OCHIL VIEW
Housing Association Ltd.

WATER SAFETY / LEGIONELLA POLICY (2021)

1.0 INTRODUCTION

In order to be fully compliant with the Control of Substances Hazardous to Health (COSHH) Regulations as they apply to legionella, the Association has developed both risk management and risk control measures to ensure satisfactory processes and systems are in place to minimize the risk of legionella.

This document describes the process of risk management and minimum risk control measures for each type of premises and associated water systems in accordance with the Health & Safety Executive's Approved Code of Practice (ACOP) and Guidance (Fourth Edition, Published 2013): Legionnaires Disease: The Control of Legionella Bacteria in Water Systems, commonly known and referred to as L8.

2.0 POLICY STATEMENT FOR THE CONTROL OF LEGIONELLA BACTERIA IN WATER SYSTEMS

It is the Associations written policy to do all that is reasonably practicable to protect residents, employees, visitors and neighbour's from health hazards arising from the use and distribution of water in all Association owned or leased properties. This is achieved by the implementation of a risk management procedure to ensure full compliance with all statutory requirements of current relevant legislation, standards, codes of practice and published guidance.

The policy and guidance is reviewed and updated on an annual basis by the Association's nominated employee in conjunction with their appointed consultant in order to take account of any changes in legislation or advances in risk control technology and industry practice.

The Association undertakes to perform the following actions:

- ✓ Appoint responsible persons and provide adequate training for Association employees.
- ✓ Identify all water plant and systems which present a potential risk of exposure to Legionella Bacteria.
- ✓ Arrange for Legionella Risk Assessments to be conducted of all its water systems and to review these assessments at least every 2 years and when significant changes occur. (Reference will be made to HSG 274 Parts 1, 2 and 3 in connection with the pro-active monitoring and regular review of the assessment and control measures which are recommended, especially where the risk assessment is deemed no longer valid).
- ✓ Eliminate or reduce risks whenever possible by the procurement of plant, equipment and systems which have been designed to eliminate or control the risks of exposure to Legionella Bacteria.
- ✓ Establish and operate a written management process for controlling risks from Legionella Bacteria in all relevant property.
- ✓ Monitor compliance with the management process and review risks and the

performance of the risk control measures, revising risk assessments and management processes as required.
- ✓ Maintain comprehensive records for each property.
- ✓ Employ only competent, adequately qualified and trained personnel and service providers.

The management of the Association regards the attainment of the above as a mutual objective for management and all employees of the Association.

3.0 RESPONSIBLITIES

In defining responsibilities the Association will ensure that the "Responsible Person" has the competency and authority to manage the water systems and controls. Without this they will not be able to fulfil their role.

The Chief Executive has overall responsibility for ensuring that the Association meets its legal obligations with respect to the control of legionella bacteria in building water systems.

The responsibility for the development and implementation of a risk control and management programme has been delegated to the Association's Property Services Manager (Nominated Responsible Person).

The Association will engage the services of a water treatment specialist(s) to provide the necessary competent advice on policy and procedural matters, and to prepare legionella risk assessments, written control procedures and site documentation for legionella management and control.

As a minimum requirement, contractors are required to be a registered member of the Legionella Control Association (LCA) or the Water Management Society (WMSoc).

4.0 LEGIONELLA BACTERIA & LEGIONNAIRES DISEASE

Legionella bacteria commonly occur in both natural (rivers, ponds, lakes, soil, mud and sediment) and artificial water systems within building (cooling towers, evaporative condensers, and domestic hot and cold water systems). Under certain conditions, temperatures within the range 20^0C to 45^0C and nutrients contained within sludge, scale, biofilm and corrosion deposits, legionella bacteria can rapidly multiply thus increasing the potential for exposure.

These conditions can develop in poorly maintained and operated cooling towers, evaporative condensers, showers, spray apparatus and hot and cold water systems, which are the sources of most reported cases of Legionnaires Disease. Legionella bacteria are usually associated with larger water systems, for example in factories, hospitals and hotels but the bacteria can also populate smaller water systems used in homes or residential accommodation. Further potential sources of legionella bacteria include spa and whirlpool baths, humidifiers, water features and fire suppression systems (sprinklers and hose reels).

Water systems and services which are normally considered to present a foreseeable risk of exposure to legionella bacteria (as defined with ACOP L8) are listed below in descending order of risk:

- ✓ Cooling systems with cooling towers, evaporative condensers or dry/wet cooling systems.
- ✓ Hot & cold water systems.
- ✓ Spa pools.
- ✓ Other plant and systems containing water than can create and increase the risk from legionella during operation or when being maintained.

