

Water Management Policy

This policy outlines the Trust's management arrangements for water systems (legionella) within its properties including operational procedures to ensure it meets its statutory obligations.

Key Words:	Water legionella	
Version:	4	
Adopted by:	Quality Assurance Committee	
Date Adopted:	19 March 2019	
Name of Author:	Maintenance & Compliance Manager	
Name of responsible committee:	Trust Health & Safety Committee	
Date issued for publication:	March 2019	
Review date:	September 2021	
Expiry date:	1 March 2022	
Target audience:	All staff	
Type of Policy	Clinical √	Non Clinical √
Which Relevant CQC Fundamental Standards?		

Version Control and Summary of Changes

Version number	Date	Comments (description change and amendments)
1.0	Sept 2011	Amalgamated document
2.0	January 14	Legal references updated and to reflect organisational changes within Estates and Facilities function. (outsourced)
2.1	September 14	Recognition of the Trusts Water Management Group in Section 3
3	March 2016	Policy extended due to no legislative updates or changes to arrangements
4	January 2019	Reference to Interserve removed and replaced with Estates and Facilities Provider Inclusion of Privacy Impact Assessment

For further information contact:

Health and Safety Compliance Team
Tel: 0116 295 1662
healthandsafety@leicspart.nhs.uk

Contribution List:

Key Individuals involved in reviewing the document

Name	Designation
Health and Safety Compliance Team	
Water Management Group	
LPT Estates and Facilities	

Circulated to the following individuals for consultation:

Name	Designation
Members of the Trust Health & Safety Committee	Agreeing Committee
Equality and Diversity Team	
Members of the Divisional Health, Safety and Security Action Groups	Sub-group of the Agreeing Committee

Trust Associated Policies:

All Health & Safety Policies;
All Estates & Facilities Policies
Trusts Bathing Policy
Code of Practice for the Management, Installation and Maintenance of Thermostatic Mixing Valves.

Contents Page		
	Equality Statement	7
	Due Regard	7
1	Introduction	7
2	Purpose	7
3	Organisational Responsibilities	8
	3.1 Chief Executive	9
	3.2 Director with Designated Responsibility for Health and Safety (Designated Person)	9
	3.3 Director (Responsible Person)	9
	3.4 Authorising Engineer	9
	3.5 Authorised Person	9
	3.6 Maintenance Manager	9
	3.7 Competent Person (Water Systems)	10
	3.8 Site Lead Person / Appropriate Managers	10
	3.9 Employees	10
	3.10 Contractors	10
	3.11 Patients and Visitors	10
4	Implementation	10
5	Background	11
	5.1 Legionella	11
	5.2 Safe Hot Water Temperature	11
6	Operational Procedures	12
	6.1 New Installations and Additions to Water Systems	12
	6.1.1 System Design	12
	6.1.2 Suppliers of products and services	12
	6.1.3 Installation	12
	6.1.4 Commissioning the System	13
	6.2 Existing water systems	14
	6.2.1 Unused areas / little used outlets	14
	6.2.2 Temporary closure of inpatient facilities	14
7	Maintenance Plan (Operational Procedure)	14
	7.1 Equipment (Other risk systems)	14
	7.1.1 Hydrotherapy pools, spas and whirlpool baths	14
	7.1.2 Drinking fountains	15
	7.1.3 Ornamental fountains	15
	7.1.4 Portable/room humidifiers	15
	7.1.5 Vending, chilled water and ice-making machines	15
	7.1.6 Specialist systems	16
	7.1.7 Dental equipment	16
8	Water Systems Risk Assessment	16
9	Temperature Control	17
	9.1 Temperature Control (Domestic hot water generating Equipment)	17
	9.2 Temperature testing	18
	9.3 TMV Installation and maintenance	18
10	Training	18
11	Policy Monitoring and Review	18
Appendix 1	Table 3 Monitoring the temperature control regime (L8)	19
Appendix 2	Temperature Reference Guide	21
Appendix 3	Policy Monitoring Section	22
Appendix 4	Policy Training Requirements	24
Appendix 5	Due Regard	25
Appendix 6	NHS Constitution	26
Appendix 7	Privacy Impact Assessment	27

Definitions that apply to this code of practice

Designated Person(s) (DP)	This person provides the essential senior management link between board and the professional support teams and is identified as the responsible duty holder for the Trust.
Authorising Engineer(s) (AE)	<p>The Authorising Engineer will act as an independent professional adviser to the healthcare Trust. The Authorising Engineer should be appointed by the Trust with a brief to provide services in accordance with Health Technical Memorandum guidance.</p> <p>The Authorising Engineer will act as assessor and make recommendations for the appointment of Authorised Persons, monitor the performance of the service, and provide an annual audit to the Designated Person. To effectively carry out this role, particularly with regard to audit, it is preferable that the Authorised Engineer remains independent of the operational structure of the trust.</p>
Authorised Person(s) (AP)	<p>The Authorised Person has the key operational responsibility for the specialist service. The person will be qualified and sufficiently experienced and skilled to fully operate the specialist service. He/she will be nominated by the Authorised Engineer and be able to demonstrate: his/her application through familiarisation with the system and attendance at an appropriate professional course; a level of experience; and evidence of knowledge and skills. An important element of this role is the maintenance of records, quality of service and maintenance of system safety (integrity).</p> <p>The Authorised Person will also be responsible for establishing and maintaining the roles and validation of Competent Persons, who may be employees of the Trust or appointed contractors.</p>
Competent Person(s) (CP)	This person provides skilled installation and/or maintenance of the specialist service. The Competent Person will be appointed, or authorised to work (if a contractor), by the Authorised Person. He/she will demonstrate a sound trade background and specific skill in the specialist service. He/she will work under the direction of the Authorised Person and in accordance with operating procedures, policies and standards of the service
Director of Infection, Prevention and Control (DIPC)	The Executive Director with the responsibility for ensuring strategies are implemented to prevent avoidable healthcare associated illnesses at all levels within the organisation.
Local Water Undertaker	This is a reference to the local supply company for water (Severn Trent).
Legionella Outbreak	An outbreak is defined by the Public Health Laboratory Service (PHLS) as two or more confirmed cases of legionellosis occurring in the same locality within a six-month period.
Management	Management refers to the person from each respective Trust with overall responsibility for the implementation of policies procedures

