URN: TPOL018



WATER TREATMENT & ANTI-SCALDING SAFETY POLICY



1. Purpose

To set out how Twenty11 will implement control and management systems to prevent the risk of legionella bacteria in water systems and reduce the risks of scalding within homes and buildings which it has responsibility for. Water systems are installed, maintained and serviced to required standards (as defined in Section 4 of this document).

2. Definitions

Legionellosis - the collective name given to the pneumonia-like illness caused by legionella bacteria. This includes the most serious Legionnaires' disease, as well as the similar but less serious conditions of Pontiac fever and Lochgoilhead fever. Legionnaires' disease is a potentially fatal form of pneumonia, and everyone is susceptible to infection. However, some people are at higher risk, including:

- People over 45 years of age
- Smokers and heavy drinkers
- People suffering from chronic respiratory or kidney disease
- Anyone with an impaired immune system

Scalding

Scalding can be described as a form of thermal burn resulting from heated fluids such as boiling water or steam. Most scalds are considered first- or seconddegree burns, but third-degree burns can result, especially with prolonged contact.

3. Responsibilities

The duties of management and staff shall be clearly communicated and agreed by all parties to ensure that responsibilities and accountabilities are understood, and relevant staff have appropriate skills and training to undertake their duties. Communications and feedback detailing agreed responsibilities shall be kept and monitored by the responsible person who shall initiate further training or assistance as deemed necessary.

3.1. The Board

The Board is collectively and ultimately responsible for the implementation of policy.

3.2. Director of Property and Development

The Director of Property and Development has overall responsibility for ensuring compliance with relevant legislation. The Director of Property and Development is the identified Duty Holder for this policy, it is their responsibility to ensure adequate monitoring, review and implementation of this policy. They delegate various tasks to

the Responsible Person ensuring that the person who carries out this role is competent to do so.

The Duty Holder through the Responsible Person takes steps to ensure the competence of those carrying out work, either under their direct control or those employed through a third party and that responsibilities and lines of communication are properly established and clearly set out. The Duty Holder shall ensure adequate finance and other resource is secured for the delivery of this policy. They also need to appoint a competent responsible person.

3.3. Executive Directors

The Executive Directors assist the Duty Holder where needed and in doing, will collectively review performance as part of operational management responsibility.

3.4. The Head of Property

The Head of Property is identified as the 'Responsible Person' and takes the lead role for the operational delivery of this policy, staff awareness, training, and communication to tenants. They ensure that employees or other persons are competent and that risk assessments as required by relevant guidance are undertaken and actions progressed where recommended. They will implement suitable training at regular intervals and ensure those carrying out works have sufficient information, and instruction, to be classed as competent.

They will further ensure:

- The implementation and regular review of this document
- That appropriate staff receive regular training and are kept informed of developments in legislation and good practices relating to the management of legionella/water hygiene and anti-scalding
- That only competent staff are employed in delivering the policy.
- A 'Duty of Care' is shown to tenants, employees and contractors.
- Adequate processes and procedures are in place to manage the risks arising
- Regularly monitor the performance of staff and contractors
- That members of the public, staff and contractors are not unnecessarily exposed to risk
- That suitable and sufficient risk assessments are undertaken and reviewed regularly
- That appropriate inspections and monitoring are undertaken and that statutory requirements are met

- That appropriate actions are taken to prevent and manage risks of the exposure to legionella and scalding
- Provide monitoring information on performance to relevant stakeholders
- 3.5. Home Safety Manager

The Home Safety Manager provides support with the operational oversight and management for water treatment testing, servicing, installation and anti-scalding provisions and including associated activities. They regularly review risk assessments to ensure that they are suitable and sufficient and ensure that approved processes are followed should any amendment to process be required this will first be approved by the Responsible Person or Duty Holder prior to any change being implemented.

They will also monitor and assess organisations such as water treatment companies or consultants, to ensure staff employed are competent and that all have the necessary equipment to carry out their duties as detailed in the 'written scheme of control' safely.

