). What issues are raised, in your view?
- A Deaths, pain and suffering, for example, could have been avoided and public safety could have been achieved.
- 175. In your view, what does this indicate about the structure at QEUH?
- A This highlights that the structure was ineffective.
- 176. Please comment on the work you carried out with DMA Canyon in respect of the 2018 risk assessment. Refer to **Water Safety Group Bundle page 96** to assist with your answer.
- A Work carried out, as per point 176 included creation of Smartsheet systems in respect of training, checks on flow straighteners across the Board, water cooler works, asset lists works, working on written schemes, etc.

#### 2017 Water System Audit

- 177. What is required of a Water System Audit?
- A Water Systems Audit should cover Management, Policy, Roles, Incident, Accidents, Dangerous Occurrences, Safety Documentation (RAs), Operating Records, Inspection and Verification, Safety equipment and access control, engineering systems, engineering work spaces, environment and assurance.
- 178. Where does that requirement come from?
- A SHTM, L8, HSE and LCA.
- 179. Who is responsible for carrying out a Water System Audit?
- A Experienced company in respect of the healthcare environment.

- 180. Who is responsible for ensuring that it gets done?
- A Duty holder and responsible persons.
- 181. How often ought an audit to be done?
- **A** Annually.
- 182. What is the normal procedure for carrying out such an audit? Please describe what roles would be involved.
- A At that time organising for a company to carry out an Audit. Roles at that time would involve Alan Gallacher informing me who he had chose to carry out the audit as he was the budget holder.
- 183. At the time when the 2017 audit was to be carried out, were you aware of any previous audit?
- A No.
- 184. Ought there to have been a previous audit?
- A Yes.
- 185. Whose responsibility would that have been?
- **A** Duty holder Jane Grant and responsible persons.
- 186. Would it have been possible to safely maintain the water system in the absence of such an audit?
- A No.
- 187. When you first took up your role at QEUH, were you aware of a specific process for managing risk around the water system?
- A Yes.
- 188. What measures were in place for managing such risk?
- A The GG&C Water Policy.

- 189. Please comment on the adequacy of the arrangements around managing risk.
- A Not robust enough.
- 190. When did you become aware that there was a requirement to carry out an audit in 2017?
- A 1st November 2017 when I started the post.
- 191. Describe the process around the 2017 audit. Did it conform to normal practice?
- A Involved in meeting with the Company and establishing timelines for delivery of the audit and this appeared to be normal practice at this time.
- 192. Who carried it out?
- A DMA
- 193. Describe your involvement.
- **A** Establishing a programme and ensuring all requirements were covered.
- 194. Who else was involved?
- A Alan Gallacher.
- 195. Is this how you would have expected the process to take place?
- A No.
- 196. Were you satisfied with the process?
- A No.
- 197. In the 2017 audit there is a reference to the 2015 DMA Canyon report, which is said to be the only preceding risk assessment at QEUH. Are you aware that you are cited as a possible source by which the 2015 report came to the attention of the auditor? Please comment on this.
- A I am not surprised as as the Auditor would expect me to be aware of the 2015 DMA Canyon report because the Company have been aware of me being

involved in Water Systems within the Healthcare environment for a number of years and having previously and presently carried out the role of Authorised Person. The Auditor may not have been aware of the fact that I took up the Compliance Manager role on 1st November 2017 when my focus was pushing water safety throughout the Board and not just within the QEUH at that point.

- 198. Are you aware of how it came to the attention of the auditor? If not, can you comment on other routes by which might have come to his attention?
- A I do think there were many pressures on individuals at that time in respect of the QEUH and I believe the auditor would have innocently just assumed that I had knowledge of this report.
- 199. To what extent were you in fact aware of it at that time?
- A I started my Compliance Manager role on 1st November 2017 and prior to me starting I was working in the North and the QEUH fell under the South. At this time the South and North were very separate in terms of areas and did not generally discuss each other's water systems, as there were very separate Sector Meetings held via Sector Estates Managers at that time, other than possibly Management discussing water systems at Board Meetings for instance.
- 200. How, in your view, ought it to have come to the attention of the auditor?
- A Possibly someone has provided the auditor with incorrect' information, but I cannot say who provided this information sorry.
- 201. Please comment on the significance of the auditor not having been aware of it before commencing his auditing process.
- A Very surprising.
- 202. Who ought to have known of the 2015 DMA Canyon report?