	<p>and safe systems of work.</p> <p>Regular refresher training should be given and records of all initial and refresher training need to be maintained. Although training is an essential element of competence, it is not the only factor – it should be viewed as is a product of sufficient training, experience, knowledge and other personal qualities which are needed to undertake a job safely. Competence is dependent on the needs of the situation and the nature of the risks involved.</p>
Nominated Person (Legionella)	A person to take day-to-day responsibility for controlling any identified risk from water systems. The appointed “responsible person” should be a manager, director, or have similar status and sufficient authority, competence and knowledge of the site installations to ensure that all operational procedures are carried out in a timely and effective manner
P.P.M (Planned Preventative Maintenance)	The operations manual should include a detailed maintenance schedule, which should list the various time intervals when the system plant and water should be checked, inspected, overhauled or cleaned. Provision should be made for the completion of every task to be recorded by the plant operatives.
Positive Sample	If water samples have been taken and have been returned from the laboratory showing the presence of legionella at more than 50 cfu/litre.
Reasonably Practicable	Where a statement is qualified by the words “Reasonably Practicable”, a slightly less strict standard is imposed. This means an assessment must be made considering, on the one hand, the magnitude of the risk of a particular work activity or environment and, on the other hand, the cost in terms of the physical difficulty, time, trouble and expense which would be involved in taking steps to eliminate or minimise the risk. The greater the degree of risk, the less weight that can be given to the cost of measures needed to prevent that risk.
Services	The use of the word services applies to the water services provided for staff, visitors and patients. These services include all bathing facilities, showers and washbasins.
TMV (Thermostatic Mixing Valves)	Thermostatic Mixing Valves are used throughout the NHS to control the temperature at which water is supplied at the discharge point. The TMV is a key control measure used to reduce the risk of scalding.
Due Regard	<p>Having due regard for advancing equality involves:</p> <ul style="list-style-type: none"> • Removing or minimising disadvantages suffered by people due to their protected characteristics. • Taking steps to meet the needs of people from protected groups where these are different from the needs of other people. • Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.

Equality Statement

Leicestershire Partnership NHS Trust (LPT) aims to design and implement policy documents that meet the diverse needs of our service, population and workforce, ensuring that none are placed at a disadvantage over others.

It takes into account the provisions of the Equality Act 2010 and promotes equal opportunities for all.

This document has been assessed to ensure that no one receives less favourable treatment on the protected characteristics of their age, disability, sex (gender), gender reassignment, sexual orientation, marriage and civil partnership, race, religion or belief, pregnancy and maternity.

In carrying out its functions, LPT must have due regard to the different needs of different protected equality groups in their area.

This applies to all the activities for which LPT is responsible, including policy development and review.

Analysis of Equality

An analysis of equality review found the activity outlined in this policy to be equality neutral.

This policy describes the Trust's health and safety arrangements. The factors within this policy will be taken into account in identifying staff to undergo the required training and may disadvantage on the grounds of disability. Steps being taken and implemented to remove any perceived or actual barriers are that the following factors are and will be taken into account in identifying staff to undergo training.

1.0 Introduction

The Water Management Policy applies to all staff employed by Leicestershire Partnership NHS Trust to be referred to throughout as 'the Trust' and is a legal requirement.

The Trust has a wide range of teams and services operating from a large number of properties making up our overall estate. The combination of mix and ageing condition of the estate means that the Trust has a number of Water Systems in different condition and complexity. All Water Systems will require managing in an appropriate way in accordance with statutory requirements.

The Trust has made a commitment to effectively manage all of its estate with all tasks being undertaken in a safe and appropriate manner-By proactively managing these systems the Trust will reduce any potential risks to patients and visitors as well as staff.

2.0 Purpose

It is the intention of this policy to provide guidance to employees to ensure that all appropriate steps are taken to comply with the duty to manage Water Systems and the risks associated with the control of legionella. The organisation will comply with related

legislation, approved codes of practice, guidance and relevant standards. In particular it will seek to prevent exposure or where this is not reasonably practical, to minimise the exposure of all persons.

