



OAK TREE HOUSING ASSOCIATION

Legionella Policy

Adopted: September 2016 Last Reviewed March 2019

Next Review Due: March 2024

1.0 Purpose

- 1.1 The aim of this Policy is to ensure the effective inspection, maintenance and management of all water systems within premises controlled by Oak Tree Housing Association (OTHA).
- 1.2 The procedures detailed within this section have been written to ensure all reasonable steps have been taken to comply with The Control of Substances Hazardous to Health Regulations 2002 (as amended), The Water Supply (Water Fittings) (Scotland) Byelaws 2014 and all other relevant legislation.

2. Definitions

Legionella – *“a potentially dangerous type of bacteria when inhaled with water vapour. Bacterium grows best in warm, nutrient rich water.”*

Legionella Risk Assessment – *“a specific risk assessment carried out to determine the risk level of Legionella Assessment proliferation, and exposure from a specific water system.”*

Log Book – *“a record book provided to record all local checks and tests carried out, as specified by legionella risk assessment.”*

Legionnaires’ disease – *“a potentially fatal form of pneumonia caused by the legionella bacteria.”*

3. References (see also [Section 8.14 – Guidance](#))

- 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

4. Legal Duties

- 4.1 OTHA has several specific legal duties which relate to water safety and, in particular, Legionella risk management. These include:
 - Identifying and assessing sources of risk;
 - Preparing a scheme for preventing or controlling the risk;
 - Implementing and managing the scheme;

- Keeping records and checking what has been done is effective.

5. Legionella Information

- 5.1 Legionella bacteria is common in natural water (such as rivers and ponds). However, legionella can grow in other water systems such as cooling towers, evaporative condensers, showers, spray apparatus and hot and cold water systems.
- 5.2 Legionnaires' disease is a potentially fatal form of pneumonia caused by the inhalation of Legionella bacteria. This includes the most serious Legionnaires' diseases, as well as the similar but less serious conditions of Pontiac Fever and Lochgoilhead Fever. The bacteria is 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.
- 5.3 Legionnaires' disease has the potential to affect anybody. However, those more susceptible are normally in the age range of 45 and above, smokers, heavy drinkers, or suffer from chronic respiratory or kidney disease or have impaired immune systems.
- 5.4 Legionella survive low temperatures and thrive at temperatures between 20-45 degrees C if the conditions are right (e.g. if a supply of nutrients is present such as rust, sludge, scale and other bacteria).

6. Legionella Policy

- 6.1 OTHA will aim to minimise and control the risk from Legionnaires' disease and, to this end, will:
 - Appoint a responsible person who will have a duty to put in place an action plan to minimise the risk of Legionella and to manage and monitor the necessary work systems and procedures;
 - Identify and assess sources of risk (e.g. where conditions are present that may encourage Legionella bacteria to multiply or where there is a means of creating and disseminating breathable droplets), and establish any items of non-compliance;
 - Assess the level of risk through a structured Legionella Risk Assessment programme, and aim to eliminate or reduce the risk to an acceptable level;
 - Arrange for routine inspection and maintenance of water systems, and where needed, a programme of disinfection;
 - Retain records of maintenance, inspection and testing for a minimum of five years.

7. Risk Assessment

- 7.1 OTHA 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.

- 7.2 OTHA will use a competent external company with qualified Legionella Risk Assessors to carry out the risk assessment programme. The Assessment company will not normally be associated with a water hygiene/control contracting company in an attempt to ensure independent recommendations are given by the Assessor. The Assessors and the Organisation will determine an appropriate programme of risk assessing, which may involve the use of 'representative' assessments followed by an ongoing programme or rotation across different addresses.
- 7.3 All recommendations and remedial action will be recorded in a log book. The recommendations should also highlight the management control actions that may be carried out in-house and those which would require an external contractor.
- 7.4 The risk assessment will be reviewed at regular intervals (at least every two years) or when it is believed that the original risk assessment is no longer valid (e.g. following a change in the building or water supply, or following an incident).

