



Policy:

EST 007 - Water Quality Policy

(Includes control of Legionella, Pseudomonas aeruginosa and other bacteria that exist in water systems)

Executive Director Lead	Executive Director of Finance
Policy Owner	Head of Estate Services
Policy Author	Head of Estate Services

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Summary of Policy

This Policy outlines the process for the control of bacteria in Trust water systems. It outlines persons responsible as required in HTM 04
If you have any concerns about the content of this document please contact the author.

Target audience:	All staff
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Key words:	Water, Quality, Flushing, Infection Control
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Storage

Version 3 of this policy is stored and available through the SHSC intranet and internet. This version supersedes the previous version (Version 2, September 2019). Any copies of the previous policy held separately should be destroyed and replaced with this version.

Version Control and Amendment Log

Version No.	Type of Change	Date	Description of change(s)
2	Updated	July 2019	Amendments made to suit new policy format and changes to guidance
2	Policy submitted for consultation	July 2019	
2	Amend Policy	July 2019	
2	Policy submitted to the Health and Safety Group for comment	August 2019	
2	Policy submitted to the Director of Corporate Governance for comment by the Policy Governance Group before being submitted to EDG	September 2019	
2	Policy ratified by EDG	September 2019	
2	Policy placed on the intranet with a Trust-wide email informing staff of Policy change; previous Policy removed	September 2019	
3	Policy due for review	August 2020	New Policy format
3	Policy submitted to the Health and Safety Group for comment	October 2020	No amendments needed
3	Policy submitted to the Director of Corporate Governance for comment by the Policy Governance Group	November 2020	Approved

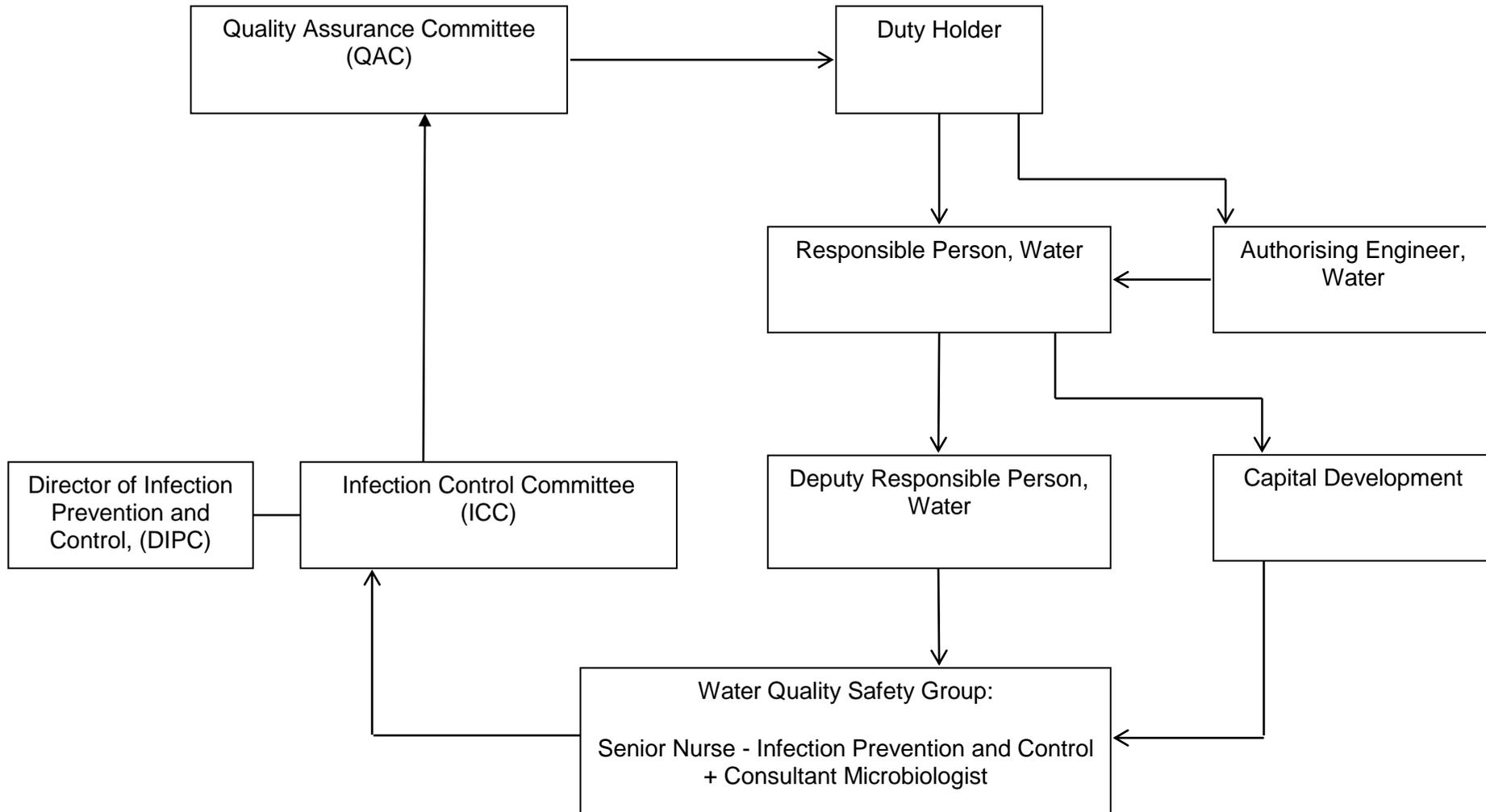
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Flowchart



1. **Introduction**

Legionella, Pseudomonas aeruginosa and other bacteria that exist in water systems, creates potentially high risks to the organisation, and this document sets out Sheffield Health and Social Care NHS Foundation Trust's (SHSC) policy for managing water systems and Legionella to manage and reduce that risk. It is the aim of SHSC to maintain the highest standard in relation to health and safety for staff, service users and visitors. This will be achieved by ensuring premises are maintained to a high standard and comply with statutory and mandatory requirements and best practice as set out in the Health Technical Memorandums (HTMs) and Department of Health Guidance.