- All involved in water systems within the QEUH, duty holder, responsible persons, authorising engineer, authorised persons and competent persons.
- 203. Did such persons in fact know of it?
- A There may have been individuals who were aware of the report, but I cannot, with confidence state who sorry.
- 204. Whose responsibility was it, or ought it to have been, to ensure that the 2015 DMA Canyon report was known about?
- A Duty holder, Designated person, responsible persons, authorised persons, authorising engineer, competent persons and all involved in roles related to the safety of the water system at the QEUH.
- 205. Whose responsibility was it, or ought it to have been, to ensure that appropriate action was taken in respect of the contents of the 2015 DMA Canyon report?
- **A** Duty holder, Designated person, responsible persons and authorised persons involved in the water systems.
- 206. In your view, was the significance of the 2015 DMA Canyon report properly understood within QEUH prior to 2017?
- A No.
- 207. When was the significance of it understood?
- When I started work in the NHS on 16th July 2012, I had experience of working with water systems, but didn't appreciate the challenge on first entering the service of the in depth aspects of water systems within the Healthcare environment. This role was a quick and steep learning curve which involved educating and influencing a lot of senior figures operationally and clinically to achieve the end goal of water safety. At that time when I started taking water samples and reporting results, I used to get telephone calls at this time asking what I was doing with the water system in the Beatson. For instance, I received calls from, reportedly senior managers and Directors who did not understand the process or the requirements and of

course I was cautious to discuss any details on the telephone with anyone whom I had not met before and was also cautious about ensuring any statements were filtered through the appropriate channels of the Press Officer for example. I think NHS GG&C staff have been on a learning curve from this date and I had regularly asked for the Duty Holder and possible designated persons to attend Legionella Awareness Training in order to educate and spread the "risk" message. There have been significant advances made in respect of a greater understanding of water systems over a number of years, but also there have been many quick wins in relation to little used water systems, water coolers and responsibilities over the years, but also, frustratingly I do consider I personally have had years of influencing and spreading the water safety message (and continue to do so). In conclusion I think this is one of the reasons I was asked to apply for the Compliance Manager role within Greater Glasgow and Clyde. Upon the creation of the Compliance Manager new post one Manager had possibly noticed that I had waters systems/records in place whilst working in my current operational role, whilst other sites across the Board did not. Although at the time of advertising of the new Compliance Manager role I did not feel like this was a positive opportunity initially, as I also valued working within my current role across all operational estates systems at that time and thought that my contribution was misunderstood, but then soon I appreciated the opportunity to be involved in the creation of robust and auditable water systems within the Board and I then completely appreciated and valued the role.

208. Please comment further as you consider appropriate.

A There are still significant works to do within the Healthcare environment as more and robust communication and risk mitigations is required between Capital, Minor works projects and contractors carry out maintenance and works within the Board and I shall strive to positively contribute and influence these requirements at all and every opportunity.

- 209. Do you agree that temperature and movement are the primary control mechanisms for the water system at QEUH?
- A Yes, but one cannot consider this in isolation as there are so many other holistic considerations, for example you have your water systems operating at 60oC flow and 55oC return and the water is moving throughout the pipework system which reduces the risk of stagnation, but to consider are there any leaks that can introduce risk for immune-compromised individuals or could someone be working on the system at any particular time and can these emergency/unforsee events introduce risk for instance. Other risks can be loss of engineering controls such as pumps, bladders, etc.
- 210. Are there any other control mechanisms in use?
- A Yes, dosing system and filter control are other useful mechanism (both incoming water/point of use filters). Serious consideration should also be given to risk assessment and complete mitigation where possible.
- 211. How familiar were you with temperature as a control mechanism before taking up your role at QEUH?
- A Quite familiar as when I started as Senior Hospital Estates Manager in 2012, I asked the Fitters to increase the temperature at the calorifiers at Gartnavel General Hospital and they told me they had been in the NHS years and had never carryout this task. However, after some reassurance the task was acted upon and we received significant temperature improvements.

  Temperature control is very important in respect of water for so many reasons.
- 212. How effective was it as a control mechanism?
- A Not effective.
- 213. What risks does temperature control present:
- a) In respect of ability to maintain required temperatures
- A Significant risk associated with the loss or ineffective control/maintenance associated with required temperatures and resultant microbiological risk.