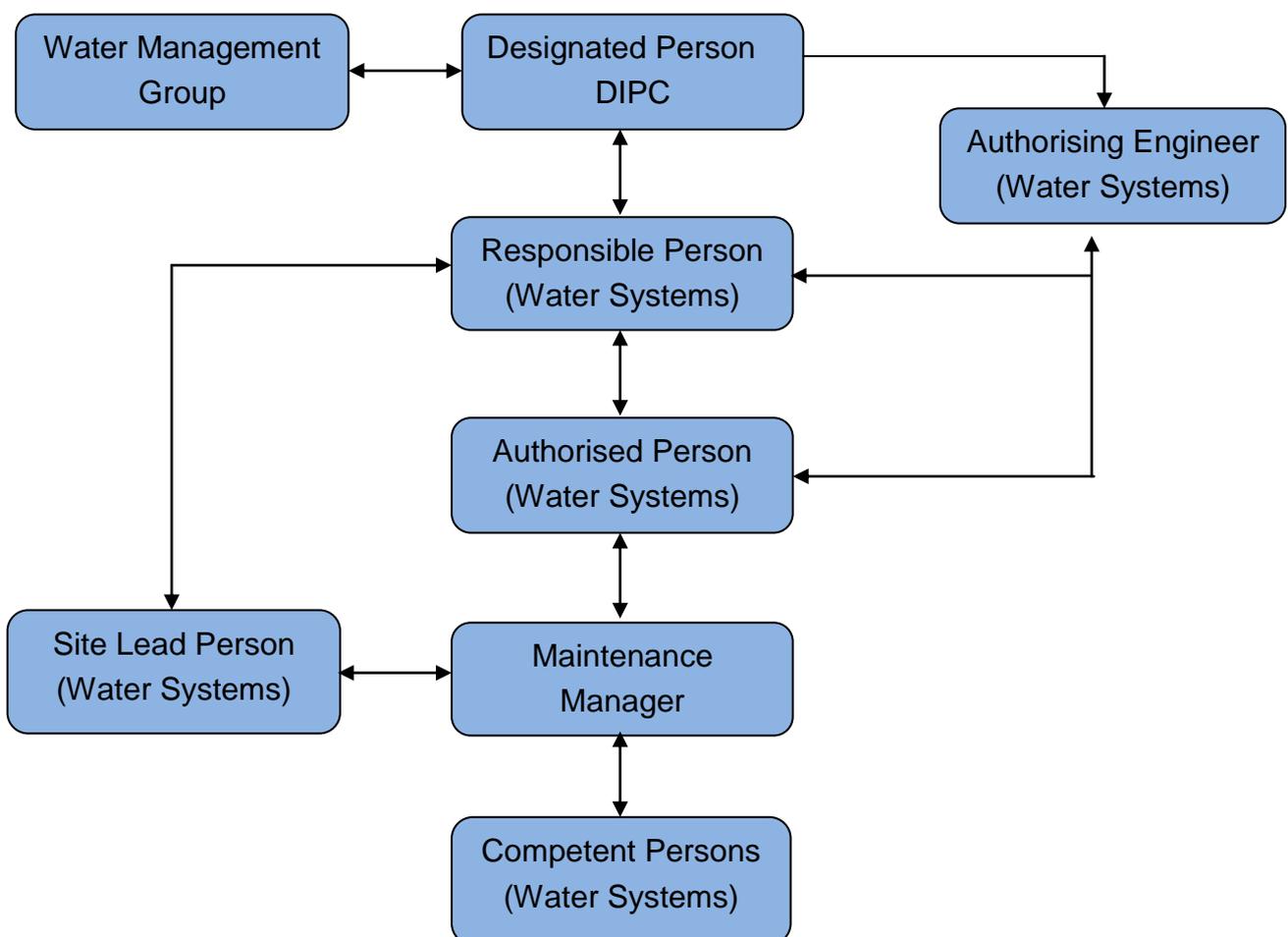
This Policy applies to all premises owned by the Trust or where the Trust holds maintenance responsibilities and to all employees and contractors involved in the construction, management, design, upgrading, refurbishment, extension, maintenance and operation of plant, equipment, buildings and services.

3.0 Organisational Responsibilities

Everyone is responsible for complying with the Trusts arrangements for the management of water systems, including the implementation of local management controls. In order to comply with this policy, all staff must be aware of the lines of communication and levels of responsibility, which exist to ensure that all matters of water systems management, are dealt with effectively.

In order to ensure that Water Systems are managed effectively within the Trust, the following organisational responsibilities have been allocated.

Management Hierarchy of Responsibility for the Management of Water Systems



3.1 Chief Executive

The Chief Executive has overall responsibility for all matters relating to Water Systems Management. This responsibility includes ensuring that all Water systems management matters are seen as an important priority for the Trust and addressed through comprehensive policies and procedures that are effectively implemented and appropriately resourced within the overall financial position of the Trust.

The Chief Executive will ensure that financial resources are made available to support this Policy based upon a risk assessment of priorities.

3.2 Director with Designated Responsibility for Infection Prevention and Control (Designated Person)

The Director with designated (DIPC) responsibility is responsible for ensuring that the aims and objectives of the Trusts Water Management policy are implemented and will nominate a lead officer. The Director with designated responsibility for water will:

- Publicly endorse the Trusts “Water Management policy”;
- Empower staff to take the necessary actions;
- Ensure that an accurate register of Water risk assessments are maintained.

3.3 Director (Responsible Person)

The Associate Director of Estates and Facilities will act as the responsible person. They will facilitate and coordinate all aspects of water management in conjunction with the Infection Prevention and Control Team Health and Safety Compliance Team via the Trust Water Management Group.

3.4 Authorising Engineer

- An Authorising Engineer (AE) acts as an external assessor and shall be appointed with a brief to provide services in accordance with Health Technical Memorandum guidance.
- The AE will make recommendations for the appointment of Authorised Persons, monitor the performance of the service, and provide an annual audit report.
- Chair the Trust Water Management Group

3.5 Authorised Person

The Authorised Person is defined as the person designated to be responsible for the day-to-day management of the water systems at a particular site or sites. Authorised Persons are to prepare and implement inspection, maintenance and safety programs. They are to update system and maintain records. Ensure all test equipment is maintained in good condition. Report any dangerous and or unusual occurrences. Authorise the issue and cancellation of any necessary safety documentation.