Other duties involve;

- Ensuring those involved in the management of the works are trained and competent and have relevant in date qualifications
- Informing and instructing employees and tenants regarding identification, management and risk from exposure to legionella and scalding
- Maintaining a training matrix, recording and planning appropriate training, and assessing proof of competence
- Monitoring and commenting on the effectiveness of processes and procedures in place to manage risks
- Ensuring sufficient information, and instruction is provided, and appropriate training is implemented
- Monitoring the quality of risk assessments and the review of these at appropriate timescales
- Ensuring appropriate inspections are made to assess the condition of water storage systems, installations and equipment
- Putting in place and monitoring plans and programmes including written systems of control

Training requirements are determined following regular review by, the Home Safety Manager and the Responsible Person. Training will be cascaded through the organisation to relevant staff and stakeholders as appropriate.

Training is an essential element of an employee's capability to carry out work safely, but it is not the only factor: instructions, experience, knowledge and other personal qualities are also relevant to perform tasks safely, i.e. competence. This competence

is also assessed and recorded through general management arrangements and formal one-to one assessment. Any person required to undertake specific tasks in relation to the management of anti-scalding and water treatment management will be appropriately trained and assessed as competent.

3.6. Assistant Home Safety Specialist (water)

The Assistant Home Safety Specialist (water) under the management of the Home Safety Manager supports the day-to-day implementation of this policy and will:

- Action task and recommendations arising from risk assessments.
- Ensure that relevant records, certification, schematic layouts, site records and general information are maintained and up to date
- Review testing and monitoring information submitted checking quality and accuracy of information.
- Provide information to staff, contractors, tenants and members of the public as required
- Support in the delivery and management of training
- Provide relevant information to contractors and consultants and manage their work output
- Monitor the performance of contractors undertaking inspection programmes and works
- Maintain an up-to-date knowledge of legislative requirements, guidance and best practice

3.7. Employees

All employees, irrespective of their position shall:

- Take reasonable care for their own health and safety and that of other persons who may be adversely subjected to infectious diseases or scalding including members of the public, tenants, visitors and contractors
- Co-operate as appropriate with other staff and agencies to ensure compliance with this policy and all other legal requirements
- Halt works that, in their opinion, may present a serious risk to health and safety report any concerns that they may have in relation to the management of works covered by this procedure
- Report all accidents, incidents and near misses to the Health and Safety Manager as quickly as possible after the event, to ensure that an investigation is undertaken.

• Technical staff to identify dead legs and any potential Legionella risk, draw this to the attention of the Water specialist making appropriate recommendations.

3.8. Contractor's responsibility

Will ensure that their staff are competent to carry out the task safely. They will be properly trained to a standard appropriate to the various tasks they perform and comply with the relevant legislation and guidance as applicable.

The contractor will undertake risk assessment, advising on water treatment measures, sampling (both temperature and bacterial) or cleaning and maintaining water systems. The Legionella Control Association administers a Code of Conduct for organisations providing services to occupiers/owners of water systems.

This Code of Conduct does not have legal status but will give guidance to Duty Holders about the standards of service expected. Suppliers are required to be members of the Legionella Control Association and abide by the Code.

Contractors comply with the Contractor Code of Conduct when undertaking maintenance or installation works. The contractor is required to conform to the requirements of this procedure.

The samples will be tested for the presence of legionella bacteria. Where unacceptable levels are found they will undertake work to reduce and or eliminate the risk of legionella's disease.

Every effort is made to arrange a convenient time and date with the tenant for access to complete the works. Appointments are made and in certain situations written notice is required. In cases where access is denied on several pre-arranged occasions and following several written notifications, legal action to gain access is considered.

3.9. Tenants' responsibility

Under the terms of their Tenancy Agreement, tenants must allow access to their home for maintenance and / or inspection to be carried out. To undertake works it may be necessary to disrupt hot and cold-water supplies.

Prior to planned works being undertaken and where consistency of service is to be disrupted, written confirmation is provided in accordance with the general Consultation Strategy. It is the tenants' responsibility to ensure that;

- Any contingency arrangements arising from the absence of supplies must be highlighted and agreed in advance of works
- Obstacles are removed from work areas i.e. tenant belongings and furniture etc. should the tenant be unable to manage, support will be agreed
- Notification of any repair / fault is provided in a timely manner

Any defective or unauthorised works needing rectification may incur a recharge which will be explained in advance of works commencing unless in cases of an emergency. If any installation has been undertaken without permission and is found to be defective the supply may be temporarily terminated.