Specific risk associated with patient/immune-compromised patients and public safety. Issues with ineffective sensors liked to Building Management Systems temperature control and monitoring systems. Human error associated with checking temperatures on existing systems. There is also significant scald risk associated with inability to maintain temperatures. This duty requires very specific management, control and response activity in terms of risk posed to patients.

- b) In respect of susceptibility to pathogens
- A In general, immune-compromised individuals, such as bone marrow patients, individuals going through cancer, reduced immune system patients, dialysis patients and staff at work who may be working through health challenges are at risk of bacteria/contamination, legionella, pseudomonas, E.coli, etc within the water system, particularly from aerosols.
- c) In respect of any other aspect
- A Water temperature control was previously and traditionally known as a strategy for reducing the risk of legionella and detailed in the older SHTMs, but later removed to introduce greater flexibility. This is significant as water sitting at 37-40oC present the opportunity for legionella to double (in good conditions) within 15 minutes and other bacterial growth which represents significant risks to all coming in and around water system.
- 214. Did those risks in fact materialise?
- A Yes.
- 215. What measures would be required as a result?
- A Urgent action associated with potential risk associated with the system, who is and would be affected, migration, action required to regain control and avoid losing control again in the future, via any and all controls available, including education.
- 216. Were those issues and measures identified at QEUH? When and by whom?

- A Yes. Unfortunately, too late in respect of the risks and by Senior Managers, Authorised Persons, Responsible Persons, Competent Persons, Risk Assessment Contractors, Authorised Engineers in 2017 from my awareness.
- 217. Were the necessary measures carried out?
- A Yes.
- 218. When was the necessity for them identified? Were they carried out from that point onwards?
- A The necessity was immediately and in advance of construction works. They have not always been carried out from that point onwards as evidence of non-compliance in Edinburgh, etc has been in the news for example.
- 219. In your view, what other measures would have been desirable? Please comment further as you consider appropriate.
- A Awareness training mandatory for all Head and Senior Management Staff to ensure awareness and greater reporting systems. More regular auditing and the importance of ensuring audits and associated actions are complete and not simply stopped when negative/undesirable results appear to be initially coming out of the audit. A foreside and holistic overview of water systems, a simple learnpro that explains to all staff the importance of flushing and aspects of our water system and what happens if we don't carry out these simply measures as there are still activities throughout the NHS where individuals/managers think NHS spaces are their own and they can do as they wish with them, for example turning disused toilets/shower rooms into storage spaces for clinical equipment/files, just basic ideas and learning which can help so much in terms of water safety.

# **Dead Legs**

220. Please describe your understanding of what a dead leg is, how it comes about, and what problems are raised thereby.

- A deadleg is pipework leading to a fitting which water only passes infrequently and when there is draw off from the fitting which can provide the potential/risk for stagnation. This means if the water is not circulating and moving this situation can lead to stagnation.
- 221. Did you encounter dead legs at QEUH?
- A Yes in 2017.
- 222. Are you able to comment on the significance of this?
- A Yes, this was significant as many are aware of the incidents involved in the QEUH, however if we do not monitor/measure/assess the proposed works across any water system there will always be risk associated with the water systems as someone with requisite knowledge and skills needs to assess proposed plans prior to works commencing on site.
- 223. What measures were required to address the problem of dead legs? Action would be required of whom?
- A Budget provision and depending upon the extent of the dead leg removal, risk assessment determining the use of the area, potential HAI Scribe, agreement with staff, relocation of patients, Infection Control agreement/input/approval, potential building warrant, method statement in terms of rams/disinfection, isolation programme to name just a few considerations, associated fire escape restrictions for potential areas isolated to enable works to be carried out which affect means of escape, ensuring that there is a plan which has been altered and works recorded in the Log book, Alterations File and Risk Assessment Action plan as required.
- 224. Please comment on the effectiveness or otherwise of flushing as a means of addressing the problem. What challenges are raised for staff?
- A Flushing and effectiveness must always be assessed as where Managers are not aware of what duties may be covered by an individual, and it is difficult for the Manager to properly assess which areas to flush which are little used in the leave or sickness absence of staff. We are as a Board moving in a positive way to close down this risk. However, I can think of an occasion

where a Manager did not realise the importance of dealing with a neonatal area in respect of enabling a domestic member of staff annual leave and rather than ensuring the existing Manager has the staff members duties covered, they instead left their duty uncovered and their focus seemed to be placed on lesser risk associated wards.