SHSC will work with independent contractors and other commissioned services to ensure equally high standards.

Background

Legionella is a common bacterium which survives and multiplies in water. It is widespread in natural fresh water, including rivers, lakes, streams and ponds and may also be found in wet soil. There is a strong likelihood of very low concentrations of the bacteria existing in most water systems, including those of building services. Whilst under normal operating conditions there is little risk to health, the risk of infection increases considerably if the bacteria are allowed to multiply.

Legionella and Legionellosis can cause severe respiratory disease, including a potentially fatal form of pneumonia called Legionnaires Disease. This can affect anybody, but principally affects those that are susceptible due to age, illness, compromised immune systems or are smokers. It is normally contracted through inhalation of the Legionella bacteria either through tiny droplets of water, (aerosols), or in droplet nuclei deep into the lungs.

Pseudomonas aeruginosa is an opportunistic pathogen that can colonise and cause infection in patients who are immunocompromised or whose defences have been breached, (for example via a surgical site, tracheostomy or indwelling medical device such as a vascular catheter). In most cases, colonisation will precede infection. Some colonised patients will remain well, but can act as sources for colonisation and infection of other patients. As a micro-organism that is often found in water, the more frequent the direct or indirect contact between a susceptible patient and contaminated water, and the greater the microbial contamination of the water, then the higher the potential for patient colonisation or infection.

In contrast to Legionella, the origin of Pseudomonas aeruginosa is less certain. Its presence becomes evident at outlets from the system (e.g. taps) and can be found within the last two metres before the point of discharge of water. Devices fitted to, or close to, the tap outlet (for example flow straighteners) may exacerbate the problem by providing the nutrients which support microbial growth, providing a surface area for oxygenation of water and leaching nutrients.

The source, therefore, could be:

- The incoming water supply from the water provider;
- The water supply within the building, (both from the storage and distribution system), usually within biofilms;
- The waste-water system (see Breathnach et al 2012); or:
- Via external contamination from:
 - Clinical areas
 - Outlet users
 - Poor hygiene or processes during cleaning
 - Splashback from contaminated drains
 - Incorrect disposal of waste water in connection with nursing/personal hygiene activities

The Health and Safety Executive's publication, Legionnaires' Disease, The Control of Legionella Bacteria in Water Systems, Approved Code of Practice and Guidance (L8 fourth edition), provides a framework for achieving control relative to the hazards imposed. SHSC will manage/control the risks of bacteria in its water system to service users, staff and visitors in accordance with current regulations and guidance.

It is the intention of SHSC to ensure the effective implementation of this policy and to keep it under consideration in all aspects of health practice and decision making.

2. **Scope**

This Policy applies to all services directly provided by SHSC and all staff must familiarise themselves with the policy.

SHSC also has a responsibility to service users who may be deemed susceptible to infection from water-borne bacteria, and a responsibility to ensure all reasonably practicable precautions are taken to manage and effectively control the water systems throughout SHSC premises in order to prevent, or control, the risk of Legionellosis, Pseudomonas or other water-borne diseases to service users, visitors, staff and other persons working at or using its premises.

The estate comprises all the buildings currently occupied, owned and maintained by SHSC (under a full maintaining lease or otherwise), but normally excluding any third parties with sufficient and adequate Legionella policies - subject to SHSC approval via the Water Quality Safety Group.

Other sites/buildings may, from time-to-time, be included and incorporated and SHSC policies and procedures shall ensure all landlords of 'hireings' are notified of their requirements under this policy.

A list of SHSC's current estate is included in Appendix D. The estate, however, may be subject to change as a result of building ownership/occupancy changes in the future.

This policy does not apply to SHSC staff working in buildings owned or leased by other organisations.

3. **Purpose**

The Purpose of this policy is to:

- Ensure all reasonable precautions are taken to manage and effectively control the risk of Legionella, Pseudomonas, and other water-borne infections to service users, visitors, staff and other persons working at- or using its premises.
- Minimise the risk of Legionnaires Disease within all buildings currently owned or occupied by the Trust under lease or other service level agreements.
- Provide evidence that these measures have been undertaken in compliance with current guidelines (HTMs, HGNs, Model Engineering Specifications and Approved Codes of Practice), legislation and water supply regulations.

This Policy is supported by the Trust's Water Safety Plan books 1-4.

4. **Definitions**

Bacteria - a microscopic, unicellular organism.

Legionella - type of aerobic bacterium found predominately in water systems.

Legionellosis - any illness caused by exposure to legionella.

Pseudomonas aeruginosa - is a common bacterium that can cause disease in animals, including humans.