Where tenants carry out property alterations and improvements, including additions or improvements, authorisation must be sought prior to any works being undertaken. If works are approved, tenants are responsible for ensuring appropriate safety checks are carried out and all relevant certificates are supplied following the works / installation, as set out in the Tenancy Agreement.

Contractors providing water treatment or maintenance services communicate to the responsible person any deficiencies in the water system or measures that may pose a significant risk of exposure to legionella bacteria or from scalding.

4. Legislation

Twenty11 is committed to ensuring that tenants' homes remain safe and fit for purpose. In achieving this Twenty11 complies with relevant legislation and regulations. The following list sets out the key legislation and requirements:

- Landlord and Tenant Act 1985
- Housing Act 2004
- Management of Health & Safety at Work Regulations 1999
- Workplace (Health, Safety & Welfare) Regulations 1992 (as amended)
- The Construction (Design and Management) Regulations 2015
- The Health and Safety at Work etc. Act 1974
- Legionnaires' Disease The control of Legionella bacteria in water systems Approved Code of Practice and guidance on regulations L8
- Legionnaires' Disease Technical Guidance, HSG 274 part 2 'The control of legionella bacteria in hot and cold-water systems'
- Legionnaires' Disease Technical Guidance, HSG 274 part 3 'The control of legionella bacteria in other risk systems'
- Control of Substances Hazardous to Health Regulations 2002 (COSHH)
- The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)
- Water Supply (Water Fittings) Regulations 1999
- The Provision and Use of Equipment Regulations 1998
- Building Regulations 2023

- British Standard (BS8580-1:2019) Water Quality-Risk Assessments for Legionella Control-Code of Practice
- BS 8558 2015 'Guide to the design installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages-Complementary guidance to BS EN 806

5. Key Principles

- 5.1. This document is not intended to provide detailed technical guidance on dealing with water treatment or anti scalding issues. Detailed guidance is available at the Health and Safety Executive's website at: <u>www.hse.gov.uk</u> and in the Approved Code of Practice L8 and HSG 274 parts 2 & 3 (as detailed above).
- 5.2. The general scope of this policy covers the use of water systems serving communal areas and various situations in domestic homes as required by appropriate guidance, and will extend but not be limited to;
 - Cold-water systems: Including mains or local tanked fed supplies, distribution systems and outlets
 - Showers
 - Hot Water Systems: Including all direct and indirect calorifiers (primary heating coil, electric immersion heater or otherwise), cistern-type water heaters and instant water heaters
 - Ancillary Plant any plant which is liable to encourage Legionella growth and/or create an aerosol.
 - All new water systems shall be designed, installed and operated in such a way as to minimise, avoid or prevent the risk of Legionellosis. All existing water systems shall be operated and maintained in such a way as to minimise or control the risk of Legionellosis.
 - No new water systems shall be introduced, and no changes shall be made to water systems unless they have first been authorised by the relevant Responsible Person

The HSE guidance states that suitable and sufficient legionella risk assessments must be carried out to all appropriate properties to identify and assess the risk of exposure to legionella bacteria. Twenty11 complies with this requirement through the Responsible Person employing a competent contractor to undertake risk assessments, these are reviewed and updated at regular intervals. The risk assessment records and prioritises any remedial works required. The remedial actions are resolved by an appointed specialist contractor. Risk assessments include control measures needed to prevent scalding through excessive hot water temperatures.

5.3. Where identified and required through the risk assessment, a written scheme of control is developed and recorded. The written scheme of control contains



information about the water system and actions needed to control the risk. The risk assessment is reviewed in line with the assessment's' recommendation (generally 2 years) or when there are significant changes to the water system.

Twenty11 maintains specific call-out arrangements and emergency procedures which are regularly communicated to all those involved.

- 5.4. Written schemes of control are developed as required to provide clear instruction on how to use and carry out control measures and water treatment regimes, these include:
 - Physical treatment program, e.g., using inspection, cleaning and disinfection and temperature control for hot and cold-water systems
 - Chemical treatment program where required, including a description of the manufacturer's data on effectiveness, the concentrations and contact time required
 - Health and safety information for storage, handling, use and disposal of chemicals used
 - System control parameters; allowable tolerances physical, chemical and biological parameters; measurement methods and sampling locations, test frequencies and procedures for maintaining consistency
 - Remedial measures to take when control limits are exceeded, including lines of communication
 - Cleaning and disinfection procedures
 - Emergency procedures
 - Commissioning and recommissioning procedures
 - Shutdown procedures
 - Checks of warning systems and diagnostic systems in case of malfunctions
 - Maintenance requirements and frequencies
 - Operating cycles, including when the system plant is in use or idle
- 5.5. The typical checks undertaken by the appointed, competent contractor are listed below along with the typical timescales (timescales may vary depending on risk assessment findings):
 - Inspection of water storage tanks annually
 - Visual inspection of hot water calorifiers annually
 - Check calorifier flow temperature and settings monthly
 - Temperatures of hot and cold water outlets at Sentinel taps monthly