- 225. Please comment on the effectiveness or otherwise of point of use filters as a means of addressing the problem.
- A Point of use filters can be effective in respect of risk, but this is not a holistic solution as you can have risk associated with individuals who may/could remove point of use filters then reattach the POU filter as care is required in respect of cleaning individual outlets/areas on a daily basis and associated education and training requirements.

## **Single Rooms**

- 226. You will be aware that QEUH operates on the basis of single rooms. What issues, from your perspective, does this raise?
- A number of issues in respect of occupation/use of the outlets, consideration of the type of patient as clinical colleagues focus, correctly on patients and in pressured situations clinical colleagues may not always be focussed upon whether these outlets are being utilised, regardless of flushing records and electronic requests for little used outlets. This design presents challenges in respect of staff getting access within a very busy environment to monitor, repair, etc. Better design may have facilitated access to pipework and systems from outwith the room.
- 227. How does QEUH compare to other locations in your experience?
- A Whilst being a challenging incredible new hospital building providing essential services sometimes traditional or thoughtful design proposals can assist/eliminate risk. However, there is a need to approach individuals who are experienced and possess the necessary skills to contribute to good design and ultimately impact safety in and around buildings.

- 228. What challenges are posed by the increased number of outlets?
- A Patient risk, main hospital providing vital services to a large number of patients, particularly on the back of closing and decommissioning of other hospital sites, no asbestos within the environment, water flow challenges, flushing, access, repairs, HAI Scribe consideration/actions, shear number of outlets to monitor, repairs, replacement taps which significantly increase costs, PPM maintenance costs/access and related budgetary impacts for the public purse for instance.
- 229. How did you address these? What options were available?
- Α Worked on HAI Scribe 3 classes of risk, such as low, medium and high, assisted in plans related to replacing a number of outlets, ensuring there was a records database as it is important to understand what assets are in place before mitigation works, etc are proposed/actioned. Influenced the creation of sentinel points (taps of interest) which should have been created prior to construction, but there are difficulties with knowing what service will go where in respect of occupancy, influenced the photographing and recording of actions being closed down in respect of repairs, provided some contact details of contractors I had previously worked with in respect of water systems. Regularly reviewed SHTM documentation and interpretation for many staff involved in the QEUH. Assisted with Scottish Water's contraventions' compliance requirements. Created deadleg registers, assisted and worked in incident plans, assisted and supported staff during subsequent AE Audits, created an implementation plan and subsequent auditable record, created a Smartsheet deadleg register, created a confined space document register example for use across the Board, created, maintained and monitored all training, course, records in respect of all staff across the Board in respect of water systems, created water asset registers, equipment registers, created a COSHH document centre, worked with Infection Control to establish a hydrotherapy and Spinal Pool record for the Board, established a calibration certificate for thermometers location and many other records to enable Audits to be evidence to support operational staff, Management and the Board, developed and worked on the WS01a flushing record to support staff with Infection Control and an Assistant Head of Estates, chaired, steered and

supported all sector water safety groups, reported concerns/information back to the Board Water Safety Group, provided risk assessment advice/information/guidance in respect of water systems, provided regular and continued support to all individuals, worked with and supported staff in respect of monitoring systems, created an electronic flushing record system and HAI Scribe Smartsheet page for records and communication improvements and operational staff across the Board and a number of other works as this list is not exhaustive.

### Monitoring

- 230. What measures were in place to monitor the functioning of the water system at QEUH?
- **A** BMS
- 231. Were those in your view appropriate?
- A No, this is a complex water system requiring systems, response mechanisms, a holistic approach overall for example. I have attended a number of design meetings with experienced and professional designers within the Healthcare environment and many designers do not understand the requirements for healthcare professionals to deliver services, therefore the chances of delivering a building not fit for purpose can be the result. There are minimum Building Standards, but there are greater needs in respect of a healthcare environment which are unique to this particular environment.
- 232. Were they properly used?
- **A** Not initially.
- 233. What challenges would arise from the use of additional methods of monitoring?
- A Response, alert procedures.