Water Systems - hot and cold installation intended for personal hygiene, culinary, drinking water or other domestic services. Includes items of plant or equipment where water is stored, distributed or discharged.

Flushing - the opening of infrequently-used water outlets to draw off potentially stagnating water.

Written Scheme - is the document laying out a structured procedure and reporting schedule, for the Management and Control of Legionellosis, including Legionnaires Disease, in compliance with current Guidelines (HTMs, HGNs, Model Engineering Specifications and Approved Codes of Practice), Legislation and Water Supply Regulations.

The Estate - for the purposes of this policy, the estate comprises all the buildings currently owned or occupied (under a full maintaining lease or otherwise) by SHSC.

Planned Preventative Maintenance (PPM) - a system of periodic inspection of plant and equipment

Responsible Person - is a competent person designated in writing by the Chief Executive. This person will have sufficient technical knowledge, qualifications and experience, normally an Estates Professional

Water Quality Safety Group (WQSG) - a multi-disciplinary group to undertake commissioning and development of water safety plans and advise on remedial action(s) once a system is found to be contaminated.

Water Safety Plan - a risk management approach to the micro-biological safety of water that establishes good practice in local water distribution and supply.

5. Details of the Policy

The purpose of this policy is to outline the procedure by which Trust water systems are managed within the Trust to prevent the proliferation of bacteria. In outlining this procedure, the policy sets out the Trust's systems, processes and expectations in relation to control measures employed in premises owned or leased under a maintenance agreement.

6. Duties

Sheffield Health and Social Care NHS Foundation Trust will:

- Manage the operation and maintenance of its water systems in-line with current best practice, complying with all current and relevant guidelines and legislation relating to the management and control of Legionellosis including Legionnaires Disease.
- Manage the operation and maintenance of all its domestic hot water systems and associated water blending apparatus in line with current legislation, guidance and best practice for ensuring water quality and minimising the risk of hot water caused scalding.

6.1 **Chief Executive**

The Chief Executive for Sheffield Health and Social Care NHS Foundation Trust has overall responsibility for ensuring suitable and sufficient procedures and resources are in place to manage and maintain the water systems and, as such, is the Duty Holder under the regulations. This will include all aspects of water quality management and control. They will be advised by the Water Quality Safety Group.

6.2 **Responsible Person (Estate Services)**

The Chief Executive will appoint, in writing, a Responsible Person for Legionella who will have the necessary skill and experience together with appropriate training to ensure the operational procedures of SHSC are carried out.

6.3 **Deputy Responsible Person (Estate Services)**

The Chief Executive may also appoint, in writing, one or more Deputy Responsible Person(s) who will deputise for the Responsible Person in his/her absence.

- 6.4 Director of Infection Prevention and Control**
Will be nominated by management to advise SHSC on infection prevention and control matters. Other matters, for example water quality, will be referred to a Consultant Microbiologist. Ensure staff carry out the necessary action(s) should an outbreak situation, associated with water-borne pathogens, be suspected or confirmed.
- 6.5 Independent Legionella Consultant**
In order to ensure SHSC receives the best advice on all matters relating to water quality and the safe operation of hot and cold-water services, the competent assistance from an approved consultancy will be employed to support SHSC.
- 6.6 Infection Control Committee**
Will primarily be advised and assured upon all matters relating to the prevention and control of water-borne infections within the premises occupied by staff employed by SHSC. The group will meet quarterly, or whenever circumstances dictate. Please refer to ICC terms of reference for membership of group.
- 6.7 Contractor**
A contractor is the person, or organisation, designated by management to be responsible for the supply, installation, validation and verification of hot and cold-water services, and for the conduct of the installation checks and tests in relation to the control of Legionella.
- 6.8 Department/Ward Manager**
Will be appointed for each department/ward, responsible for the safe user management of all water systems within the building. This includes ensuring the 'flushing procedures' are undertaken and records maintained.
- They will be responsible for notifying the Responsible Person of any changes in use of water systems that may affect safety.
- 6.9 Water Quality Safety Group**
The Water Quality Safety Group will undertake the commissioning and development of the Water Safety Plan. It will advise on remedial action required when water systems or outlets are found to be contaminated, and the risk to susceptible service users increases. The Water Quality Safety Group will be a sub-group of the Infection Control Committee. It will advise and receive recommendations from the Director of Infection Prevention and Control, (DIPC), and the Infection Control team.
- Members of the group will abide by the Terms of Reference and, if unable to attend, nominate a deputy to ensure the group is quorate.
- Meetings will be chaired by the Responsible Person for Water, (Estate Services).
- 6.10 Head of Capital and Strategic Development**
Have responsibility for ensuring all water systems and equipment under their control are designed, modified, installed, tested and commissioned to the guidance and standards referred to in this policy and the Water Safety Plan.

6.11 Head of Soft Facilities Management

Ensure training is undertaken for all Soft Facilities Management staff relating to Legionella and Pseudomonas management and control. Ensure appropriate guidance and protocols for the cleaning and flushing of all water outlets are provided and approved by the Water Safety Group.

6.12 Trust Consultant Microbiologist

Provide microbiological support and interpretation of sample results relating to Legionella and Pseudomonas aeruginosa. Advise on the continuing procedure for the prevention and/or control of water-borne pathogens.

6.13 Infection Control Nurse

Advise on infection control practices relating to Legionella and Pseudomonas aeruginosa. Advise on the location of 'high-risk' service user services, potential areas of risk, particularly those relating to medical devices. Support and advise Trust staff on the continuing procedure for the prevention and/or control of water-borne pathogens.