8. Water Fittings and System Requirements

- 8.1 OTHA 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.
- 8.2 OTHA will ensure that all water fittings are suitable for the purpose intended.
- 8.3 Hot water shall be stored in tanks at a temperature of at least 60°C.
- 8.4 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.
- 8.5 Hot water shall reach taps at temperatures greater than 50°C within one minute of running.
- 8.6 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.
- 8.7 All little used outlets shall be routinely flushed through.
- 8.8 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.

9. Disinfection

9.1 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 Legionnaires' disease or any other water borne infection/disease.

10. Void Property Actions

10.1 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.

10.2 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.

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

11. Contractors

11.1 A competent external contractor will be appointed to carry out legionella preventative monitoring and water hygiene services. As a minimum requirement, contractors are required to be a registered member of the Legionella Control Association (LCA) or the Water Management Society (WMSoc). Contracted works may include legionella sampling, tank inspections, water sampling, (for all bacteria) and other associated services, as identified in the Legionella Risk Assessment programme.

12. Notification Requirements

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

13. Tenant Responsibilities

- 13.1 Tenants will be provided with information on good water management and Legionella control through tenancy agreements and/or by means of information leaflets.
- 13.2 Tenants are advised to clean shower heads, descale and disinfect them at least every two months.
- 13.3 For showers that are only occasionally used, tenants are advised to flush the shower through by running the water for at least two minutes once a week.
- 13.4 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 two minutes.
- 13.5 Tenants should inform the Association immediately if there are problems, debris or discolouration in the water.

14. Review

- 14.1 The Association will review its methodology for managing Legionella every three years or sooner if required by Statutory or best practice requirements.

15.0 Scheme of Delegation

15.1 Responsible Committee

- Housing & Technical Services Sub-Committee

15.2 Formulation and Monitoring of Policy

- Housing & Technical Services Sub-Committee

15.3 Formulation and Monitoring of Procedures

- Housing & Technical Services Sub-Committee

15.4 Amendments to Policy

- Housing & Technical Services Sub-Committee

15.5 Monitoring of Statutory Requirements

- Housing & Technical Services Sub-Committee
 - Depute Director (Health & Safety Co-ordinator)
- 15.6 Implementation of Policy
- Technical/Maintenance Manager
- 16.0 **Appendices**
- 16.1 Appendix A: Section 8.14 – Landlords Guide to Water Systems and Legionella
- 16.2 Appendix B: Record Keeping and Inspections Cleaning and Temperature Regime
- 16.3 Appendix C: Overview on Legislation
- 16.4 Appendix D: Legionella Risk Rating Methodology
- 16.5 Appendix E: Contractor Certificate
- 16.6 Appendix F: Contractor Control Document

Appendix A

Section 8.14 – Landlords Guide to Water Systems and Legionella

Introduction

This Legionella and Potable Water Supply Safety Guide has been developed to assist landlords to understand their responsibilities with regards to Potable Water Supply Safety, their legal obligations under current legislation and to ensure that they have an effective policy and system in place for the inspection, maintenance and management of Water systems.

1.1 Background Potable Water Supplies

Water is essential to sustain life and an adequate supply of good-quality drinking water should be available to consumers. International guidelines on drinking water quality are published by the World Health Organization (WHO). Within the European Union, drinking water is subject to specific quality standards set out in the EC Directive on the Quality of Water Intended for Human Consumption (98/83/EC, the 'Drinking Water Directive') which takes into account the WHO guidelines. The water quality standards laid down in the Drinking Water Directive apply to all public and private water supplies intended for drinking, cooking, food preparation and other domestic purposes.

1.2 Background Legionella Bacteria

Legionnaires Disease is potentially a fatal lung infection (form of pneumonia) which can affect anybody, but which principally affects those who are susceptible because of age, illness, immunosuppression, smoking etc. and is caused when individuals inhale legionella bacteria. The bacteria can exist in any man-made water systems such as water storage systems, taps, pipework etc.

