

Water Management Policy

Approved By:	Trust Board
Date Approved:	5 February 2004
Trust Reference:	A1/2004
Version:	April 2024
Supersedes:	March 2020
Author / Originator(s):	Michael Blair – AD Compliance, Health, Safety and Security
Name of Responsible Committee/Individual:	UHL Water Safety Group
Latest Review Date	11 April 2024 – Trust Board
Next Review Date:	April 2027

CONTENTS

Section	Page	
1	Introduction and Overview	4
2	Policy Scope	4
3	Definitions and Abbreviations	4
4	Roles	5
5	Policy Implementation and Associated Documents	8
6	Education and Training	8
7	Process for Monitoring Compliance	8
8	Equality Impact Assessment	9
9	Supporting References, Evidence Base and Related Policies	9
10	Process for Version Control, Document Archiving and Review	11

Appendix	Appendix I
Water Management Flowchart	page 12

REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

2004 – The original version A1/2014 of this Policy was written and approved.

2016 – The last review of this Policy incorporated the relationship with the Outsourced Facilities Management Contractor.

2017 - This version reflects the repatriation of Facilities Management services back to the Trust. Management responsibilities have been brought in line with Trust structures, a revised Terms of Reference for the Water Safety Group added as Appendix I and a Management and Governance flowchart is included as Appendix II.

2020 –

Terms of Reference for the UHL Water Safety Group removed to enable changes to be made without changing the policy. Section 4.6 amended to include Infection Prevention patient susceptibility risk assessment. Section 4.7 accountability and remedial actions responsibility clarified. Section 4.8 Backlog maintenance and risk relationship explained. Section 4.11 to 4.14 explains the water testing arrangements. Section 9 Reference to BS 8580-1:2019 Water Risk Assessment standard added. Appendix I Flowchart from the 2017 version deleted and the Appendix II flowchart from the 2017 version has been amended and now becomes Appendix I.

2024

Title Page details updated.

Key words – placed in alphabetical order with some additions to aid searching.

Section 1 – Formatting corrections; reference to the WSG approving the WSP.

Scope – removed training references as covered off elsewhere in document.

Section 3 – updated / simplified definitions.

Section 4 – formatting corrections in line with current policy template(s) / Role designations updated as required.

Section 5 – New WSP Book details added.

Section 6 – addition of contractor competency

Section 7 - Table 02 updated to reflect current arrangements.

Section 9 – Removed reference to individual WSP book as detailed in Section 5

Appendix 1 – Replace with graphics to reflect current arrangements.

KEY WORDS

Authorising Engineer (AE) / Legionella / Microbiological / Pseudomonas Aeruginosa / Responsible Person (RP) / Water / Water Management / Water Safety / Water Safety Group / Water Safety Plan

1. INTRODUCTION AND OVERVIEW

The University Hospitals of Leicester NHS Trust, hereafter known as the Trust, accepts its responsibility to take all reasonable precautions to prevent or control the harmful effects of contaminated water to, patients, visitors, residents, staff, and other persons working at or using its premises and to ensure the provision of “safe” hot water, drinking water and ‘wet’ ventilation systems.

The aim of this document is to describe the Trust's Policy for the safe management of water systems, incorporating Legionella and Pseudomonas Aeruginosa guidance and including "Safe" hot water and "Wet" ventilation systems using the current Guidelines (HTM, HBN, Model Engineering Specifications and Approved Codes of Practice), Legislation, Water Supply Regulations, and pertinent British Standards.

This policy is supported by a comprehensive range of technical operational documents in the form of a Water Safety Plan (WSP) prepared and approved by the Water Safety Group.

2. POLICY SCOPE

- 2.1** This Policy applies to all premises whether owned, solely occupied or partially occupied by the Trust. It does not apply to premises owned by the Trust but occupied exclusively by others unless there is an agreed Service Level Agreement (SLA) requiring the Trust to manage water systems to deliver water to the occupier of the premises.
- 2.2** This policy is relevant to all persons on site, however, additional control and monitoring measures are applied to augmented care areas, where the risk of acquiring infection from Pseudomonas aeruginosa and other water borne pathogens is higher.