6.14 Authorising Engineer (AE)

Acts as an independent, professional advisor to the Trust. The AE shall be appointed by the Chief Executive with a brief to provide services in accordance with HTM guidance.

6.15 Employees

Have a duty under Section 7 of the Health and Safety at Work Act etc. (1974) to take reasonable care for their own health and safety and that of others who may be affected by their acts or omissions at work. This would include, but is not exclusive to:

Employees must correctly use all work items provided by their employers, in accordance with their training and their instructions they receive to enable to use the items safely.

- Employees must co-operate with their employer to enable the employer to comply with statutory duties for health and safety.
- Employees must report any short comings in the health and safety arrangements (even when no immediate danger exists) so that employers can take remedial action via SHSC's Incident Pack/Incident Reporting Policy.

7. **Procedure**

7.1 **Systems Application**

This policy will apply to the following systems:

- Domestic and processed water systems, including showers and hot and cold-water systems.
- Ancillary plant: process and any other plant, which is liable to encourage Legionella and other bacterial growth and/or create an aerosol such as irrigation systems.
- Air conditioning plant: ducted systems, which include chiller batteries and/or humidification, but excludes local 'split units'.

7.1.1 The introduction of any wet cooling towers on any site owned and/or occupied by SHSC is forbidden. It is policy that:

- All new water systems shall be designed, installed and operated in such a way as to minimise, avoid or prevent the risk of Legionellosis, and minimise or prevent scalding.
- All existing water systems shall be operated and maintained in such a way as to minimise or control the risk of Legionellosis, and minimise or prevent scalding.

7.1.2 No new water systems shall be introduced and no changes shall be made to water systems unless they have first been authorised by the Responsible Person.

7.2 **Risk Assessments**

In order to accurately assess the risk to a particular building SHSC will undertake, or commission, a detailed risk assessment of the water systems in all the properties owned or occupied by the Trust.

The risk assessment will recommend methods of control and procedural arrangements necessary to minimise the likely occurrence and proliferation of Legionella within the systems.

7.3 **Water Safety Plan**

The Water Safety Plan with respect to Legionella and Pseudomonas aeruginosa will identify areas within hospitals with at-risk patients; these include those who are immunosuppressed and those in augmented care settings. There is no fixed definition of augmented care, but the Trust may wish to designate a particular service as one where water quality must be a higher microbiological standard than that provided by the supplier.

The Water Safety Plan would incorporate clinical risk assessment to identify those settings where patients are at a significant risk from water-borne contamination associated with water use and its distribution system and all other requirements as identified in HTM 04-01: Addendum - *Pseudomonas aeruginosa* - advice for augmented care units. Risk assessments that inform the Water Safety Plan should be led by the DIPC, a Consultant Microbiologist or an Infection Control team member.

The clinical team responsible for the individual service user (at a local level), will be responsible for the clinical risk assessment, with support from Infection Prevention and Control and the Consultant Microbiologist.

7.4 **Managing and Controlling Legionella or Water-Borne Bacteria**

Management Measures

In order to manage and reduce the risk of bacteria proliferating within the water systems SHSC will undertake a range of measures to achieve this objective including:

7.4.1 The appropriate selection, design, installation and maintenance of plant.

7.4.2 The appointment and suitable training of a Responsible Person and guidance from the Water Quality Safety Group to:

- a) Liaise with all other organisations that supply the Trust with services pertaining to either Legionellosis management and control and/or management and control of hot water, whether accommodation, facilities management, water treatment, consultancy etc.
- b) Manage the identification and assessment of the risk of Legionellosis and scalding resulting from work activities to include breakdowns and abnormal situations.
- c) Support and advise on the development, implementation and maintenance of suitable management systems, staff training programmes and plant treatment procedures.
- d) Participate in the maintenance of adequate records in order to support the Trust in ensuring compliance with this policy. This will include the use of a data base (Currently Compass) for real time recording of water related planned and reactive maintenance and water flushing.
- e) Participate in ensuring compliance with this policy and the Water Safety Plan.
- f) Participate in regular monitoring of all implemented management systems, training programmes and treatment procedures, to establish and ensure their continuing efficacy and legislation compliance.

7.5 Control Measures

The approach to be adopted by SHSC in controlling Legionella, and other bacterial growth, will consist of the elements set out below:

- System cleanliness - ensuring all the means of storage, transmission and delivery of water services throughout the properties are kept at a high standard of cleanliness to minimise the environmental condition that will allow bacteria to proliferate. This will include all cold-water storage tanks, calorifiers, associated pipework and outlets.
- Thermal disinfection - thermal disinfection has been established as one of the main means of controlling water-borne bacteria within water system and will be the primary method of controlling water-borne bacteria within the premises operated by SHSC.

This can best be achieved by maintaining the cold-water supply temperature at <20°C. The domestic hot water should be maintained at 60°C at its source with a return temperature not less than 55°C. Where the risk assessment has identified a risk of scalding to service users, staff and visitors then the fitting of thermostatic mixing valves at the point of use will be actioned to control temperatures to 41°C.