2. Legislation

Housing Associations as the Landlords have a legal duty to ensure that drinking water installations, services and any bottled water within premises under their control are safe (fit for purpose and kept in good order) before a tenancy begins and throughout its duration.

The legislation relating to Domestic Potable Water Supplies and the risk of Legionella Disease in water systems is listed below. See Appendix A for an Overview of Legislation.

- The Housing (Scotland) Act 2006.
- The Building (Scotland) Regulations 2004.
- The Water Supply (Water Fittings) (Scotland) Byelaws 2014.
- The Water Supply (Water Quality) (Scotland) Regulations 2001.
- The Private Water Supply (Scotland) 2006.
- The Control of Substances Hazardous to Health Regulations 2002, as amended.
- 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).

- HSG Health and Safety in Residential Care Homes (2001).
- British Standards 8580:2010 – Water Quality: Risk Assessment for Legionella.
- Public Health etc. (Scotland) Act 2008.

3. Landlord Duties – Water Fittings, Inspection and Works

The Landlord's aim is to ensure that tenants have a safe and secure environment to live in, Domestic Water Supply and Sanitation safety is one consideration. There are a number of detailed requirements set out in the Water Supply (Water Fittings) (Scotland) Byelaws 2014. These requirements relate to water fittings and systems, their installation and use.

3.1 Water Fittings

The Water Supply (Water Fittings) (Scotland) Byelaws 2014 require that all water fittings and services are maintained in a safe condition and in working order. Water fittings **must not** contaminate the water supply. The byelaw requires that all water fittings must be of an appropriate quality and standard and be suitable in the circumstances in which they are used. This means they must bear an appropriate CE marking or comply with another appropriate standard e.g. British Standard.

3.2 Approved Contractors – Plumbing Works

An Approved Contractor is a type of competent person defined in the Water Supply (Water Fittings) Regulations and Scottish Water Byelaws. These are more formally known as Approved Contractor Persons. Including The Water Industry Approved Plumbers' Scheme (WIAPS). There are seven Approved Contractor Persons' Schemes operating across the UK and for ease of recognition for consumers, they are often referred to as Approved Plumbers. All seven UK schemes are essentially the same, as they have the same entrance criteria and are recognised by all of the UK water suppliers.

Details of local approved contractors for plumbing works can be found by contacting Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF) Water Regulation Approved Contractors Scheme.

[Water Safe](#) is an online register and search facility of approved plumbing contractors working in the UK. Its purpose is to help customers find a competent and qualified plumber. Qualified plumbers help to keep water supplies safe by ensuring plumbing systems inside customers' properties are installed correctly and comply with the Water Supply Water Fittings Regulations and Byelaws

3.3 Certification of Plumbing Works and Conformity of Water Supply Fittings

Where a water fitting is installed or connected or disconnected by an approved contractor the contractor must, on completion of the work, **furnish a signed certificate stating whether the water fitting complies with the requirements of the regulations (byelaws).**

Where the prior consent of the water undertaker (Scottish Water) is required, the certificate must be sent to the water undertaker. For the purposes of the regulation, a contractor is a person approved by the water undertaker (Scottish Water) or certified as an approved contractor by a recognised Organisation.

4. Legionnaires Disease

“Landlords who provide residential accommodation have a legal duty to ensure that the risk of exposure of tenants to legionella is **properly assessed and controlled.**”

All man-made hot and cold water systems are likely to provide an environment where Legionella can grow. Where conditions are favourable (i.e. suitable growth temperature range; water droplets (aerosols) produced and dispersed; water stored and/or recirculated; some 'food' for the organism to grow such as rust, sludge, scale, biofilm etc.) then the bacteria may multiply, thus increasing the risk of exposure. It is a simple fact that the organism will colonise both large and small systems, so both require risks to be managed effectively.

The law is clear, that if you are a landlord and rent out your property (or even a room within your own home) then you have a legal responsibility to ensure the health and safety of your tenant, by keeping the property safe and free from health hazards.