- 234. Please comment on the challenge thereby posed to staff at QEUH.
- A Significant numbers of alarms and numbers of staff that did not reflect adequate response capability.
- 235. Please comment on the potential of sampling as a method for water control.
- A GG&C did not advocate routine sampling via the Water Policy, as there was a number of criteria that was required to result in sampling.
- 236. Was this used at QEUH?
- A Compliance with the Policy was acknowledged at the QEUH.
- 237. In your view, was the extent of sampling appropriate?
- A For a new building, new occupation, etc no.

## **Chemical Treatment**

- 238. Please comment on the use of chemical treatment as a method of controlling safety of the water system at QEUH?
- A Useful.
- 239. In your view, was this method adequately used?
- A Initially no.
- 240. Please comment on any deficiencies in what was done.
- A Monitoring system deficient initially.
- 241. Please comment on what other approaches you would consider to have been appropriate, and why.
- A Training courses, contractor management.
- 242. What challenges would have arisen, had another approach been taken.
- **A** Awareness, competency and responsibility.

### **Taps**

- 243. Are you able to comment on any specific issues regarding taps at QEUH, before your arrival there?
- A There were issues in respect of degrading the existing taps in respect of the chemical dosing from memory.
- 244. Are you able to comment on the following features of taps at QEUH:
- a) Point of use filters
- A Compatibility of tap types and being able to fix point of use filters were a challenge.
- b) Flow straighteners
- A There were challenges in respect of flow straighteners which can harbour microbiological risk if not replaced regularly or cleaned regularly they can represent risk to immune compromised individuals. There is also pseudomonas information and specific Health Facilities Scotland guidance which states no testing in Scotland, but testing within areas with flow straighteners. Steps were taken to remove any flow straighteners from high-risk areas at the QEUH and incorporate point of use filters. Other areas across the Board involved replacing the straighteners every 3 months which presents conflicting advice in respect of one Board and no uniform interpretation.
- 245. Flow straighteners were a feature of a 2012 pseudomonas outbreak in Northern Ireland. Please comment on your knowledge of this.
- A This was the tragic case of 3 babies dying in the Royal in Londonderry of pseudomonas bacterial infections in January 2012. There can be common contamination sites such as tap spouts, aerators, hot water valve seats and showers which can pose a significant risk to immune-compromised individuals and particularly neonates and sick children within the RHC.

- 246. What implications did this or ought this to have had for the water system at QEUH?
- **A** The implications were very negative.
- 247. In your view, was this properly taken into account.
- A I think there has been significant learning from a number of healthcare environments that we need to take into account and many are devasted about the incidents that have occurred within GG&C, but we must devise ways of ensuring individuals involved in construction projects and staff maintaining healthcare sites know and understand risk and pathways of infection and I appreciate this is what NHS Assure are trying to embed at present.
- 248. Are there any other features of the taps at QEUH on which you would like to comment?
- A Taps are still an ongoing challenge and consideration throughout healthcare in terms of specifying the correct fit for purpose outlet and we must ensure a standard is enforced for safety moving forward.

### Resource Issues

- 249. Are you able to comment on whether budget was a factor in the choices made in designing and building the water system at QEUH, and what implications this may have had on its safety?
- A From meetings and conversations in relation to this question I understand there were a number of challenges that staff faced in terms of pressure to complete and open the new building and with having a construction background I asked a number of questions when I started in my new post about a number of construction related questions. For instance, a plan and schematic detailing the sentinel and representative/points of interest would have been really useful, a plan detailing sampling and recommended sample/legionella/pseudomonas risk points would have been useful, a number of BMS points, someone/Clerk of Works overseeing the construction works, but I remember being told that savings had to be made in terms of