- In addition to 'Thermal Disinfection', SHSC will consider and use Chlorine Dioxide in order to provide additional bacterial control. These units will be installed and maintained to the requirements of (technical guidance) HSG 274. The Trust may employ the services of an independent consultant in order to verify the effectiveness and use of the disinfectant plant. Currently, the Trust has ClO₂ units in operation at the Longley Centre, Lightwood House/Woodland View Nursing Home, Grenoside Grange and the Michael Carlisle Centre.
- During specific circumstances, such as when the primary method of bacterial control is shown by the various Pre-Planned Maintenance (PPM) Programme Monitoring Tasks to be failing, the water quality shall be maintained by the use of shot-dosing of a suitable disinfecting agent (disinfection), the levels of which must be maintained within the recommended limits for achieving disinfection as specified within the current edition of BS8558 and L8 - the Control of Legionella bacteria in water systems - Approved Code of Practice and Guidance 2013.
- The Estate Services management team will continue to consider new developments and improvements in the field of Legionellosis management and control, in order to ensure the control of the prevailing risk of Legionellosis posed by the systems on site is constantly reviewed and improved and always maintained at the maximum level.
- Routine flushing - where areas are identified within any buildings where outlets are used infrequently then those outlets shall be subject to daily flushing in accordance with the flushing guidance outlined in Appendix C.

Records of the flushing regime are to be kept for a minimum of five years. Records of modification, inspection and remedial work shall be kept for a minimum of five years.

7.6 **Alternative Treatments**

SHSC will not normally use any other means of control apart from those already outlined. However, these approaches will be reviewed periodically and reliable evidence will need to be provided to support any decision to change control methods.

7.7 **Managed Water Services**

All drinking water within SHSC premises will be supplied via a designated tap directly from the main cold water incoming supply. Drinking water fountains should also be supplied from the mains supply and must be subject to a user evaluation/flushing regime. If chilled water coolers are to be installed they will only be installed after agreement by members of the WQSG and Infection Control Committee. Drinking water via stand-alone chilled bottled dispensers shall not be used.

7.8 **Ice-Making Equipment**

Ice machines, if infrequently used, have the potential to allow Legionella bacteria to thrive. Additionally, re-circulated ice has the potential to introduce bacteria which can survive at low temperatures and can be a source of infection. For these reasons, the installation of this type of equipment is not permitted at SHSC properties.

7.9 **Training**

SHSC has an obligation to provide suitable and appropriate training to its employees and will implement a training programme that provides:

- General awareness of Legionella.
- Specific training on the procedures for the control of Legionella for those members of staff that have first line responsibility for either a building or staff groups.

The Trust will provide training in a number of different ways designed to suit the wide range of needs of the staff. This shall include:

- Responsible Persons Training
- General Awareness Training
- PPM and Log Book Training
- Capital Works Training
- Usage Evaluation and Flushing Training

The frequency of training will be agreed by the Water Quality Safety Group, with the exception of the Responsible Person and Capital Works Training, which will be every 3 years.

7.10 **Legionella (and other water-borne bacteria) Outbreak Plan**

7.10.1 In the event of an outbreak, or suspected outbreak, the Trust, via the Infection Control Committee, will implement SHSC's Outbreak Management Plan as outlined in the Water Safety Plan book 4.

7.10.2 The Responsible Person will provide advice to ensure the requirements of the Water Safety Plan are met, including responsibilities and actions in the event of water failure.

7.11 **Flexible Hoses**

Flexible hoses will not be used to supply water to wash hand basins, sinks or showers. They will also not be used to supply fixed baths, but may be deemed suitable for use on some types of hydraulic operated baths used for service users with disabilities.

These types of hose and others for washing machines, dishwashers, regeneration ovens etc. must be WRAS approved.

7.12 **Accountability and Reporting Arrangements**

Monitoring and management of water quality will be via the Infection Control Committee. Membership of the group will include the necessary personnel with relevant expertise. Ongoing management of Water Quality Policy will also be undertaken by this group. Water quality issues will be communicated to the Chief Executive and the Board via the Health and Safety and Fire Safety Committee on a three-monthly basis.

Any changes to the PPM system, including changes to sampling regimes and frequency, will be agreed by the Infection Control Committee via the Water Safety Group.

7.13 **Records**

All records relating to daily flushing and use evaluation shall be kept within the appropriate ward/department or via an online flushing module. Records will be retained for a minimum of 5 years.

Legionella risk assessments and all other documentation relating to Legionella PPM or new work schemes will be kept within Estate Services.

8. Development, Consultation and Approval

Name of Policy: Water Quality	Name of Policy Lead: Mark Gamble
Date: September 2020	Contact Details: (0114) 27 18698
Consultation Plan:	
Infection Control Committee	
Health and Safety and Fire Safety Committee	
Selected line managers	
The Trust's Independent Legionella Consultant and Legionella Deputy Responsible Person	

RECORD OF CONSULTATION (interactive)			
Group or individual consulted	Date of consultation/ response received	Comments on draft policy	Your response (say if policy amended - if not, why not)
Various managers, independent consultants, Water Quality Safety Group, Infection Control Committee and the Health and Safety and Fire Safety Committee	July-October 2020	Clarification on responsibilities	Amended
		Retention of records included	Amended
		Suggested review frequency of 3 yearly rather than annually	Amended

9. Audit, Monitoring and Review

SHSC undertakes to arrange regular audits in conjunction with the Responsible Person and any appointed Specialist Contractors. This will be undertaken in accordance with the Water Safety Plan.