3. Definitions and Abbreviations

3.1 Pseudomonas aeruginosa

- a) Pseudomonas aeruginosa is a Gram-negative bacterium often found in soil, ground water and moist environments. P. aeruginosa is an opportunistic pathogen and it rarely affects healthy individuals.
- b) It can cause a wide range of infections, particularly in those with a weakened immune system, for example cancer patients, newborns and people with severe burns, diabetes mellitus or cystic fibrosis. Pseudomonas Aeruginosa infections are sometimes associated with contact with contaminated water. In hospitals, the organism can contaminate devices that are left inside the body, such as respiratory equipment and catheters.
- c) P. aeruginosa is resistant to many common antibiotics.

- d) Some colonized patients will remain well but can act as sources for colonization and infection of other patients.

3.2 Legionella bacteria

- a) Naturally occurring bacteria in both the natural and constructed aquatic environment and are widespread in natural freshwater including rivers, lakes, streams, and ponds and may also be found in damp soil.
- b) Airborne dispersal may occur when aerosols or droplet nuclei are created. There is a strong likelihood of low concentrations of Legionella existing in all open water systems including those of building services; therefore, the main emphasis should be on preventing Legionella from multiplying in water systems in healthcare premises.
- c) The risk of healthcare-associated legionellosis depends on several factors such as:
- Susceptible Individuals
 - the presence of Legionella in sufficient numbers
 - conditions suitable for multiplication of the organisms (for example temperatures between 20°C and 45°C).
 - a source of nutrients (for example scale, sludge, rust, protozoa, and other available organic carbon, bacteria, and biofilms).
 - a means of creating and disseminating aerosols (spray from taps, showers, and other water outlets)

3.3 COMPASS.

A web-based system to monitor flushing regimes of identified little used water outlets (taps, showers, etc.) across the Trust.

4 ROLES AND RESPONSIBILITIES

The Trust, as employers, have a general duty under The Health and Safety etc. at Work Act 1974 to ensure, so far as is reasonably practicable, the Health, Safety, and Welfare of all their employees and others who may be affected by the Trust's undertakings.

4.1 Chief Executive Officer (CEO)

Responsible for ensuring that arrangements are in place to manage water safety at the Trust.

4.2 Director of Estates, Facilities and Sustainability

- a) To act as the Duty Holder as delegated by the Chief Executive for the hot and cold-water storage and distribution systems across the UHL.
- b) To appoint the core members of a Trust Water Safety Group (WSG) to form a 'Responsible Body' to provide strategic management and oversight of water safety arrangements across the Trust.

4.3 Chief Nurse

- a) fulfils the Duty Holder role for Infection Prevention as the Director of Infection Prevention and Control (DIPC) for the Trust.

4.4 Consultant Microbiologist

- a) Act as Chair of the Water Safety Group.

- b) Provide specialist and technical advice and direction on water microbiological safety.
- c) Liaise with the Director Infection Prevention and Control (DIPC), where there is a significant risk to patients.

4.5 The Water Safety Group (WSG)

- a) Assurance group to ensure processes are in place for the management of 'Water Safety' across the Trust and be accountable for ensuring that arrangements are in place to identify, eliminate or control the risks from Legionella and Pseudomonas aeruginosa in water systems.
- b) Seek operational assurances from the Water Task Group that comprises representation from Estates, Capital, Infection Prevention, Compliance, and third-party providers / Contractors.