4.1 Legionella Risk in Domestic Hot and Cold Water Systems

The Legionella risk in domestic hot and cold water systems is associated with:

- The storage of water anywhere in the water system (storage tanks and Calorifiers).
- The water temperature in the water system being in the range of 20-45⁰C which favours the growth of legionella bacteria.
- A source of nutrients such as rust, sludge, scale and organic matter.
- Little used outlets, parts of the system which are used infrequently, such as guest bathrooms, garden taps, or redundant sections of pipework.
- The system being unused for more than a week (e.g. void property or tenant's holiday).
- Appliances which produce and disperse water droplets and aerosols e.g. showers.
- The health of the tenant/visitor, (people more susceptible to infection due to age, illness or a weakened immune system).

4.2 Landlord Duties

Housing Associations/Landlords are the Duty Holders and have a duty to carry out risk assessments and manage the water systems in their properties:-

The Duty Holders must:-

- Arrange for a suitable and sufficient risk assessment to be carried out, thereby identifying and assessing the sources of risk. Landlords can assess the risk themselves if they are competent and, in this case, do not need to be professionally trained or accredited. However, most Housing Associations arrange for an accredited company with trained personnel to conduct these assessments. The ultimate responsibility remains with the Housing Association/Landlord.
- Prepare a scheme (or course of action) for preventing or controlling the risk and to achieve this, a person with managerial responsibility appoint as the 'responsible person'. This person is responsible for managing the scheme, its implementation and the day to day Organisation on behalf of the Association.
- Ensure that all employees involved in work that could expose them or others to legionella are given suitable and sufficient information, instruction and training.

4.3 Responsible Person's Duties

The Responsible Person is responsible for the day to day administration and all Organisational aspects of the scheme to control legionella bacteria in water systems.

The Responsible Person's Duties Include:

- Ensuring that all Housing Association properties are risk assessed to comply with the requirements of HSE L8, *Legionnaires' disease – The Control of Legionella Bacteria in Water Systems*.
- Ensuring a suitable operations manual is prepared for each water system (Log Book).
- Ensuring that all recommendations detailed in the risk assessment are carried out, with remedial action being recorded in the Log Book.
- Ensuring that all inspections, cleaning and temperature checks are conducted to comply with Table 2.1 of HSG274 Part 2, *Legionnaires' disease – The Control of Legionella Bacteria in hot and cold water systems*. All inspections, temperature checks, cleaning and flushing regimes should be recorded in the Log Book.
- Ensuring that when temperature checks are undertaken, the thermometer used has been calibrated and the calibration certificates are in date and available for inspection. For most domestic hot and cold water systems, checking temperature is the most reliable way of ensuring the risk of exposure to Legionella bacteria is minimised. Cold water must be stored and delivered at a temperature of 20°C within two minutes of running, hot water output from outlets must reach a temperature of 50°C within one minute of running.
- Ensuring that Organisations such as water treatment companies, maintenance contractors, consultants and in-house tradesmen are competent and suitably trained and have the resources (tools, equipment and hardware) to undertake their duties in a safe and adequate manner.

- Relevant documentation such as Job Method Statements, Safe Systems of Work, Work Permits, Job Risk Assessments and COSHH Assessment are provided and placed on record.
- Ensuring that there are designated persons to carry out all maintenance operations, inspections, checks and remedial actions.
- Ensuring that responsibilities and effective lines of communication are properly established and clearly laid down for individuals and Organisations who carry out work on the water system, whether or not they are under the control of the Organisation.
Note: It is not practical or logistically possible to flush little used outlets or clean shower heads in all tenant's properties. Therefore, tenants should be informed in writing as to what action to take so that they can undertake these activities safely. A copy of the circulars/letters sent to tenants should be retained on file for review purposes.
- Ensuring that records are maintained as specified under the HSE L8, *Legionnaires' disease – The Control of Legionella Bacteria in Water Systems*. Records should be retained throughout the current period and for at least two years afterwards. Records detailing monitoring, inspections, tests, or checks carried out, should be kept for five years.
- Monitoring the effectiveness of the control measures in place and making decisions on the frequency and manner of monitoring. Ensuring that any deficiencies or limitations identified in the system are notified to the Duty Holder.
Note: A micro biological monitoring regime of the system or specific outlets may have to be conducted. The HSE states Legionella testing (or sampling) is generally not required for domestic hot and cold water systems and then only in exceptional circumstances, i.e. if the **risk assessment or temperature monitoring indicates there is a problem.**

4.4 Approved Contactors – Legionella Risk Assessment & Associated Works

The Legionella Risk Assessment must be carried out by a competent person, defined as an individual with the necessary skills, knowledge and experience to manage health and safety, domestic water risk and associated control measures.