The policy will be reviewed every 3 years to ensure it remains compliant with changes to legislation, regulation and guidance, and Department of Health standards, but does not exclude the option to review and update the policy should a significant change in legislation, regulation, guidance or Department of Health standards occur.

10. **Implementation Plan**

This Policy shall be disseminated by the Service Directors, Estate Services and Infection Control.

The Policy will be available within Estate Services and on the Trust's intranet and website and shall be implemented via the Infection Control Group and Estate Services Operational and Risk Management Group.

The Trust's water quality programme is currently audited by an independent contractor on a quarterly basis.

Action/Task	Responsible Person	Deadline	Progress Update
Amend Policy	Head of Estate Services	August 2020	Completed
Policy out for Consultation	Head of Estate Services	August 2020	Completed
Policy submitted to the Health and Safety and Fire Safety Committee	Head of Estate Services	September 2020	Completed
Policy submitted to the Policy Governance Group	Head of Estate Services	November 2020	Policy Approved
Policy submitted to the Finance and Performance Committee (FPC)	Head of Estate Services	November 2020	Completed

11. **Dissemination, Storage and Archiving (Control)**

The Policy is to be disseminated by Estate Services, Infection Control, Departmental and Ward Managers.

The Policy will be managed by Estate Services and placed on the *Polices* site of the Trust intranet and website.

Version	Date on website (intranet and internet)	Date of 'all SHSC staff' email	Any other promotion/ dissemination, (include dates)
2	3 October 2019	October 2019	Launch via the Policy Governance Group
3	November 2020	November 2020	Launch via the Policy Governance Group

12. **Training and Other Resource Implications**

Within the Trust's directorates, managers at all levels must ensure staff under their control are aware of this Policy, including their individual responsibilities detailed.

The implementation of this Policy should have no additional resource requirements. There are no other training needs for the implementation of this policy.

The introduction of this Policy should provide improved clarity on how Legionella and other bacterial proliferation is controlled within the Trust and how to obtain further information.

13. Links to Other Policies, Standards and Legislation

- Control of Substances Hazardous to Health Policy
- Health and Safety Policy
- Infection Prevention and Control Policy
- Water Safety Plan
- Serious Untoward Incident Policy
- Cleaning of Water Outlets Guidance
- Procurement Policy
- Management of Contractors Policy
- Confidentiality Code of Conduct Policy
- Health and Safety Commission Approved Code of Practice and Guidance 2013 - the Control of Legionella bacteria in water systems (L8).
- Health and Safety at Work etc. Act 1974, Sections 2, 3 and 4 (HSW).
- Management of Health and Safety at Work Regulations 1999 and the Health and Safety (Miscellaneous Amendments) Regulations 2002.
- Control of Substances Hazardous to Health Regulations 2002, Regulation 6 (COSHH).
- The Public Health (Infectious Diseases) Regulations 1988.
- The Water Supply (Water Fittings) Regulations 1999.
- The Water Supply (Water Quality) Regulations 2010.
- BS EN 806-2:2005 Specification for installations inside buildings conveying water for human consumption Food Act 1990.
- Heating and ventilation systems Health Technical Memorandum 03-01: Specialised ventilation for healthcare premises.
- Health Guidance Note 'safe' hot water and surface temperatures - 1998.
- National Health Service model engineering specifications D 08 thermostatic mixing valves (Healthcare Premises).
- Model Engineering Specification C07 1997 rev 3.
- PHLS - Hygiene for Hydrotherapy Pools 1999 2nd Edition.
- Health Building Note 13 – Sterile Service Departments – 2004.
- The Control of Legionella in healthcare premises Implementation of the Code of Practice - HTM 04-01.
- HTM 04-01: Addendum - Pseudomonas aeruginosa - advice for augmented care units
- Hot and cold-water supply, storage and mains services- HTM 2027
- Ventilation in healthcare premises - HTM 2025
- BS 8580 - 1: 2019 - Risk Assessments for Legionella Control
- BS 1710 - 1984 - Specification for identification of pipeline services
- BS EN 806-2:2005 Specification for installations inside buildings conveying water for human consumption
- Food Safety Act 1990
- The Control of Legionella, hygiene, 'safe' hot water, cold water and drinking water systems HTM 04-01 Part A and Part B
- BS EN 806-5: 2012 - Specifications for installations inside buildings conveying water for human consumption, operation and maintenance
- BS 8558: 2011 - Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages
- HTM 00 - Authorising Engineer
- HSG 274 - Legionella Technical Guidance
- Breathnach et al 2012

14. **Contact Details**

Title	Name	Phone	Email
Head of Estate Services	Mark Gamble	27 18698	mark.gamble@shsc.nhs.uk
Maintenance and Grounds Manager	Daniel Mulhall	27 11155	daniel.mulhall@shsc.nhs.uk
Senior Nurse - Infection Prevention and Control	Katie Grayson	27 18621	katie.grayson@shsc.nhs.uk

Appendix A - Equality Impact Assessment Form

Equality Impact Assessment Process for Policies Developed Under the Policy on Policies

Stage 1 - Complete draft policy

Stage 2 - Relevance - is the policy potentially relevant to equality, i.e. will this policy potentially impact on staff, patients or the public? If **NO**, no further action is required. Please sign and date the following statement. If **YES**, proceed to Stage 3.