4.6 Infection Prevention Team:

- a) responsible for supporting water safety processes, including the capital works team in relation to water safety in any refurbishments and new builds.
- b) responding to adverse water test results
- c) carrying out a patient susceptibility risk assessment with the local nursing staff (in charge of patient care for the area)
- d) coordinating actions between Nursing, Estates, Capital, and Facilities to produce an action plan to address or mitigate identified risk(s).
- e) This is coordinated through an Estates & Facilities embedded Senior Infection Prevention Nurse and outcomes are shared with core members of the UHL Water Safety Group.

4.7 Responsible Person (RP) Water

- a) Whilst the overall accountability for water maintenance rests with the Associate Director of Estates Operations and Engineering Management this is devolved to the Senior Estates Managers, who have the day-to-day responsibility for managing water systems as, or through appointed 'Operational Responsible Persons (RP) Water.
- b) The duties and responsibilities of the Operational Responsible Persons include the provision of suitably trained staff and/or contractors to carry out the Planned Preventative Maintenance (PPM) and remedial actions, new works, water sampling in accordance with the WSG agreed program, water temperature monitoring, water risk assessment action plans and emergency contingency plans for Estates services.

4.8 Capital Team / Project Managers (PM).

- a) Obtain authority and permission to work on water systems via the Operational Authorised Person who is a member of the onsite estates team and the Senior Infection Prevention Nurse prior to commencement, who will determine if the work should be escalated to the WSG for approval.
- b) Ensure that water risk assessments are reviewed and updated following completion of the work.
- c) Follow the Technical Guidance for work on water systems as prescribed in the Trust's Water Safety Plan (WSP).
- d) incorporated the standards in the WSP in all specifications for any

work on water systems.

- e) The Head of Capital will manage the Trust's backlog funding and prioritise funding to support risk reduction priorities informed through the risk assessment process and the Risk Register.

4.9 Compliance Water Specialist Officer (AP) / Technical Compliance Officer (TCO)

- a) Manage and administer the water sampling and analysis for the estate.
- b) To be the primary point of contact for the external water testing laboratory to facilitate Estates, Capital Team and Endoscopy water testing and queries.
- c) Liaise with the Senior Infection Prevention Nurse to ensure that Nominated Representatives are proposed by Clinical Management Groups (CMG's) to identify and flush little used water outlets.
- d) Monitor the Compass system weekly and alert the Senior Infection Prevention Nurse of any non-compliance with the flushing schedule.
- e) An annual program for water microbiological testing of water distribution systems will be managed through Estates & Facilities and adverse results reviewed by core members of the UHL Water Safety Group.

4.10 Contractors

- a) All contractors appointed to work on or near UHL Water systems must have the required competencies as defined within the WSP and the external Authorised Engineer for Water.
- b) All contracts must be Safe Contractor Accredited, a process to ensure that the contractor has all the required health and safety, insurances, and training certifications in place.

4.11 Water Task Group

- a) Multi-disciplinary assurance group to monitor, review and seek assurance that mitigations and control measures are applied to any non-conformities highlighted through third-party contractor Preventative Planned Maintenance (PPM) monthly reports.
- b) Report any significant risks or issues to the Water Safety Group (WSG)
- c) Monitor and highlight any issues against contractual and service level agreements (SLA) for third-party contractors carrying out water treatment tasks on behalf of the Trust.
- d) Report any issues against the contractual agreement regarding the water testing program and sample collections.

5. POLICY IMPLEMENTATION AND ASSOCIATED DOCUMENTS

The relevant processes and procedures that support this Policy detailed in the Water Safety Plan

Table 1

Water Safety Plan 2022		Key Stakeholder Impact Areas						
		Capital Works	Infection Prevention	Nursing	Medical Physics	Estates & Facilities	Microbiology	Contractors
Book 0	Introduction	✓	✓	✓	✓	✓	✓	✓
Book 1	General Considerations	✓	✓	✓	✓	✓	✓	✓
Book 2	Estates Management	✓	✓			✓		✓
Book 3	Capital Management	✓	✓	✓		✓	✓	✓
Book 4	Contingency Measures	✓	✓	✓	✓	✓		✓
Book 5	Associated Process / Documents / Permits Specifications	✓	✓	✓	✓	✓	✓	✓
Book 6	Appendices	✓	✓	✓	✓	✓	✓	✓