If you decide to employ contractors to carry out your risk assessment or other work, it is still the responsibility of the competent person to ensure that the work is carried out to the required standards. Remember, before you employ a contractor, you should be satisfied that they can do the work you want, to the standard that you require.

There are a number of external schemes which detail the competence of external contractors:-

- Member of the Legionella Control Association, details on competence and standards www.legionellacontrol.org.uk

- Legionella management for responsible persons – IOSH Course. www.iosh.co.uk
- The Legionella Risk Assessment and disinfection Scheme run by the Association of Plumbing and Heating Contractors (APHC) and the Scottish and Northern Ireland Plumbing Employers Federation (SNIPEF). www.legionellacheck.org
email legionellacheck@snipef.org

Appendix B

Record Keeping

A Legionella Risk Logbook is designed to check that what has been done is effective and appropriate. On completion of the risk assessment, a site log book should be formulated and should contain the following:-

- Full site address.
- Details of the water assets and services under investigation.
- Name of site contact (Managerial).
- Name of risk assessor.
- Company name (if task outsourced).
- Name of responsible person.
- Date of assessment.
- Copy of risk assessment.
- Schematic drawing of water system (storage tanks, calorifiers and associated pipework).
- Temperature and observation logs,
- Details of operations (if applicable).
- Details of controls in place.
- Details of any disinfection conducted.
- Details of any plumbing works carried out on the system and by whom.
- Contact details telephone numbers, email etc.

Inspections Cleaning and Temperature Regime

The above requirements for the log book will be met by the following actions:

- Inspection of water storage tanks (Six monthly).
- Visual inspection of the hot water calorifiers (Annually).
- Visual checks of temperatures and settings of calorifiers (Monthly).
- Temperatures of hot and cold water outlets at Sentinel taps (Monthly).
- Legionella water samples taken if required***.
- Cleaning and disinfection of shower heads (Quarterly).
- Cleaning and Maintenance of TMVs (Annually or as recommended by the manufacturer).
- Flushing of infrequently used outlets (Weekly).
- Checking other outlets on a rotational basis over a 12 month period recording temperatures in a log book.
- Information from the register should be easily available to all interested parties.

Appendix C – Overview on Legislation

The Housing (Scotland) Act 2006

The Housing (Scotland) Act 2006 places a duty on Landlords and states that all installations in the property for the supply of **water**, gas, electricity, **sanitation**, space heating and heating of water are in a reasonable state of repair and in proper

working order, at the start of the tenancy and at all times during the tenancy. Any fixture, fitting and appliance provided by the landlord should be in a reasonable state of repair and in a proper working order.

The Building (Scotland) Regulations 2004

These regulations address the various aspects of building design and construction which include health and safety, energy conservation, welfare and convenience of disabled people. Guidance is provided in the Building (Scotland) technical handbooks for Domestic Buildings and Non Domestic Buildings.

The Building Regulations (Scotland) sets out the requirements where thermostatic mixing valves (TMVs) need to be installed, however, as with all fitting they will need to meet certain standards of construction and be made from materials which are suitable for use with wholesome water. The Landlord/representative must check the suitability of all TMVs prior to purchase under The Water Supply (Water Fittings) (Scotland) Byelaws 2014

The Water Supply (Water Fittings) (Scotland) Byelaws 2014

The Water Supply (Water Fittings) (Scotland) Byelaws 2014 are created and enforced by Scottish Water, these byelaws must be adhered to, in all properties that have a public water supply. The main aim of the Water Byelaws is to prevent contamination of the public water supply, and also to help to prevent waste, misuse, and undue consumption of water.