- Legionella water samples taken as required annually
- Descaling and disinfection of shower heads quarterly
- Flushing of infrequently used outlets weekly
- Thermostatic mixing valve (where risk assessment requires, they be fitted) cleaning, descaling and disinfecting annually
- Expansion vessels flush and purge as identified in the legionella risk assessment
- Checking other outlets on a rotational basis over 12-month period recording temperatures in a logbook

5.6. Discovery of Legionella Bacteria

In the event of the discovery of legionella bacteria within a water system emergency action is taken to eliminate or contain any risk.

Advice and guidance are sought as required from specialist consultants /contractors by the Duty Holder or Responsible Person leading the management of the situation and detailed records as required will be kept. Including

- The appointed and Responsible Person conducting the legionella risk assessment, managing, and implementing the written scheme of control
- Any significant findings of the legionella risk assessment
- The written scheme of control and its implementation
- Details about the state of operation of the water system, i.e. in use/not in use
- The results of any monitoring inspection, test or check carried out
- The dates undertaken

All records are retained for at least two years. Records of monitoring inspection which include the test or check carried the date and other relevant information are retained for at least five years.

The following items are recorded;

- Names and positions of people responsible, and their deputies for carrying out the various tasks under the written scheme of control
- A risk assessment and a written scheme of actions and control measures
- schematic diagrams of the water systems
- Details of precautionary measures applied / implemented including detail showing that they were applied / implemented correctly and the date of implementation



- Remedial work required and carried out, and the date of completion
- A log detailing visits by contractors, consultants and other personnel
- Cleaning and disinfection procedures and associated reports and certificates
- Results of the chemical analysis of the water
- Results of any biological monitoring
- Information on other hazards, e.g. treatment chemicals
- Training and competence records of personnel
- Records showing the current state of operation of the water system, e.g. when the system or plant is in use and if not in use, whether it is drained down either the signature of the person carrying out the work, or other form of authentication where appropriate

Risk assessments are living documents that must be reviewed to ensure they remain relevant. An indication of when to review the assessment and what to consider should be recorded. This may result from:

- Changes to the water system or its use,
- Changes to the use of the building in which the water system is installed
- The availability of new information about risks or control measures
- The results of checks indicating that control measures are no longer effective
- Changes to key personnel
- A case of legionnaires' disease / legionellosis associated with the system or another incident requiring review

5.7. Risk

Prior to commencement of any work activities, the appointed Responsible Person or competent contractor shall undertake a suitable and sufficient risk assessment covering the full scope of works. This assessment includes the impact of works on tenants affected.

5.8. Detailed risks

Any water system that has the right environmental conditions could potentially be a source for legionella bacteria growth. There is a reasonably foreseeable legionella risk in water systems if:

- Water is stored or re-circulated as part of a system
- The water temperature in all or some part of the system is between 20°C 45°C
- There are sources of nutrients such as rust, sludge, scale and organic matter

- The conditions are likely to encourage bacteria to multiply
- It is possible for water droplets to be produced and, if so, if they can be dispersed over a wide area, e.g. showers and aerosols
- Thermostatic Mixing Valves (TMV's) are fitted to all new installations and in instances where there is a potential for full body immersion of vulnerable tenants (i.e. baths / showers) following a risk assessment on the tenant. The TMVs accurately control and maintain water temperature for increased safety and to prevent potential scalding.

5.9. Preventing and controlling the risk

The risk of legionella is assessed by considering the type of water system. The key point is to design, maintain and operate water services under conditions that prevent or adequately control the growth of legionella bacteria.