6. EDUCATION AND TRAINING REQUIREMENTS

- 6.1** The Trust's Authorising Engineer (Water) shall periodically (at least annually) assess the training requirements of staff associated with Legionella and Pseudomonas aeruginosa management control and arrange suitable training, as required.
- 6.2** Training for Trust appointed Responsible Persons (water) should be reviewed every two years to ensure the competency of staff. Training shall be recorded, and relevant training certificates maintained in staff personal files. The status of training for key personnel will be recorded on the Estates & Facilities training database.
- 6.3** Training records shall be confirmed by the Trust's Authorising Engineer through their Biannual Water Safety Management Audit. The level of knowledge will be regularly assessed and must be programmed and continuous rather than sporadic.
- 6.4** Specific training requirements are detailed in the Trust's Water Safety Plan.

7. PROCESS FOR MONITORING COMPLIANCE

- 7.1** The WSG shall, collectively, be responsible for ensuring that auditing processes are in place across the Trust's arrangements for the Management & Control of Legionella and Pseudomonas aeruginosa.
- 7.2** The Trust's Authorising Engineer (Water) shall undertake an annual review audit and a six-monthly review of the practical implementation of water management

arrangements and prepare a report for the WSG.

Table 2

Element to be monitored	Lead	Tool	Frequency	Reporting arrangements
Responsible Person (water) training	WSG Chair	Authorising Engineer report	Annual	UHL Water Safety Group
Water Sampling Results	Technical Officer	Breach reports	Bi-weekly	Water Task Group
Water evaluation and flushing	Compass Administrator	Compass system report	Quarterly	UHL Water Safety Group
Authorising Engineer's report	Compliance Team	Authorising Engineer report	Six monthly	UHL Water Safety Group
Audit Water Safety Plan	Compliance Team	Audit report	Annually	UHL Water Safety Group
Monitor Water Planned Preventative Maintenance (PPM) performance	Estates managers Operational RP	CAFM system report	Monthly	Water Task Group

8. EQUALITY IMPACT ASSESSMENT

8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

8.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

Acts and Regulations:

[Health and Safety at Work etc. Act 1974](#)

[Control of Substances Hazardous to Health](#)

Regulations 2002, SI 2002 No 2677. HMSO, 2002.

[Drinking Water Legislation](#)

(The) Food Safety Act 1990. HMSO, 1990.

(The) Food Safety (General Food Hygiene)

Regulations 1995, SI 1995 No 1763. HMSO, 1995.

Guidance@food.gov.

[Workplace \(Health, Safety and Welfare\) Regulations 1992](#)

[The Public Health \(Infectious Diseases\) Regulations 1988](#)

Health Technical Memorandum [HTM 04-01 Guidance](#)

Part A covers the design, installation and commissioning

Part B covers operational management

Part C focuses on specific additional measures that should be taken to control and minimise the risk of *Pseudomonas aeruginosa* in augmented care units.

HTM 04-01 should be read with the HSE's Approved Code of Practice (L8) and HSG274 Part 2. It is equally applicable to both new and existing sites.

[Health & Safety Executive Water \(Legionella\) Guidance](#)

Safety Notice [NHSE SN \(96\)06](#)

Evaporative type cooling fan. 15 August 1996.

BS 8580-1:2019

Water quality. Risk assessments for Legionella control. Code of practice

Trust Water Safety Plan:

10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

This document will be uploaded onto SharePoint and available for access by Staff through Insite. It will be reviewed by the WSG every three years, or when conditions change. The updated version of the Policy will then be uploaded and available through Insite Documents and the Trust's externally accessible Freedom of Information publication scheme. It will be archived through the Trusts PAGL system.

Appendix 1 – Water Management Flow Chart