The Water Byelaws apply to **ALL** plumbing systems, water fittings and appliances connected to the public water supply in Scotland.

Landlords and tenants of premises, and anyone who installs or maintains plumbing systems and water fittings, have a legal obligation to ensure that the systems and fittings meet the requirements of the Water Byelaws. In addition, architects, developers, plumbers and builders need to ensure the requirements are met for any future owners or occupiers

Scottish Water is responsible for the water main in your street and all the pipework up to, and including the stopcock at the boundary of your property. The Housing Association/occupier will then normally have responsibility for any pipework from the stopcock into the property and all indoor and external plumbing.

Approved Fittings and Materials

All plumbing fittings and materials that are used must meet the requirements of the Water Byelaws and, therefore, must have relevant UK or EU approval. A list of approved fittings can be found in the 'Water Fittings and Materials Directory' published by the Water Regulations Advisory Scheme (WRAS). This directory can be viewed free of charge by visiting their website at www.wras.co.uk

It should be noted that not all plumbing fittings and materials on sale in the UK meet these requirements. It is important that Housing Association Responsible persons check their suitability prior to purchase. Remember, it is illegal to use fittings which do not have the relevant approvals.

Licensed plumbers and contractors

It is recommended that a licensed plumber/contractor is used. A licensed plumber will certify that his or her work meets the requirements of the Water Byelaws. **If any breaches are subsequently found in the certified work, the legal responsibility would fall upon the plumber and not on the landlord or occupier.**

Scottish Water advises the use of professional plumbers and plumbing contractors who are members of recognised national licensing schemes. There are a number of benefits in using members of such schemes.

These include:

- Their work is certified as complying with the Water Byelaws.
- Properly trained and qualified personnel are available.
- Members are audited/inspected on a regular basis.
- They hold public liability insurance (£2million).
- They must submit Financial Integrity Statements annually.

Should any dispute arise, 'Complaints Resolution Procedures' are in place (This applies to the SNIPEF (Scottish and Northern Ireland Plumbers Employers' Federation) scheme only).

These procedures are further enhanced by an Independent 'Complaints Panel'. Scottish Water supports and promotes the Water Safe scheme. Water Safe is a dedicated online search facility to help customers to find the nearest qualified plumbing and heating professionals in their area. Scottish and Northern Ireland Plumbing Employers' Federation (SNIPEF) runs the Plumbing Industry Licensing Scheme and this is part of Water Safe.

To find a licensed plumber in your area, visit www.watersafe.org.uk or call SNIPEF on 0845 224 0391 who will be able to recommend a plumber. Office opening hours are Monday – Thursday 8.30am to 5pm and Friday 8.30am to 4.30pm. For out of hours, please visit the website or refer to your telephone directory. Scottish Water also support the national Water Industry Approved Plumbers' Scheme (WIAPS). For full details of the scheme and how to obtain a list of registered plumbers in your area visit www.wras.co.uk/plumber_scheme.

Flexi-Pipe

Flexi-pipes can be used to connect the plumbing system to a tap as nothing within the Scottish Byelaws prevents these flexible pipe connectors from being used. However, Housing Association Responsible persons must check their suitability prior to purchase, to make sure that they are suitable for use with drinking water (some of the non-metallic material in certain imported flexi-pipes have material which can increase the risk of legionella and other bacterial growth

Backflow Protection

The Scottish Water Byelaws require that domestic water supplies are adequately protected from backflow. Backflow prevention devices must be fitted between domestic plumbing systems and the source of any potential contamination.

Water (Scotland) Act 1980

Under section 6 of the Water (Scotland) Act 1980 it shall be the duty of every Water Authority to provide a supply of wholesome water to every part of the limits of supply where a supply of water is required for domestic purposes and can be provided at reasonable cost. Likewise for non-domestic purposes, section 9 states that a Water Authority shall give a supply of water on reasonable terms and conditions for purposes other than domestic purposes to the owner or occupier of any premises within their limits of supply who requests them to give such a supply to those premises.