Maintenance Manager

The Maintenance Manager is the individual who has responsibility for all operational maintenance work carried out within a given location.

3.6 Competent Person (Water Systems)

Trade staff or contractors have sufficient technical knowledge, training and experience to carry out their defined duties, and to understand fully any dangers involved and will be directed, appointed, or authorised to work (if a contractor), by the Maintenance Manager or Authorised Person Water Systems (APWS) dependant on the work involved.

3.7 Site Lead Person/ Appropriate Managers

All designated managers are responsible for the implementation and monitoring of the policy within their specific properties, ensuring in conjunction with the Authorised Person that:

- Risk assessments in relation to Water Systems are carried out, recorded and reviewed regularly;
- Ensuring that Water management procedures and safe working practices resulting from them are produced, documented and implemented for their area;
- Undertaking regular monitoring and recording their findings.

3.8 Employees

All employees have an individual responsibility for Water management in line with their duties and working environment. Each employee or agent of the Trust has an individual responsibility to:

- Co-operate with the Trusts management in the implementation of this policy;
- Report any poor management of Water Systems to their supervisor/ manager;
- To undergo appropriate training as required.

3.9 Contractors

Other employers or individuals providing goods and/or services to the Trust shall be required to comply with Trust policies and procedures with regard to water systems management.

Specific requirements for Contractors will be detailed in The Policy for the Control of Maintenance and Construction Activities and the Water Management Plan.

3.10 Patients and Visitors

Patients and visitors will be advised of any necessary procedures that are in place for the water systems management and will be expected to comply with all reasonable requests.

4 Implementation

In order to implement this policy effectively there is a need to encourage all staff to play their part in the Trusts overall goal. Senior management will be seen to take the lead in

implementing and encouraging water safety awareness into everyday activities. All sites will have a Water Systems logbook located with the site responsible person where all records will be kept these will be audited periodically.

5 Background

5.1 Legionella

Duties under the Health and Safety at Work Act 1974 (HSW Act) extend to risks from legionella arising from work activities. In addition, all harmful micro-organisms are subject to the Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH), and accordingly, the requirements to carry out an assessment, and to prevent, or adequately control exposure under those regulations will apply to risks of legionellosis.

This would be particularly relevant to persons cleaning or maintaining systems where legionella may be present, and when exposure to risk is increased. COSHH also requires that the risks to others should be considered "so far as is reasonably practicable". This would include:

- persons who work in an environment controlled by an air conditioning system or in premises served by a hot and cold water system,
- persons (including members of the public) who might be exposed to emissions from wet cooling towers or evaporative condensers,
- persons who might be exposed to aerosols which might contain viable organisms e.g. showers

The Approved Code of Practice and Guidance Legionnaires' disease "The Control of Legionella bacteria in water systems" (L8 fourth edition 2013) was issued by the Health and Safety Commission (HSC) in 2000. The ACOP provides a basic framework for preventing further outbreaks of the disease, giving advice on the requirements of HSW Act and a basic framework for preventing further outbreaks of the disease, giving advice on the requirements of HSW Act and COSHH. It places responsibility on employers and others to:

- Identify and assess risks of Legionellosis
- avoid the use of systems that give rise to a reasonably foreseeable risk of legionellosis or, where this is not reasonably practicable, prepare a written scheme for minimising the risk from exposure;
- Implement and manage the scheme of precautions including the appointment of a person, or persons, to take managerial responsibility and to provide supervision; and
- Keep appropriate records.

5.2 Safe Hot Water Temperatures

Hot water temperatures in excess of 55⁰C are required to control possible colonization by legionella, and it is therefore essential to maintain the correct temperature within hot water circulating systems.

High water temperatures create a scalding risk to all vulnerable service users these risks will need to be controlled at the hot water outlets utilising Thermostatic Mixing Valves (TMV). Those at risk from scalding/burning include

- children, the elderly,
- those with mental illness,
- learning disability,
- reduced mobility,
- visually impaired,
- those with reduced sensitivity to temperature,
- those who cannot react appropriately, or quickly enough, to prevent injury.

Further information on the temperature reference guidance can be found in Appendix 2 of this document and more detail information is available from the Code of Practice for the Management, Installation and Maintenance of TMV.

6 Operational Procedures

6.1 New Installations and Additions to Water systems

6.1.1 System Design

All new water systems installations will be planned ensuring that all relevant hazards are designed out of the installation and will be carried out only by contractors competent in the installation of water systems and aware of all relevant hazards and associated legislation. No work will be carried out without the appropriate authorisation from the Authorised Person.

When compliance cannot be achieved, a relevant risk assessment will be carried out to assess the consequences of non-compliance and to identify the relevant control measures if the work is to be carried out. This will identify any Planned Preventative Maintenance required for the system and will be discussed with the Authorised Person, client and the design team.

6.1.2 Suppliers of products and services must:

- Ensure that any deficiencies or limitations which are identified in occupier's systems or written schemes to control the risk are, made known to the person upon whom the statutory duty falls or the persons appointed to take managerial responsibility.
- Ensure that the water system is so designed and constructed that it will be safe and without risks to health when used at work.
- Provide adequate information to the AP and users about the risk and measures necessary to ensure that the water systems will be safe and without risks to health when used at work. This should be updated in the light of any new information about significant risks to health and safety that becomes available.

