

**WATER TREATMENT & ANTI-SCALDING  
SAFETY POLICY**

## 1 Purpose

The purpose of this policy is to set out specific guidance to ensure the control and management of legionella bacteria in water systems and the prevention of scalding within dwellings owned and managed by Twenty11. Water systems in dwellings are installed, maintained and serviced to required standards (as defined in Section 4 of this document). The properties are inspected at appropriate frequencies to minimise the risk of legionella and scalding due to incorrect water temperatures.

## 2 Definitions

Legionellosis is 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

## 3 Responsibilities

The duties of management, staff and personnel of Twenty11 shall be clearly communicated and agreed by all parties to ensure that all persons can undertake their duties as stated in this procedure. Communications and feedback detailing agreed responsibilities shall be kept and monitored by the Duty Holder or the relevant Responsible Person who shall initiate further training or assistance as deemed necessary.

### 3.1 Board

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

### 3.2 The Chief Executive

The Chief Executive is the identified Duty Holder for this policy, it is their responsibility to monitor and review this policy. They are also responsible for ensuring that the person who carries out the legionella risk assessment and provides advice is competent to do so. The duty holder takes reasonable steps to ensure the competence of those carrying out work who are not under their direct control and that responsibilities and lines of communication are properly established and clearly laid down. The Chief Executive is responsible for ensuring adequate finance is secured for the delivery of this policy. They also need to appoint a Responsible Person. The following actions relate to designated staff and contractors acting on behalf of Twenty11:

- ensuring adequate resources are allocated to managing the risks associated to this procedure

- ensuring adequate processes and procedures are in place to manage the risks arising from this procedure
- ensuring sufficient information, instruction and training is carried out
- monitoring the performance of staff and contractors
- ensuring that members of the public, staff and contractors are not unnecessarily exposed to risk
- ensuring appropriate legionella risk assessments are undertaken and regular reviews are undertaken
- ensuring appropriate inspections and monitoring are undertaken and that statutory requirements

### 3.2 *The Head of Property*

The Head of Property is identified as the 'Responsible Person' and takes the lead role for the operational delivery this policy, staff awareness, training, and communication to tenants. They ensure that employees or other persons that are at risk of exposure to legionella are given suitable and sufficient information, instruction, training and assessed to be competent This includes communicating the significant findings of the legionella risk assessment and the appropriate precautions and actions required to safeguard themselves and others.

Further duties include:

- implementation and the continuing review of this document
- ensuring that appropriate staff are kept fully informed of developments in legislation and good practices relating to the management of legionella/water hygiene
- ensuring only competent staff are employed in delivering the policy
- ensuring a 'Duty of Care' to older tenant, employees and contractors.

### 3.3 *Home Safety Manager*

The Home Safety Manager takes the lead on contract management for water treatment testing, servicing, installation and anti-scalding provisions and all appropriate, associated activities. They regularly review risk assessments to ensure that they are suitable and sufficient.

The Home Safety Manager ensures that organisations such as water treatment companies or consultants, and staff employed are competent by obtaining training and competency assessments. They also ensure they 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
- appointing a designated deputy to provide cover in their absence
- ensuring adequate processes and procedures are in place to manage the risks arising from water treatment and anti-scalding works
- ensuring sufficient information, instruction and training is carried out
- ensuring risk assessments are undertaken and reviewed at appropriate timescales
- ensuring appropriate inspections are made to assess the condition of water storage systems, installations and equipment
- implementing and monitoring written systems of control

Training regarding legionella and anti-scalding is completed following a training needs analysis produced by the, the Home Safety Manager and approved by the Responsible Person. Training will be cascaded through the organisation 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. The person undertaking the required task will therefore be appropriately trained and assessed as competent.

- They will also ensure that the competence matrix is kept up to date so only competent employees are asked to undertake specific tasks and roles required by this policy.

#### 3.4 *Home Safety Specialist (Hazards)*

The Home Safety Specialist (Hazards) is responsible for the day to day running and implementation of this policy and they:

- provide advice on the application of this procedure on a case-by-case basis and take day-to-day responsibility for its implementation
- ensure information is fed back to the appropriate managers
- ensure that records and information is maintained and up to date
- provide information to staff, contractors, tenant and members of the public as required
- ensure training is maintained in accordance with current regulations
- ensure a designated deputy is appointed to provide cover in their absence
- ensure information is available to contractors and consultants

- monitor the performance of staff and contractors
- maintain property records and relevant certification
- maintain up-to-date knowledge of legislative requirements and best practice

### 3.5 *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 Home Safety Specialist (Health & Safety) as quickly as possible after the event, to ensure that an investigation is undertaken.

### 3.7 *Contractor's responsibility*

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.

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.

### 3.8 *Tenants' responsibility*

Under the terms of their Tenancy Agreement, tenants must allow access to their property for maintenance and / or inspection to be carried out. To undertake works it may be necessary 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 tenant's responsibility to ensure that.

- any contingency arrangements arising from the absence of supplies must be highlighted and agreed in advance of works
- provide appropriate access by the relocation / removal of any obstacles and in situations where the tenant is unable to manage support is agreed
- temporary provision of cold and hot water is identified
- clearance of work areas including loft space

- notify any repair / fault in a timely manner

Any defective or unauthorised works needing rectification may incur a recharge which will be explained to the tenant. If any installation has been undertaken without permission and is found to be defective the supply may be terminated, or a recharge incurred for any rectification work.

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. They also make the Duty Holder and the Responsible Person aware of any limitations in their own expertise, products or services so arrangements to ensure that these deficiencies or limitations are addressed.

Contractors and consultants ensure their staff are competent to carry out tasks safely. They should be properly trained to a standard appropriate to the various tasks they perform, such as 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.