To achieve this water systems are designed to:

- Ensure that the release of water spray is properly controlled,
- Avoid water temperatures and conditions that favour the growth of legionella and other micro-organisms
- Minimisation of water stagnation in the system by keeping pipe lengths as short as possible or by removing redundant pipework
- Avoid materials that encourage the growth of legionella by compliance with The Water Fittings and Materials Directory which references fittings, materials, and appliances approved for use on the UK Water Supply System by the Water Regulations Advisory Scheme
- Keep the system and the water in it clean and treat water to either kill legionella (and other microorganisms) or limit their ability to grow
- Introduce appropriate controls by identifying:
- the system, e.g. developing a written schematic
- who is responsible for carrying out the assessment and managing its implementation
- the safe and correct operation of the system
- control methods and other appropriate precautions
- what checks will be carried out to ensure risks are being managed and how often, and where these will be recorded

5.10. Auditing and review

Quality of work is assessed in four ways:

- Assessment of a percentage of works by a suitably experienced and qualified member of staff
- Assessment by a nominated consultant as and when required i.e. if there are concerns relating to safety or the quality of contractor's work/practices
- Internal quality assurance by the contractor
- The condition and performance of all systems need to be monitored. The appointed Responsible Person oversees and manages this or where appropriate, an external contractor or an independent third party is appointed.

Management involves:

- Checking the performance and operation of the system and its component parts
- Inspecting the accessible parts of the system for damage and signs of contamination
- Monitoring to ensure that the treatment regime continues to control to the required standard
- Internal auditing arrangements implemented by the contractor which includes the contractor's qualified supervisor officer reviewing all certification arising from maintenance inspections and checking relevant information and results prior to submission. A sample of submitted records are checked for accuracy by appropriately qualified and experienced staff.

6. Policy Statement

Twenty11 ensures the control and management of legionella bacteria in water systems and the prevention of scalding within dwellings it owns and manages. Water systems in dwellings are installed, maintained and serviced as set out in the approved code of practice and guidance document:

- L8 Legionnaires' disease The Control of Legionella Bacteria in Water Systems
- Risk assessments will be reviewed regularly on frequencies recommended as part of the review and whenever there has been a material alteration to an existing installation, service, building use or if there has been a confirmed case of Legionella. Inspections and testing of systems are undertaken to minimise the risk of Legionella and scalding due to incorrect water temperatures.
- For the purpose above, a water system includes all plant / equipment and components associated with that system, e.g. all pipework, pumps, feed tanks, valves, showers, heat exchangers, quench tanks, water softeners, chillers etc.
- Red Kite Community Housing, the managing agent for Twenty11, manages all aspects of the delivery of water treatment testing and anti-scalding, associated testing, repairs, upgrades and the provision of new installations.



- Specific water testing is undertaken by specialist contractors procured to ensure suitably qualified, competent individuals undertake the works according to the requirements set out in the risk assessments or guidance contained within the Control of Legionella Bacteria in Water Systems.
- Client management and monitoring systems are implemented to ensure necessary provisions are carried out in a timely and compliant manner.
- a. The main objectives for this Policy are listed as follows:
 - Set a clear approach for maintenance and servicing of hot and cold-water installations
 - Ensure a prompt, efficient, cost-effective repair, servicing and inspection
 - Comply with statutory requirements
 - Promotion of good practice
 - Prioritisation of remedial works
 - Outline the approach for the safe use of stored water including provision for inspection and monitoring
 - Ensure adequate records are kept
 - Ensure the risks associated from stored hot water are managed and the likelihood of scalding is reduced
 - Commit to training and developing relevant staff
 - Define practical measures to control water contamination and scalding

7. References

The key documents and references are listed in the legal framework section of this document.

8. Related Policies and Procedures

This policy should be read in conjunction with our Health and Safety Policy, which will cover the process for recording, reporting, investigation and analyses of accidents, incidents and cases of ill health in relation to Water Treatment & Anti-Scalding safety.



Appendix A – Twenty11 Organisational Structure Chart



Document Controls			
Version:	7	Effective date:	19/08/2024
Subject Matter expert drafter:	Home Safety Specialist (Hazards)	Policy owner:	Head of Property
Related Pod	Property	Related Policy	Health & Safety Policy
Review period	3 Years	Next review due by:	August 2027
Delegated approvals			
Approved by EMT	Nick Burston, Director of Property and Development	Approved Date:	19/8/24
Approved by Board/ Committee/ RRT		Approved Date:	