6.1.3 Installation

Materials and equipment installed shall comply with the Water Supply (Water Fittings) Regulations 1999 and should be WRAS approved. Equipment that is listed in the latest

edition of the 'Water Fittings and Materials Directory' and installed in accordance with any of its relevant conditions will comply. Only traditional methods of installation shall be used, no push fit, crimp or press fit fitting or flexible connections shall be used without the Authorised Persons agreement.

Service isolation valves should be fitted to all pipe work preceding sanitary ware and WC's etc. for servicing, repair and replacement. Drain-valve provision should be made at all low points of a system and automatic air vent provision should be made at all high points of a system.

Flexible connecting hoses should not be used for final connection to water outlets, where these have been used they should be identified, listed on a maintenance plan for replacement at regular interval not exceeding six months.

Where flexible hoses must be used (e.g. on essential equipment such as hi-low baths) they must be lined with a suitable alternative to Ethylene Propylene Diene Monomer (EPDM), as well as being WRAS approved. Care should be taken to avoid kinking or distorting them during installation.

On completion of the installation of a new water system the entire system shall be flushed out to remove debris from the system, the whole system should then be disinfected.

Silver-stabilised hydrogen peroxide chemicals (for the use of microbiological removal) within water services must not be used in any of the Trusts premises

Immediately after disinfection, the distribution pipework should be drained and thoroughly flushed through with fresh water and refilled. Appropriate hazard warnings should be placed on all taps throughout the building during disinfection procedures.

After disinfection, microbiological tests should be carried out for bacteria colony counts at 37°C and coliform bacteria, including Escherichia coli, these should be carried out under the supervision of the infection control team to establish that the work has been satisfactorily completed.

Water samples should be taken from selected areas within the distribution system. The system should not be brought into service until the infection control team certifies that the water is of potable quality.

The system shall not be allowed to stand unused so the system shall either be drained or water flushed through every outlet for at least 5 minutes twice every week

6.1.4 Commissioning the System

Correct commissioning is vitally important for the satisfactory operation of the hot and cold water systems. The designer should prepare a commissioning brief for use by the contractor's commissioning engineer. This brief should specify fully and clearly the extent of the commissioning and the objectives which must be achieved, and should include:

- full design data on temperatures, water flow rates and pressures;
- plant and equipment data;
- number commissioning procedures for TMV in accordance with specification MES D08 and the Trusts Code of Practice;

- drawings and schematics;
- a list of test certificates to be provided

6.2 Existing Water Systems

All existing systems will be risk assessed to identify relevant risks and to ensure that adequate maintenance, testing and monitoring schedules are identified and clearly communicated to the client. All outlets should be identified on system schematic drawings.

6.2.1 Unused Areas / Little Used Outlets

Any unused area or outlets used infrequently have the potential to represent a risk to users (i.e. a shower that may be used less than once a week). To ensure that these areas are maintained and that the risk to users using the equipment is minimised all such areas will be flushed at least on a twice weekly basis and the results of this recorded in the site log book.

If areas are identified that are little used the Inteserve Customer Services Centre must be informed to provide short term protection. Where it is likely that the outlet will be considered to be a little used outlet for more than eight weeks, consideration should be given to removing any redundant pipework.

6.2.2 Temporary Closure of Inpatient Facilities

During temporary closure of wards or departments, a procedure for flushing the hot and cold water service systems should be instituted. This should include opening all taps and showers and for a period of three minutes and flushing WC cisterns etc. on a twice-weekly cycle. Alternatively, when this is impracticable the water system should be disconnected and drained. , the disinfection procedure recommended for new installations may be carried out immediately prior to re-occupation. This should be applied upstream of the closed area. Taps that include a flow regulation device may need to be flushed for longer than three minutes. In determining the flushing period, consideration should be given to the water pressure and length of dead-legs and spurs in the connecting pipework.

7 Maintenance Plan (Operational Procedure)

An Estate maintenance plan should be produced that as a minimum incorporates the tasks as identified in Appendix 1 of this document. The plan should include local procedures for routine operation of plant and equipment including the actions to be taken in the case of an emergency, plant or system failure.

7.1 Equipment (Other Risk Systems)

There are a number of other systems (which produce aerosols) which may pose a risk of exposure to legionella; this includes any area where droplets of contaminated water of a size suitable for deep inhalation are generated. For example

7.1.1 Hydrotherapy Pools, Spa Pools and Whirlpool Baths

Hydrotherapy pools, spa pools and whirlpool baths provide conditions that potentially favour the growth of Legionella. These types of pool are ideally suited to the proliferation and dissemination of Legionella. A log must be kept of water treatment and filter cleaning, and the results of tests for pH, free residual halogen and other treatment parameters.

Regular cleaning and disinfection after each use in accordance with manufacturer's instructions is required.

7.1.2 Drinking Fountains

All drinking fountains will be installed in-line with the manufacturers' instructions ensuring that the appropriate maintenance and cleansing regimes are in place, in accordance with infection control guidance.

7.1.3 Ornamental Fountains

Ornamental fountains have been implicated in cases of legionellosis, they should not be situated under trees where fallen leaves or bird droppings may contaminate the water. Exposure to high winds should be avoided as they can disperse spray beyond the immediate confines of the basin/pond. Their provision should be subject to a risk assessment, and appropriate action is required to minimise the risk. Any connection from a potable supply should be via adequate back flow protection. The installation of an ornamental fountain inside a healthcare building (for example a main entrance hall) is not recommended. Routine maintenance of such equipment must be undertaken in accordance with manufacturers instructions and the requirements of the Infection Prevention and Control Team.