Staff and contractors are suitably trained, competent managed supervised and given appropriate resources or support. They should be aware of the action to take in situations outside their knowledge or experience.

The Contractors will also undertake water sampling at 10% of domestic properties, these samples will be tested for the presence of legionella bacteria. Where unacceptable levels are found they will undertake work to reduce the risk of legionella's disease.

#### **4 Legislation**

Twenty11 are 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
- Approved code of practice and guidance on regulations L8 Legionnaires' disease: the control of Legionella bacteria in water systems
- HSG 274 part 2 'The control of legionella bacteria in hot and cold water systems
- 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 2000 (amended)
- British Standard (BS8580) Water Quality-Risk Assessments for Legionella Control-Code of Practice 2010
- 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 Executives website at: [www.hse.gov.uk](http://www.hse.gov.uk) and in the Approved Code of Practice L8 and HSG 274 parts 2 & 3 (as detailed above).

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 by 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.

Where identified and required through the risk assessment, a written scheme of control is it 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 annually or when there are significant changes to the water system.

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

Written schemes of control are developed to provide clear instruction on how to use and carry out control measures and water treatment regimes, these include:

- physical treatment programme, e.g., using inspection, cleaning & disinfection and temperature control for hot and cold water systems
- chemical treatment programme 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

The typical checks undertaken by the 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



## 5.2 *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.

## 5.3 *Detailed records*

Records to be kept include details about:

- 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

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 should normally be 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

- the name and position of the person or people who have responsibilities for implementing the written scheme of control, their respective responsibilities and their lines of communication,
- 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

#### 5.4 *Risk*

Prior to commencement of any work activities, the appointed Responsible Person or 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.

#### 5.5 *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 Sheltered Schemes 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 TMV's accurately control and maintain water temperature for increased safety and prevent potential scalding

## 5.6 *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

## 5.7 *Auditing and review*

Quality of work is assessed in four ways:

- assessment of a percentage of works by a suitably experienced and qualified officer
- 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/practice's
- 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 ensure the control and management of legionella bacteria in water systems and the prevention of scalding within dwellings owned and managed by Twenty11. 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

Water system risk assessments, inspections and testing are undertaken at appropriate frequencies 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.

As the Duty Holder 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.

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.

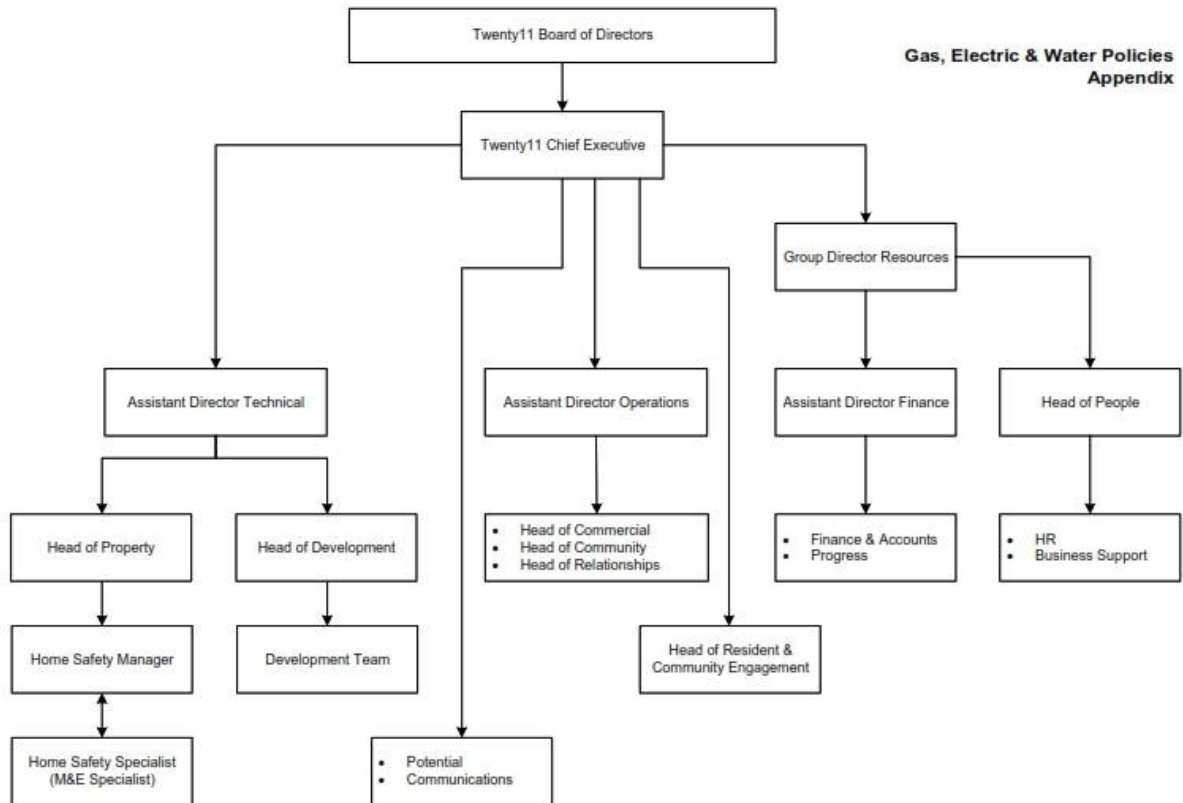
## **7 References**

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



Staff roles listed in the **Competency Standards section** must be acquainted with contents of this document and have had documented instructions and training on its use. Authority to amend can only be undertaken by the **Process owner** with the relevant **Delegated approvals**.

For information on interpretations and instructions staff should contact the **Subject Matter expert** or **Process owner** and under no circumstances should any deviation be permitted without prior approval as above.

Document Controls			
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