- budget. I do appreciate that this has been the largest Hospital built in Scotland and there are so many useful design and practice lessons for all.
- 250. Are you able to comment on whether budget was a factor in the safety of the water system at QEUH during your time there?
- A Budget is always a factor within the Healthcare environment from my observations and experience, however, when presented or having identified a risk, these risks can be acknowledged by the Responsible Persons and added to the risk register for future budgetary purposes, but that initial process/conversation needs to take place.
- 251. How was the cost of operating the water system, during your time at QEUH, affected by the issues discussed above, such as design choices, allocations of responsibility, and knowledge and implementation of prior assessments of its safety?
- A From my observations there were significant pressures upon individuals to react/respond to issues at the QEUH and when you are dealing with design choices there are often significant time pressures which reflect against choice. For example to be able to take a step aside and consider that this design is unlike any other before it in respect of the total number of outlets which equates to risk alone is a challenge, to ensure that all involved with design and operations have an knowledge, skills, experience and opportunity to take into account what is coming to them to manage shortly and how to start to address these challenges is unprecedented.
- 252. Were appropriate resources allocated to the areas necessary to enable the operation of the water system in a safe manner?
- A Taking into account the incidents which have resulted no.
- 253. Specifically, please comment on whether Estates were allocated an appropriate budget for this task.
- A No.

## **Reporting Issues**

- 254. Several sections above address allocation of responsibilities and lines of reporting at QEUH. In your experience, did those arrangements operate in order to enable the raising of any concerns about the water system?
- A No.
- 255. Were those arrangements in fact used for that purpose?
- A Difficult to answer as I have not been aware of all individual conversations.
- 256. Were they used as extensively as they ought to have been?
- A No I think we are working together across the Board more effectively now.
- 257. Were there obstacles to their use?
- A There can be a number of barriers/challenges within the NHS environment.
- 258. Where they were used, did they lead to appropriate action?
- A In response to a number of actions yes.
- 259. In practice, did such structures operate properly, in your view?
- A Structural operations could have been improved.
- 260. Outside of those formal structural arrangements, was it possible for other persons at QEUH to raise concerns?
- A There were possibilities/opportunities to raise concerns.
- 261. Were concerns raised with you personally?
- A Yes.
- 262. Are you aware of concerns being raised with others?
- A Yes.

- 263. Are you able to comment on whether such raisings of concern were effective?
- A I think concerns within GG&C are and can be effective, however whether I consider my concerns were acted upon in a timely fashion is another factor.
- 264. Where this was done, did it lead to appropriate action?
- A QEUH, more staff to facilitate/accommodate/cover actions.
- 265. Were there obstacles to raising concerns?
- A I am not aware of obvious obstacles.
- 266. Please give examples where you are aware of difficulties arising?
- A There were significant gaps in the Legionella Management, high risk considerations, dead legs, flushing, isolation valves, service contracts, emergency procedures, etc as detailed in the Water Systems Audit at the QEUH.
- 267. Are you aware of difficulties in raising concerns around the time of the closure of the Schiehallion unit?
- A I was aware that wards 2A and 2B closed through the media.
- 268. Who suffered from such difficulties in reporting these, and other, concerns?
- A Patients.
- 269. What difficulties arose?
- A I understand there were concerns over bacteria in the water systems and ventilation system upgrade requirements.
- 270. In such cases, were the attempts to raise concerns effective?
- A I cannot answer sorry.
- 271. Did they lead to appropriate action?
- A I am not fully aware of all the actions taken.

- 272. In your view did QEUH in practice have proper arrangements to enable the raising of concerns?
- A Not fully aware of arrangements now in place sorry.

# **Conclusion**

- 273. Looking back, how would you assess your time at QEUH?
- **A** Extremely busy.
- 274. Are you pleased that you took the role?
- A Yes.
- 275. Do you regret taking the role?
- A No.
- 276. How effective would you assess your involvement to have been?
- A Not as effective as I would have liked.
- 277. How much improvement were you able to see in water matters at QEUH?
- A Significant.
- 278. Which aspects would you assess to still have required improvement?
- A Resilience aspects.
- 279. Which aspects were you able to contribute to the most?
- A Water safety and compliance.
- 280. Please comment on any other matters which seem to you important.
- A I appreciate this Inquiry is very important and please note that every effort has been taken to complete these answers. However please also note that at present I am presently covering 82 sites in the absence of my colleague (currently on sick leave) and Senior (currently on annual leave), therefore I am very busy currently fulfilling the operational support role and it is not always

easy to take complete time away from these duties. I have genuine sadness, concern in respect to the deaths, illness, pain and suffering which has been caused to patients and staff and hope no further incidents occur in the future.

# **Declaration**

281. 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.

282. The witness was provided the following Scottish Hospital Inquiry documents for reference when they completed their questionnaire statement.

# Appendix A

A48079747 – Bundle 6 – Miscellaneous documents

A48077959 - Bundle 11 - Water Safety Group