7.1.4 Portable/Respiratory/Room Humidifiers

Portable or room humidifiers have a water supply that is sprayed or atomised into the room and can present a risk unless they are regularly cleaned and maintained. These types of units would not normally be used in healthcare buildings. However In clinical/patient areas the decision to use this type of humidifier must rest with the Infection Prevention and Control Team.

7.1.5 Vending, Chilled Water and Ice-making Machines.

The water supply to this equipment should be taken from a potable supply via a double check valve to prevent backflow and be upstream of a regularly used outlet with the minimum of intervening pipe-run, that is, less than 3 m. The supply should not be softened. Additionally, it should be established that the usage is sufficient to avoid deterioration in water quality, for example that the inlet water temperature does not exceed 20°C.

The equipment should be positioned so that the warm air exhaust does not impinge directly on taps or hoses supplying cold water.

Where equipment is hand-filled, there should be clear instructions on the water used; it should be hygienically collected and decanted into the equipment from a clean vessel.

Ice should not be allowed to stagnate in an ice making machine's storage bin, but should be changed frequently. Maintenance of ice-making machines should be carried out in accordance with the manufacturer's recommendations and Infection Prevention and Control guidance. Care should be taken to ensure that the water supply to the ice-making machine is not subjected to heat gain.

7.1.6 Specialist Systems

Where water supplies are required for specialist systems such as endoscope cleaning installations, dialysis units etc., the hospital infection control team should be consulted to establish any specific water treatment requirements for the process, and also the local water undertaker to clarify any special precautions that may be necessary, such as backflow prevention devices.

7.1.7 Dental Equipment

Dental chairs and units are considered to be medical devices and must therefore meet the relevant essential requirements of the Medical Devices Directorate (93/42/EEC)

All dental equipment should be drained and cleaned in line with HTM 01 05

8 Water Systems Risk Assessment

The Trust will ensure that suitable and sufficient water systems risk assessments are carried out by a competent person appointed by the Authorised Person, to identify and assess the risk of Legionellosis from work activities and water sources on Trust premises. This risk assessment will also detail any necessary precautionary measures required for the identified tasks and processes.

All assessments shall identify and evaluate potential sources of risk and the particular means by which exposure to Legionellosis is to be prevented;

Where prevention is not reasonably practicable, the particular means by which the risk from exposure to Legionella is to be minimised.

All systems susceptible to colonisation by Legionella and which incorporate a potential means for creating and disseminating water droplets shall be identified along with the risks they present. Risk shall be assessed not just for routine operation or use of the system, but also in relation to maintenance, breakdown, abnormal operation, commissioning, or unusual circumstances.

The assessment shall take account of the:

- potential for droplet formation;
- water temperature;
- likely risk to those who will inhale water droplets;
- means of preventing or controlling the risk;
- materials in the system that can harbour or provide nutrient for bacteria and other organisms

Where the assessment demonstrates that there is no reasonably foreseeable risk or that risks are insignificant and unlikely to increase, no further measures shall be

necessary. All such assessments shall be reviewed bi-annually or when there is a change of use of the premises or water systems.

Where the assessment shows that there is a reasonably foreseeable risk from the use of water systems, plant or systems of work which may lead to exposure the exposure should be avoided so far as is reasonably practicable.

Where this is not reasonably practicable, the Authorised Person shall ensure a written scheme is produced for minimising the risk from exposure.

All risk assessments shall be reviewed annually by the Authorised Person in conjunction with Infection Prevention and Control Team and the Health and Safety Compliance Team and ratified by the responsible/designated person who shall:

Ensure that all proposed actions have been correctly prioritised. Set out and agree deadlines for the completion of each level of priority with those responsible for implementing the actions.

Any additional control measures identified in a risk assessment shall be documented in an action plan. The Authorised Person shall ensure that a copy of the Risk Assessment Action Plan is distributed to all those responsible for implementing the control measures identified.

A copy of the site water system risk assessments shall be kept in the site Water Management Log book; this log book will be audited annually and shall be consulted before any alterations or new works are undertaken. This shall also be amended and updated with relevant information following any changes to the water system

Monitoring Implementation

The Authorised Person in consultation and assistance with other with other key Estates and Facilities personnel shall monitor implementation of the control measures identified on the Risk Assessment Action Plan.

Where remedial action has not been implemented and there remains a serious risk to health and safety by the agreed deadline the Designated Person (Director with responsibility for estates and facilities shall take steps to ensure the necessary action is taken.

9 Temperature Control

9.1 Temperature Control (Domestic Hot Water Generating Equipment)

Temperatures of domestic hot water generating and distribution are controlled by local plant controls and final supply to protected outlets by TMV. These temperatures must only be altered by qualified and competent staff. Any alterations to water temperatures must be recorded in the water systems log book. Any discrepancies in water temperature or required changes in water storage or distribution temperatures shall be reported to the Estates and Facilities Helpdesk for further action. On no account will locality based staff alter hot water systems or hot water boiler settings designed to protect staff, patients and all other users of the premises.

9.2 Temperature Testing

Temperature testing should be undertaken at the frequencies as listed in Appendix 1.

Where TMV are fitted, hot water outlet temperatures (including those that supply both assisted and non-assisted bathing/showering) are recorded locally in line with Trust guidelines for hot water temperature monitoring. All discrepancies will be reported to the Estates and Facilities Customer Service Centre. Flushing will take place and will be monitored and recorded.

9.3 TMV Installation and Maintenance

All TMV's will be installed and maintained in accordance with approved code of practice for installation and maintenance of TMV.

10 Training

There is a need for training identified within this policy. In accordance with the classification of training outlined in the Trust Learning and Development Strategy this training has been identified as mandatory training.