This policy does not impact on staff, service users or the public, (insert name and date)

Mark Gamble, September 2020

Stage 3 - Policy screening - public authorities are legally required to have 'due regard' to eliminating discrimination, advancing equal opportunity and fostering good relations, in relation to people who share certain 'protected characteristics' and those that do not. The following table should be used to consider this and inform changes to the policy (indicate yes/no/ don't know and note reasons). Please see the SHSC guidance on equality impact assessment for examples and detailed advice; this can be found at <http://www.shsc.nhs.uk/about-us/equality--human-rights>

	Does any aspect of this policy actually or potentially discriminate against this group?	Can equality of opportunity for this group be improved through this policy or changes to this policy?	Can this policy be amended so that it works to enhance relations between people in this group and people not in this group?
AGE	No		
DISABILITY	No		
GENDER REASSIGNMENT	No		
PREGNANCY AND MATERNITY	No		
RACE	No		
RELIGION OR BELIEF	No		
SEX	No		
SEXUAL ORIENTATION	No		
MARRIAGE AND CIVIL PARTNERSHIP	No		

Stage 4 - Policy Revision - Make amendments to the policy or identify any remedial action required (action should be noted in the policy implementation plan section)

Please delete as appropriate: Policy Amended/Action Identified/No Changes Made

Impact Assessment Completed by (insert name and date)

Mark Gamble, September 2020

Appendix B - Human Rights Act Assessment Checklist

You need to be confident that no aspect of this policy breaches a person’s Human Rights. You can assume that if a policy is directly based on a law or national policy it will not therefore breach Human Rights.

If the policy, or any procedure(s) in the policy, is based on a local decision which impacts on individuals, there is a need to ensure their human rights are not breached. To do this, refer to the more detailed guidance that is available on the SHSC website - <http://www.justice.gov.uk/downloads/human-rights/act-studyguide.pdf> (relevant sections numbers are referenced in grey boxes on diagram) and work through the flow chart on the next page.

1. Is your policy based on, and in-line with, the current law, (including case law), or policy?

Yes. No further action needed

No. Work through the flow diagram over the page then answer questions 2 and 3 below

2. On completion of flow diagram, is further action needed?

No. No further action needed

Yes, go to question 3

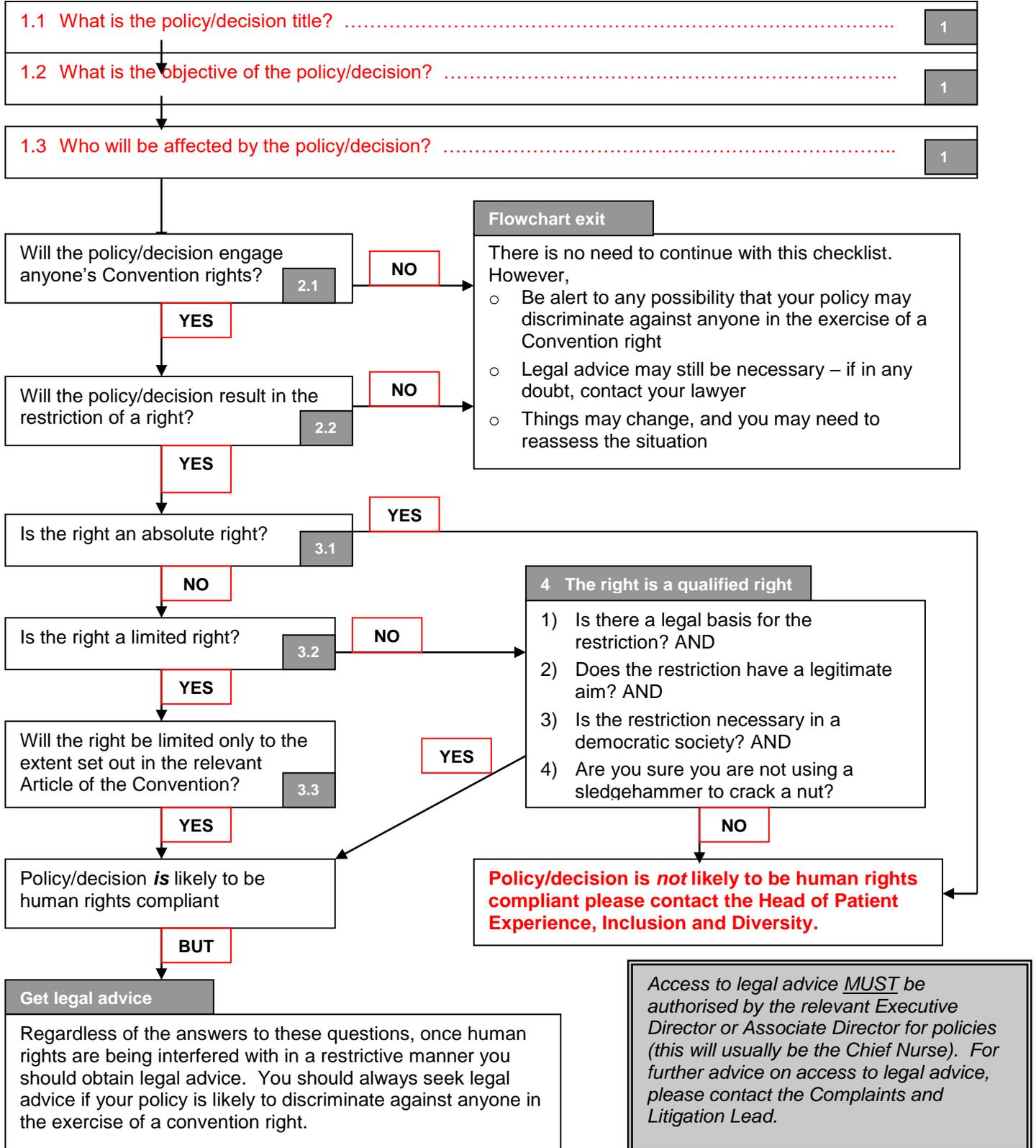
3. **Complete the table below to provide details of the actions required**