The Water Supply (Water Quality) (Scotland) Regulations 2014

The Drinking Water Directive sets the standards for drinking water quality. Currently the Water Supply (Water Quality) (Scotland) 2001 and The Water Quality (Scotland) Regulations 2010 regulations transpose this Directive.

The Private Water Supply (Scotland) 2006

Water quality in EU countries is governed by EC Directive 98/83/EC. The Directive is then translated into Scots law through The Water Supply (Water Quality) (Scotland) Regulations 2001 (for public water) and The Private Water Supply (Scotland) 2006 (for private water), as well as the overarching Water (Scotland) Act 1980. Under the 1980 Act, Scottish Water is required to provide a supply of wholesome water to domestic premises to be used for drinking, washing, cooking, central heating and washing facilities. As a result of these stringent legislative requirements, **all** water used for the above uses will be **wholesome and drinkable**.

Public Health etc. (Scotland) Act 2008

Section 21 of the Public Health etc. (Scotland) Act 2008 gives health boards and local authorities (competent persons) the power to enter any premises to carry out an investigation into a public health incident. Where premises are contaminated or there is reasonable grounds to suspect that the premises are contaminated (Contamination is defined being a biological, chemical or radioactive substance) Health Boards and local authority competent persons have the power to take samples of water in, on, or in the vicinity of the premises, serve a notice on the occupier or landlord of premises to take steps to decontaminate the premises by a specified date, take steps to prevent or prevent the spread of a contamination.

The Control of Substances Hazardous to Health Regulations 2002, as amended

COSHH) provides a framework of actions to control the risk from a range of hazardous substances, including biological agents (e.g. Legionella) – to identify and assess the risk,

and implement any necessary measures to control any risk. Since 2001, there has been a requirement for landlords of both domestic and business premises to assess the risks of exposure to their tenants from Legionella.

Legionnaires' disease the Control of Legionella Bacteria in Water Systems L8 -2013

The HSE L8 document is aimed at duty holders, including employers, those in control of premises and those with health and safety responsibilities for others, to help them comply with their legal duties in relation to legionella. These include identifying and assessing sources of risk, preparing a scheme to prevent or control risk, implementing, managing and monitoring precautions, keeping records of precautions and appointing a manager to be responsible for others.

Legionnaires' disease: Technical Guidance, HSG274, Part 1 The control of legionella bacteria in evaporative cooling systems

Legionnaires' disease: Technical Guidance, HSG274, Part 2 The control of legionella bacteria in hot and cold water systems

The HSG274 documents provide guidance for duty holders, which includes employers, those in control of premises and those with health and safety responsibilities for others, to help them comply with their legal duties. It gives practical guidance on how to assess and control the risks due to legionella bacteria.

APPENDIX D – Legionella Risk Rating Methodology

Rating System

Likelihood of Accident/Incident Occurring

1. Will not occur
2. Unlikely to occur
3. Likely to occur
4. Near certain to occur
5. Certain to occur

Severity of Consequences (legionellosis related illness)

1. Negligible symptoms
2. Minimum symptoms
3. Medical aid required
4. Hospital aid required
5. Death/Major incident (As defined in RIDDOR)

Risk Rating = Likelihood x Severity

L I K E L I H O O D		SEVERITY				
		5	4	3	2	1
E	5	25	20	15	10	5
L	4	20	16	12	8	4
I	3	15	12	9	6	3
H	2	10	8	6	4	2
O	1	5	4	3	2	1

Risk Rating Values can then be grouped into three broad classes:-

15-25: HIGH RISK

8-12: MODERATE RISK

1-6: LOW RISK

LEGIONELLA RISK (LEARNING DISABILITY UNITS)

Rating System

Likelihood of Accident/Incident Occurring

1. Will not occur
2. Unlikely to occur
3. Likely to occur
4. **Near certain to occur**
5. Certain to occur

Severity of Consequences (legionella related illness)