The above list is for guidance only and should not be taken as an exhaustive listing of water systems that present a foreseeable risk of exposure to legionella bacteria.

Legionnaires Disease is a potentially fatal form of pneumonia caused by the inhalation of legionella bacteria. The bacteria are normally contained within fine water droplets (aerosol) that may be caused by operating a cooling tower, shower, spray apparatus, running a tap outlet or operating a humidifier.

Legionnaires Disease has the potential to affect anybody; however, persons more susceptible are normally in the age range of 50 and above, smokers, heavy drinkers, persons suffering from chronic respiratory or kidney disease and persons with impaired immune systems. Healthy persons are not immune from catching Legionnaires Disease. A large proportion of reported cases of Legionnaires Disease within the UK each year are those returning from foreign travel.

The identification of legionella bacteria within a water system is **NOT** an outbreak, this is **ONLY** the case when two or more persons have contracted the disease from the same source.

5.0 MINIMISING THE RISK FROM LEGIONELLA BACTERIA

It is generally accepted that levels of legionella bacteria found in typical mains supply waters are very low (normally below the detectable limit) and do not pose a serious risk providing they are not allowed to proliferate. The survival and growth of legionella bacteria are governed by a number of factors which include:

- ✓ Water temperature.
- ✓ Water retention period.
- ✓ Accumulation of sludge, scale, deposits and corrosion by-products.
- ✓ Use of unsuitable materials.
- ✓ Low levels of disinfectants and other biocide treatments.

Legionella bacteria start to die at a temperature above 50^{o}C with the temperature determining the speed this process occurs. Below 20^{o}C the legionella bacteria remains dormant.

However, within the temperature range of 20^{o}C to 45^{o}C legionella bacteria can proliferate rapidly giving rise to large numbers of the bacteria, and increasing the likelihood of a high risk of exposure. Numbers can double every 2 to 12 hours. Within a few days, action levels can be reached.

In closed or sealed water systems even if legionella bacteria are found to be present at very high concentrations, under normal operation the risk present is low although where legionella

is present the risk remains. The Association recognises that its duty is to minimise the legionella bacteria levels.

However, during cleaning or maintenance works where aerosols may be generated these same low risk systems could present an unacceptable level of exposure to operatives performing such work. In these circumstances, job specific risk assessments and method statements must be in place to cover such maintenance and / or cleaning procedures.

Experience has shown that while it can be difficult to completely eradicate legionella bacteria from building water systems, the risks can be reduced to an acceptable and manageable level by the adoption of a suitable programme of system design and risk management and control.

6.0 LEGAL REQUIREMENTS

Legal requirements are set out in:

- British Standards 8580:2010 – Water Quality: Risk Assessment for Legionella
- HSG Health and Safety in Residential Care Homes (2001)
- HSG274 Legionnaires Disease – Technical Guidance (in 3 Parts) (2013)
- IACL27 (rev2) Legionnaires Disease – A guide to Employers
- INDG 458 Legionnaires Disease – A brief Guide for Duty Holders (2012)
- Public Health etc. (Scotland) Act 2008
- The Building (Scotland) Regulations 2004
- The Control of Substances Hazardous to Health Regulations 2002, as amended
- The Housing (Scotland) Act 2006
- The Management of Health and Safety at Work Regulations 1999
- The Private Water Supply (Scotland) 2006
- The Water Supply (Water Fittings) (Scotland) Byelaws 2014
- The Water Supply (Water Quality) (Scotland) Regulations 2001

Legislation in the United Kingdom in relation to exposure to hazardous substances including biological agents such as legionella bacteria is contained within The Control of Substances Hazardous to Health (COSHH) regulations. Under the COSHH regulations the employer has a duty to ensure that health risks associated with hazardous substances including micro-organisms such as legionella bacteria are adequately controlled in the work-place by a process of risk assessment and management control.

Further legal requirements are described in the Health & Safety Executive's Approved Code of Practice (ACOP) and Guidance (Fourth Edition): Legionnaires Disease: The Control of Legionella Bacteria in Water Systems (L8) which came into effect on the 25th November 2013.