All members of staff including those with managerial responsibilities for water systems should also receive training commensurate with their duties.

Role	Training Requirement
Authorised Person	Managing Legionella in building water systems
Site Lead Person	Legionella awareness and /Water Systems Management in house course
Maintenance Managers	Legionella awareness
Maintenance Operatives, Contractors	Legionella awareness
All other staff including Designated Persons	Legionella awareness information supplied in leaflet format supplied at induction and mandatory training

11 Policy Monitoring and Review

To facilitate the monitoring of this policy managers at all levels shall be responsible for the on-going monitoring of activities that may impact on water management within their service/department/area of responsibility.

This policy shall be reviewed at a minimum frequency of annually via the Trust Water Management Group and report to the Health and Safety Committee. It should also be reviewed when substantial changes occur in the organisational structure of the Trust or property portfolio or when significant changes to legislation occur.

Appendix 1

Table 3: Monitoring the temperature control regime (from L8)

Frequency	Check	Standard to meet		Notes
		Cold Water	Hot Water	
Monthly	Sentinel taps	The water temperature should be less than 20°C after running the water for up to two minutes	The water temperature should be at least 50°C within a minute of running the water.	This check makes sure that the supply and return temperature on each loop are unchanged, i.e. the loop is functioning as required.
	Water leaving and returning to calorifier/Plate Heat Exchanger		Outgoing water should be at least 60°C, return at least 55°C	If fitted, the thermometer pocket at the top of the calorifier and on the return legs are useful points for accurate temperature measurement. If installed, these measurements could be carried out and logged by a building management system.
Six monthly	Incoming cold water inlet (at least once in the winter and once in summer)	The water should be below 20°C after running the water for two minutes.	The water temperature should be at least 50°C within a minute of running the water.	This check makes sure that the whole system is reaching satisfactory temperatures for Legionella control.

1. Hot and cold water services.

Systems	Procedure	Minimum Period	Responsibility
Hot water services	Arrange for samples to be taken from hot water calorifiers, in order to note condition of drain water.	Annually	Operational Estates Maintenance
	Check temperatures in the flow and return pipework at the calorifiers	Monthly	Operational Estates Maintenance
	Check water temperatures up to one minute to see if it has reached 50°C in the sentinel taps.	Monthly	Hotel Services/Operational Estates Maintenance
	Check discharge temperature of representative taps as above (this may be undertaken on a rotational basis)	Annually	Operational Estates Maintenance
	Visual check in internal surfaces of calorifiers for scale and sludge.	Annually	Operational Estates Maintenance
	Manual check to confirm secondary hot water recirculation pumps are operating effectively	Monthly	Operational Estates Maintenance
Cold water services	Check tank water temperature remote from ball valve and mains temperature at ball valve. Note maximum temperatures recorded by fixed max/min thermometers where fitted.	Six monthly	Operational Estates Maintenance
	Check temperature in sentinel outlets after draw-off for 2 minutes to establish that it is below 20°C	Monthly	Operational Estates Maintenance
	Check discharge temperature of representative taps as above (this may be undertaken on a rotational basis)	Annually	Operational Estates Maintenance
	Visually inspect cold water storage tanks and carry out remedial work where necessary.	Annually	Operational Estates Maintenance
Shower heads	Dismantle, clean and de-scale showers heads and hoses.	Quarterly or as necessary.	Operational Estates Maintenance
Little-used outlets	Flush through and purge to drain, for 5 minutes, without release of aerosols.	Twice Weekly	Hotel Services/Operational Estates Maintenance
Closed Wards	Flush through and purge to drain, for 5 minutes, without release of aerosols.	Twice Weekly	As Agreed
	Sampling for legionella	As indicated by risk assessment	Maintenance & Compliance Team
Spa baths	Disinfect and clean	After each use	Locality Bases staff
Dental equipment	Drain down and clean	At the end of each working day.	Locality Bases staff

Temperature Reference Guide

Cold Water Outlet	20°C after draw off for two minutes
Hot Water Outlet not protected by Thermostatic Mixing valve	50 to 60°C after draw off for one minute
Outlets Protected by Thermostatic Mixing Valves	
Bidet	38°C +/- 2°C
Shower	41°C +/- 2°C
Washbasin	41° C +/- 2°C
Bath	44° C +/- 2°C
Domestic Hot Water Generating Equipment (Calorifier/Plate Heat Exchanger)	
Flow	60 to 65°C
Return	An absolute minimum of 50°C at the return connection

Policy Monitoring Section

Duties outlined in this Policy will be evidenced through monitoring of the other minimum requirements.

Where monitoring identifies any shortfall in compliance the group responsible for the Policy (as identified on the policy cover) shall be responsible for developing and monitoring any action plans to ensure future compliance. monitoring any action plans to ensure future compliance.