Action required	By what date	Responsible person

Human Rights Assessment Flow Chart

Complete text answers in boxes 1.1 – 1.3 and highlight your path through the flowchart by filling the YES/NO boxes red (do this by clicking on the YES/NO text boxes and then from the Format menu on the toolbar, choose 'Format Text Box' and choose red from the Fill colour option).

Once the flowchart is completed, return to the previous page to complete the Human Rights Act Assessment Form.



Appendix C - Flushing Guidance

Current legislation requires that both 'management' and 'staff' are aware of their individual and collective responsibility for the provision of wholesome, safe hot and cold-water supplies, and storage and distribution systems in healthcare premises. At the same time, take in to account the effect of usage of water on the environment and cost to the Trust.

Estate Services carry responsibility for much of the work needed to achieve this requirement, but are reliant on local users to assist with measures that are fundamental to success. Regular usage and flushing of all outlets is one of the key elements in keeping water systems clean and maintaining bacteria below harmful levels. It is the responsibility of ward or departmental managers to ensure flushing is performed in their area of responsibility and recorded as detailed below:

- Identify fittings that are rarely or never used and can be removed without detriment. The Estate Services Helpdesk (x18181) should be informed of these fittings and given the details of type(s) of fitting, number(s) involved and exact location(s).
- Identify fittings (wash basins, sinks, bidets, WCs and water coolers) that are infrequently used. Infrequently used fittings are defined as those that are not used on a daily basis. Outlets having guaranteed daily use are not subject to this regime.
- Outlets that are guaranteed to be used daily are to be recorded as in daily use:
 - Infrequently used fittings **MUST** be flushed for 5 minutes every working day and the process recorded on the standard 'Flushing Log Sheet'.
 - Units that are closed at weekends and bank holidays (e.g. outpatients, day wards, clinics and admin buildings/areas etc.) should ensure outlets are flushed as a priority when the unit first re-opens. No more than two outlets should be flushed simultaneously to avoid draining the system.
 - Outlets should be run at a maximum flow rate. Hot taps must be run at their hottest and cold taps at their coldest setting without over-riding any pre-set controls.
 - Flushing of showers is of particular importance because they are more likely than most other outlets to create aerosols. They must be run every working day on their hottest pre-set setting for a period of 5 minutes.
 - Evaluation of usage and flushing of unused outlets is the responsibility of the ward/departmental manager.
 - When completing the 'Flushing Log Sheet', it is acceptable to document either an individual record for each outlet or to that all outlets in the area have been flushed. The record must be signed and dated.
 - The completed log sheets must be kept by the ward or department manager for a period of **5 years** from the date of the last entry on the sheet. The log sheet will be subject to external audit to determine compliance.
 - In the event the flushing of outlets does not occur the Responsible Person (or deputy responsible person) shall be informed.

Appendix D - Current Estate

Property	Address
Argyll House	9 Williamson Road, S11 9AR
Albert Terrace Road	Albert Terrace Road, S6 3EB
Liaison Psychiatry	Sheffield Teaching Hospitals, Northern General Hospital, Herries Road, S5 7AU
East Glade Centre	1 East Glade Crescent, S12 4QN
Edmund Road	Edmund Road, S2 4EA
Firshill Rise	32 Firshill Rise, S4 7BW
Fitzwilliam Centre	141-149 Fitzwilliam Street, S1 4JP
Forest Close	1a + 1-4 Forest Close, S35 0JW
Forest Lodge	5 Forest Close, S35 0JW
Fulwood House	Old Fulwood Road, S10 3TH
Grenoside Grange Hospital	Salt Box Lane, S35 8QX
Highgate Surgery	Highgate, Sheffield S9 1WN
Lightwood House/Woodland View Nursing Home	Lightwood Lane, S8 8BG
Limbrick Centre	Limbrick Road, S6 2PE
Longley Centre	Norwood Grange Drive, S5 7JT
Michael Carlisle Centre, main site	75 Osborne Road, S11 9BF
Michael Carlisle Centre, LTNC	75 Osborne Rd, S11 9BF
Michael Carlisle Centre, SAANS	Lyndhurst Road, S11 9BJ
Netherthorpe House	Netherthorpe Road, S3 7EZ
Northlands	Northlands Road, S5 8DU
President Park	Unit 1 President Way, S4 7UR
Psychiatric Outpatients	Sheffield Teaching Hospitals, Northern General Hospital, Herries Road, S5 7AU
Rivermead Unit	Sheffield Teaching Hospital, Herries Road, S5 7AU
Sidney Street	Sidney Street
St George's Community Health Centre	Winter Street, S3 7ND
Transport Services	Shepcote Lane, S9 1US
Wardsend	45 Wardsend Road North, S6 1LX
Wilkinson Street	30 Wilkinson Street, S10 2GB