Although failure to comply with any provision of the Approved Code of Practice is not in itself an offence, failure may be taken by a court in criminal proceedings as proof that a person or organisation has contravened the legal requirement to which the provision relates. In such a case, however, it will be the person or organisation that has to satisfy the court that compliance with the requirements has been achieved in some other way. The ACOP sets out guidance to satisfy the relevant legislative requirements under COSHH, which include:

- ✓ Appoint a competent person for day-to-day management.
- ✓ Identification and assessment of risk.
- ✓ Preparation of a written scheme for prevention or controlling the risk.
- ✓ Management and the selection, training and competence of personnel.
- ✓ Record keeping.
- ✓ Responsibilities for designers, manufacturers, importers, suppliers and installers.

7.0 MONITORING AND TESTING

The extent of monitoring is determined through categorisation of premises and water systems together with the risk assessment process described within this document.

Where legionella monitoring is identified as a requirement it will be agreed between the Association's Property Services Manager and their nominated water consultants.

8.0 PROPERTY CATEGORISATION

The Association has worked closely with their nominated water consultants to determine the correct policy and processes for use with the various water system types and sizes installed within its property portfolio. It is essential that the policy adopted is not a one size fits all approach as the risks associated with mains supplied water systems are negligible compared with that of large stored water systems, showers, etc. although this is dependent upon how the water system is designed, maintained and managed.

The Association has undertaken a review of the water system types contained throughout their property portfolio and have compiled a list of minimum monitoring requirements for legionella control in each of the different types of premises according to water system type. These are broadly categorised by property size and type.

As part of ongoing monitoring the Association will annually review the tenancy information as it recognises that tenants individual needs will also play a part in the assessing the risk of legionella, and potentially the monitoring requirement.

The minimum monitoring requirements for the Associations portfolio of stock are detailed in **Appendix 1.** A full property list including categorisation is included at **Appendix 2**.

The actual level of risk will be dependent on a number of factors including system design, operation, condition, maintenance and susceptibility of building occupants. It is important to establish the written control scheme and any requirements for remedial measures such as cleaning and disinfection, equipment removal or replacement.

9.0 IDENTIFICATION & ASSESSMENT OF THE RISK FROM LEGIONELLA BACTERIA

The Association will engage the services of a nominated water consultant to have responsibility for completing site surveys, risk assessments and for the preparation of site specific written control schemes, record system and programme of maintenance and monitoring for each property allocated to them by the Association.

In carrying out the initial assessment of potential risk of exposure to legionella bacteria, it is essential to take account of the main factors affecting that said risk, as detailed below:

- ✓ The potential for legionella bacteria to colonise, survive and proliferate in the water system under normal operating conditions, for example, is the water temperature between 20^0C and 45^0C or is there debris in the system such as rust deposits, sludge or scale.
- ✓ The potential for water to stagnate including over-capacity and dead leg area, for example, capped pipe work or vacant areas of the property no longer used.
- ✓ Infrequently used outlets such as showers, taps, etc.
- ✓ The potential for aerosol generation during normal operation, and when maintenance work is undertaken.
- ✓ The potential for exposure of persons to aerosols containing viable legionella bacteria.

It is essential that all sites are assessed adequately to ensure that the most appropriate provisions are made to comply with current legislation. This must include the whole property, including tenanted areas that do not have separate water facilities, or supply from the local water supply company, or where the Association is responsible for building water services.

The risk assessment shall be reviewed at least every 2 years or when changes occur (as indicated in section 2.0). Where the system is unchanged, the existing documentation shall remain but the review date and signature of reviewer must be entered onto the review sheet contained within the risk assessment document. A completed copy of the risk assessment and written control scheme shall be located within the Water Management Log Book supplied by the nominated water consultants who completed the assessment.

10.0 RISK CONTROL & WRITTEN CONTROL PROCEDURES

When deciding on control measures appropriate to deal with risk allocation, the following list should be considered in the order given:

- ✓ The elimination of the hazard at source, for example, a direct mains-supplied point of use system.
- ✓ The reduction of the hazard at source, for example, large water systems, spray apparatus and dead-legs.
- ✓ The reduction of the exposure to the hazard, for example, system checks, temperature monitoring and flushing of infrequently used outlets.

Process, control measures and policy, must be reviewed on a regular basis and revised as required. Similarly if conditions change to the extent that any risk identified is significantly affected then the risk evaluation and management process shall be reviewed.

Written control procedures must be provided for controlling the risks identified by the risk assessment taking into account the minimum monitoring requirements detailed in **Appendix 1**. The written control procedure shall clearly identify the specific actions required, their frequency and the nominated person responsible for the undertaking of such actions.

In controlling the risk of exposure to legionella bacteria within “at risk” building water systems, particular attention must be paid to the following:

- ✓ The control and reduction of aerosol emissions.
- ✓ The control of legionella bacteria proliferation by the application of a suitable water

management programme including cleaning and disinfection, temperature control and if required, water treatment, plant and equipment checks, and routine maintenance to ensure compliance with recommendations given in HSG 274 Parts 1, 2 and 3.