1. Negligible symptoms
2. Minimum symptoms
3. Medical aid required
4. Hospital aid required
5. **Death/Major incident (As defined in RIDDOR)**

Risk Rating = Likelihood x Severity

L I K E L I H O O D		SEVERITY				
		5	4	3	2	1
5	25	20	15	10	5	
4	20	16	12	8	4	
3	15	12	9	6	3	
2	10	8	6	4	2	
1	5	4	3	2	1	

Risk Rating Value: 20

15-25: HIGH RISK

8-12: MODERATE RISK

1-6: LOW RISK

Considerations

Health Protection Scotland's Report indicated that legionellosis was more common in older age groups and that fatality rates were highest in those aged over 80 years (50%) and the lowest in those under 50 years (no deaths). Hospitals and health care facilities retain the potential for being highly significant public health problems, more so because of the complex water systems they contain and due to the number of vulnerable people that tend to be either patients or residents of these facilities. Given these considerations a likelihood rate of 4 and a severity rate of 5 have been applied for the risk associated with the learning disability units i.e. **HIGH RISK**.

LEGIONELLA RISK (OFFICE ACCOMMODATION)

Rating System

Likelihood of Accident/Incident Occurring

1. Will not occur
2. Unlikely to occur
- 3. Likely to occur**
4. Near certain to occur
5. Certain to occur

Severity of Consequences (legionellosis related illness)

1. Negligible symptoms
2. Minimum symptoms
3. Medical aid required
- 4. Hospital aid required**
5. Death/Major incident (As defined in RIDDOR)

Risk Rating = Likelihood x Severity

L I K E L I H O O D		SEVERITY				
		5	4	3	2	1
E	5	25	20	15	10	5
L	4	20	16	12	8	4
I	3	15	12	9	6	3
H	2	10	8	6	4	2
O	1	5	4	3	2	1

Risk Rating Value: 12

15-25: HIGH RISK

8-12: MODERATE RISK

1-6: LOW RISK

Considerations

The Association office premises are located in High Street which accommodates all of the Associations' staff and the hot and cold water services comprise of a pressurised mains water supply system with combi boiler. Higher risk is however present due to the utilisation of air conditioning plant and the number of staff involved, although the risk associated with the average age of staff is less than that of the learning disability unit residents i.e. below the 50-80 and 80 plus higher risk age categories. Given these considerations a likelihood rate of 3 and a severity rate of 4 have been applied for the risk associated with the office accommodation i.e. **MODERATE RISK**.

LEGIONELLA RISK (DOMESTIC DWELLINGS)

Rating System

Likelihood of Accident/Incident Occurring

1. Will not occur
2. **Unlikely to occur**
3. Likely to occur
4. Near certain to occur
5. Certain to occur

Severity of Consequences (legionellosis related illness)

1. Negligible symptoms
2. Minimum symptoms
3. **Medical aid required**
4. Hospital aid required
5. Death/Major incident (As defined in RIDDOR)

Risk Rating = Likelihood x Severity

L I K E L I H O O D		SEVERITY				
		5	4	3	2	1
5	25	20	15	10	5	
4	20	16	12	8	4	
3	15	12	9	6	3	
2	10	8	6	4	2	
1	5	4	3	2	1	

Risk Rating Value: 6

15-25: HIGH RISK

8-12: MODERATE RISK

1-6: LOW RISK

Considerations

Health Protection Scotland's' statistics on cases of human legionellosis indicates an annual incidence rate of 8.2 per million population. Of the 42 cases reported in 2006 only 3 resulted in fatality. None of these had confirmed links to domestic premises. This would suggest that although there is always a risk of an incident occurring, it is less likely to occur in domestic premises. Although the generally high throughput and relatively low volume of water held in smaller water systems reduces the likelihood of bacteria reaching dangerous concentrations, you must still carry out a risk assessment to identify and assess potential sources of exposure". Given these circumstances a likelihood rate of 2 and a severity rate of 3 have been applied for the risk associated with domestic properties i.e. **LOW RISK**