Reference	Minimum Requirements to be monitored	Evidence for self assessment	Process for Monitoring	Responsible Individual / Group	Frequency of monitoring
Not Applicable	Water risk assessments in place Appointments of Authorised Person Appointments of Authorised Engineer		Quarterly Statutory Compliance Report received into the Health and Safety Committee from NHS Horizons who monitor KPIs for compliance and performance on behalf of LPT for the external facilities management contract Annual Statutory Compliance Report received into the Health and Safety Committee from NHS Horizons who monitor KPIs for compliance and performance on behalf of LPT for the	Service Provider	Quarterly / Annually

			external facilities management contract Authorised Person Reviews Authorised Engineer Review Corresponding remedial action plans		
	Water risk assessments		Infection rates		
	Review of the Water Management Group Terms of Reference		Review to be undertaken and agreed by the Water Management Group and Health and Safety Committee	Water Management Group Health and Safety Committee	Annually

Policy Training Requirements

The purpose of this template is to provide assurance that any training implications have been considered

Training topic:	Water Management Policy
Type of training:	<input checked="" type="checkbox"/> Mandatory (must be on mandatory training register) <input type="checkbox"/> Role specific <input type="checkbox"/> Personal development
Division(s) to which the training is applicable:	<input checked="" type="checkbox"/> Adult Learning Disability Services <input checked="" type="checkbox"/> Adult Mental Health Services <input checked="" type="checkbox"/> Community Health Services <input checked="" type="checkbox"/> Enabling Services <input checked="" type="checkbox"/> Families Young People Children <input checked="" type="checkbox"/> Hosted Services
Staff groups who require the training:	All staff need a basic awareness of good water management practices and key issues to be aware of.
Update requirement:	Three yearly
Who is responsible for delivery of this training?	Authorised Engineer / Appointed Person
Have resources been identified?	No
Has a training plan been agreed?	No
Where will completion of this training be recorded?	<input checked="" type="checkbox"/> Trust learning management system <input type="checkbox"/> Other (please specify)
How is this training going to be monitored?	

Due Regard Screening Template

Section 1		
Name of activity/proposal	Policy offering guidance on water management	
Directorate / Service carrying out the assessment	Health and Safety Compliance Team	
Name and role of person undertaking this Due Regard (Equality Analysis)	Bernadette Keavney	
To ensure the safety of domestic water services for the benefit of patients, staff, visitors and contractors		
Section 2		
Protected Characteristic	Could the proposal have a positive impact (Yes or No give details)	Could the proposal have a negative impact (yes or No give details)
Age	No	No
Disability	Yes – component on systems may have benefit to users eg lever taps	Yes if equipment not used correctly. Eg automatic sensor flush on toilets incorrectly positioned may mean blind user may not be able to get the facility to work
Gender reassignment	No	No
Marriage & Civil Partnership	No	No
Pregnancy & Maternity	No	No
Race	No	No
Religion and Belief	No	Yes – Guidelines recommend the none use of foot spas
Sex	No	No
Sexual Orientation	No	No
Section 3		
Does this activity propose major changes in terms of scale or significance for LPT?		
Yes		No
High risk: Complete a full EIA starting click here to proceed to Part B		Low risk: Go to Section 4.

Section 4
If this proposal is low risk please give evidence or justification for how you reached this decision:
All staff receive appropriate training therefore risks will be eliminated.

This proposal is low risk and does not require a full Equality Analysis:

Head of Service Signed Bernadette Keavney

Date: 11/02/2019

The NHS Constitution

NHS Core Principles – Checklist

Please tick below those principles that apply to this policy

The NHS will provide a universal service for all based on clinical need, not ability to pay.

The NHS will provide a comprehensive range of services

Shape its services around the needs and preferences of individual patients, their families and their carers	<input type="checkbox"/>
Respond to different needs of different sectors of the population	<input type="checkbox"/>
Work continuously to improve quality services and to minimise errors	<input type="checkbox"/>
Support and value its staff	<input type="checkbox"/>
Work together with others to ensure a seamless service for patients	<input type="checkbox"/>
Help keep people healthy and work to reduce health inequalities	<input checked="" type="checkbox"/>
Respect the confidentiality of individual patients and provide open access to information about services, treatment and performance	<input type="checkbox"/>

PRIVACY IMPACT ASSESSMENT SCREENING

<p>Privacy impact assessment (PIAs) are a tool which can help organisations identify the most effective way to comply with their data protection obligations and meet individual's expectations of privacy. The first step in the PIA process is identifying the need for an assessment.</p> <p>The following screening questions will help decide whether a PIA is necessary. Answering 'yes' to any of these questions is an indication that a PIA would be a useful exercise and requires senior management support, at this stage the Head of Data Privacy must be involved.</p>			
Name of Document:		Water Management Policy	
Completed by:		Bernadette Keavney	
Job title		Head of Trust Health and Safety Compliance	Date 23/01/19
			Yes / No
1. Will the process described in the document involve the collection of new information about individuals? This is information in excess of what is required to carry out the process described within the document.			No
2. Will the process described in the document compel individuals to provide information about themselves? This is information in excess of what is required to carry out the process described within the document.			No
3. Will information about individuals be disclosed to organisations or people who have not previously had routine access to the information as part of the process described in this document?			No
4. Are you using information about individuals for a purpose it is not currently used for, or in a way it is not currently used?			No
5. Does the process outlined in this document involve the use of new technology which might be perceived as being privacy intrusive? For example, the use of biometrics.			No
6. Will the process outlined in this document result in decisions being made or action taken against individuals in ways which can have a significant impact on them?			No
7. As part of the process outlined in this document, is the information about individuals of a kind particularly likely to raise privacy concerns or expectations? For examples, health records, criminal records or other information that people would consider to be particularly private.			No
8. Will the process require you to contact individuals in ways which they may find intrusive?			No
<p>If the answer to any of these questions is 'Yes' please contact the Head of Data Privacy Tel: 0116 2950997 Mobile: 07825 947786 Lpt-dataprivacy@leicspart.secure.nhs.uk In this case, adoption n of a procedural document will not take place until approved by the Head of Data Privacy.</p>			
IG Manager approval name:			
Date of approval			

Acknowledgement: Princess Alexandra Hospital NHS Trust