- ✓ The monitoring of the performance of the water management programme.
- ✓ The effective communication, training and documentation for the operation and maintenance of the water system(s). Additional checks and auditing should also be undertaken to ensure the adequacy of preventative actions for controlling the associated risks.

11.0 TRAINING

The Association will engage the services of a nominated water consultant to carry out legionella risk assessments and implement written control measures. As a minimum they must be adequately trained and competent to undertake such tasks and be suitably qualified and be independent of any of the parties carrying out the controls and the testing.

The Association will ensure that any personnel/persons involved in the management and implementation of the risk control programme are trained and competent in the duties they are required to undertake. The Association and any nominated water consultants will provide specific training in Legionella Awareness and Management, together with the risk management process detailed in this document. The Association will also provide support to scheme managers and/or employees in order to ensure that they understand the risk management process and their role in its successful implementation.

Where the Association's staff will undertake any risk assessments they must have completed training comprising of both in-house training by the Association's nominated person, combined with external accredited training by a recognised professional body. Copies of training records and a copy of the company training policy for staff employed in the control of legionella bacteria shall be incorporated within the site log book at each location.

12.0 WATER MANAGEMENT PROGRAMME

The Organisation will arrange for a suitable and sufficient risk assessment programme to be carried out (and regularly reviewed) to identify and assess the risk of exposure to Legionella bacteria from all water systems across its property portfolio.

On the completion of each risk assessment a written control procedure and site record system including log book will be prepared. Any serious non-compliance identified during the survey visits will be communicated to the Property Services Manager and a suitable course of action will be agreed.

Routine system monitoring of temperature and flushing will be carried out using local resources. Where more specialised services are required, such as cleaning and disinfection, these will be procured by the Association.

Future water quality monitoring requirements will be co-ordinated by the Property Services Manager and may involve the services of a nominated water consultant.

Risk assessments will be reviewed every 2 years or more frequently if changes occur to building water services and / or occupancy in accordance with ACOP L8 guidance.

In order to benchmark and monitor the risk management process a selection of properties will be audited by a water consultant in conjunction with the Property Services Manager on an annual basis.

The Association will ensure that all water fittings comply with relevant legislation and have the CE mark, British Standard kitemark or appropriate equivalent. Specialist advice will be obtained in the selection of all water systems fixtures and fittings.

The Association will ensure that all water fittings are suitable for the purpose intended. This will include the following:

- ✓ Hot water shall be stored in tanks at a temperature of at least 60°C.
- ✓ Water pipes shall be as short and direct as possible and pipes and tanks will be effectively insulated. Tanks will be protected against contamination and materials used which do not encourage Legionella growth.
- ✓ Hot water shall reach taps at temperatures greater than 50°C within one minute of running.
- ✓ Cold water shall be stored at a temperature of less than 20°C. Cold water shall reach taps at temperatures less than 20°C within two minutes of running.
- ✓ All little used outlets shall be routinely flushed through.

Where water is used or stored for consumption in any devices, e.g. water coolers, tea urns, drinks machines etc., an effective system of regular cleaning and disinfecting shall be introduced, in accordance with manufacturer's instructions.

13.0 DISINFECTION

Water services will be disinfected when any of the following situations occur:

- ✓ If a routine inspection or risk assessment shows it necessary to do so;
- ✓ After any prolonged shutdown of a month or longer (a risk assessment may indicate the need for cleaning after a period of less than one month, especially in summer where temperatures have been high);
- ✓ If the system or part of it has been substantially altered or entered for maintenance purposes in a manner that may lead to contamination;
- ✓ Following an outbreak or suspected outbreak of Legionaries' disease or any other water borne infection/disease.

14.0 VOID PROPERTY ACTIONS

It is recognised that all void properties have the potential to exhibit increased risk of Legionella due to the possibility of stagnant water remaining undisturbed within pipework for prolonged periods.

To mitigate the increased potential risk associated with voids, the contractor appointed to carry out repair and re-decoration works on all standard properties will carry out and record the following:

- ✓ Thoroughly flush all taps;
- ✓ Clean and disinfect, or replace, all shower heads;
- ✓ Inspect and report on water storage tank, where present.

All Special Lets becoming void will be assessed individually and on their own merits.

15.0 DOCUMENTATION & RECORDS

The HSE Approved Code of Practice and guidance requires that detailed records are to be kept. It is essential that records are organised in a structured format and reflect the key management processes in order to demonstrate compliance with the relevant statutory requirements and Association requirements as set out in this document.

Relevant information shall be compiled and maintained by the Property Services Manager to ensure that procedures and records reflect the water systems identified in the risk evaluation process. The Property Services Manager will assign the tasks to ensure that operatives comply with the risk management programme.

It is the duty of the Association, and its employees and agents to ensure that organisations and personnel employed are competent, suitably trained and have the necessary equipment to undertake their duties under the written control procedures, adequately and safely. These arrangements will be audited at a nominated percentage of sites on a randomly selected basis. Any non-compliance will be formally reported, and dependent on the severity, may include a written warning notification.

The level of documentation provided will be dependent on the system category determined for each location following the format of the following list:

Site Information

- ✓ Risk Management Process.
- ✓ Risk Assessment Report and Survey Forms.
- ✓ Schematic drawing(s).
- ✓ Written Control Procedure.
- ✓ Training Records.
- ✓ Chemical Safety Information (If Water Treatment Chemical Are In Use).

Diary

Diary Pages for Recording **ALL** Site Checks, Maintenance & Monitoring.

Temperature Monitoring

All categories: As required by the Risk Assessment.

Cleaning & Disinfection Certificates

Only approved Documentation to be use In Order to Ensure Consistency in Site Documentation.

Water Treatment

ALL water treatment chemicals and equipment should be used in accordance with the manufacturer's instructions. Chemicals should be dosed to achieve stated concentrations and amounts of chemical used, recorded.

ALL RECORDS WILL BE KEPT FOR A MINIMUM OF FIVE YEARS

16.0 MAINTENANCE

The Association will regularly seek guidance from its nominated water consultants on the current best practice for regular maintenance of all of its water systems. This will include:

- ✓ cold water storage tanks;
- ✓ water heaters and/or calorifiers;
- ✓ showers;
- ✓ details of commissioning and de-commissioning procedures;
- ✓ pre-let inspections.

This list is not exhaustive and the risk assessment will identify any potential areas that require additional maintenance.

The Association currently does not undertake any monitoring or de-scaling of showers within individual rented properties. This is deemed the responsibility of the tenant who will be informed / issued with guidance on the controls they can easily take to reduce the risk. Care will be taken where the tenant may be vulnerable and / or incapable of carrying out the controls identified.

Design Philosophy for Upgrading and Provision of New Installations:
Water services that are directly fed from the incoming mains supply present reduced risk to building occupants, so when contemplating new or refurbishment projects that involve work to the water services; this shall be the preferred solution. In all other circumstances, systems shall be changed from stored, to mains-supplied, as opportunities arise for an upgrade.

When completing upgrade work, water services must comply with British Standards and Water Supply Regulations. Any changes made to site water systems must be documented within the site record system and where appropriate, the risk assessment and schematic drawings must be amended accordingly.

The key points to consider when refurbishing or installing new water systems are:

- ✓ Keep systems simple.
- ✓ Restrict microbiological growth by keeping temperatures below 20°C.
- ✓ Remove disused systems and dead legs.
- ✓ Use low capacity local area water heaters.
- ✓ Insulate pipe work.
- ✓ Run all systems from the direct mains supply.
- ✓ Where showers are required, use electric point of use units.
- ✓ Label all outlets including drinking water.
- ✓ Document all installations on a schematic drawing.

17.0 TENANT RESPONSIBILITIES

Tenants will be provided with information on good water management and Legionella control through tenancy agreements and/or by means of information leaflets.

Tenants are advised to clean shower heads, descale and disinfect them at least every two months.

For showers that are only occasionally used, tenants are advised to flush the shower through by running the water for at least 2 minutes once a week.

Where a property is left vacant for any time (e.g. when on holiday), tenants are advised to flush both hot and cold water systems by running all outlets for at least 2 minutes.

Tenants should inform the Association immediately if there are problems, debris or discolouration in the water.

18.0 NOTIFICATION REQUIREMENTS

If it is suspected or confirmed that a tenant, employee or visitor has contracted Legionnaires ' disease, the Association will report the incident to the HSE under the Reporting or Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

19.0 REVIEW

This policy will be reviewed at least every 3 years.

24th February 2021

Policy Review Consultation Process

Considered by Property Services Manager	24th February 2021
Reviewed by HSEHR Committee	3rd March 2021
APPROVED BY THE MANAGEMENT COMMITTEE	**25th MARCH 2021**
Date of Next Review:	**March 2024**