

1.0 Introduction

- 1.1 Legionnaires' disease is a potentially fatal pneumonia caused by legionella bacteria. It is the most well-known and serious form of a group of diseases knows as legionellosis. Other similar (but usually less serious) conditions include Pontiac fever and Lochgoilhead fever. Infection is caused by breathing in small droplets of water contaminated by the bacteria. The disease cannot be passed from one person to another
- 1.3 Everyone is potentially susceptible to infection but some people are at higher risk, e.g. those over 45 years of age, smokers, heavy drinkers, those suffering from chronic respiratory or kidney disease and people whose immune system is impaired.
- 1.4 The bacterium *Legionella pneumophila* and related bacteria are common in natural water sources such as rivers, lakes and reservoirs, but usually in low numbers. Legionella bacteria are therefore widespread in the environment and may contaminate and grow in purpose-built water systems.
- 1.5 Water system design and operation, methods of routine control, treatment and monitoring of the water contained in these systems along with recommended cleaning and disinfection procedures must be considered if the risk is to be minimised as any water system that has the right environmental conditions could potentially be a source for legionella bacteria growth.
- 1.6 There is a reasonably foreseeable legionella risk in a water system if:
 - water is stored or re-circulated as part of the system,
 - the water temperature in all or some part of the system is between 20–45 °C,
 - there are sources of nutrients such as rust, sludge, scale and organic matters in the system,
 - the conditions are likely to encourage bacteria to multiply,
 - it is possible for water droplets to be produced and dispersed over a wide area, e.g. showers and aerosols from cooling towers; and
 - it is likely that any employee, resident, visitor etc who is more susceptible to infection due to age, illness, a weakened immune system etc. could be exposed to any contaminated water droplets.
- 1.7 High temperatures of 60°C and over will kill the bacteria

2.0 Controlling the Risks and Legal Implications

- 2.1 It is the responsibility of Lowestoft Town Council (LTC) to ensure adequate risk assessments of all its water systems are conducted with details of all the arrangements required to ensure the safe management of the water systems.
- 2.2 LTC has a duty to ensure people involved with the control of the water systems are adequately trained, qualified and experienced to fulfil their duties in executing the risk management programme.
- 2.3 The following approved code of practice and legislation is applicable to the management and control of legionella:
 - Approved Code of Practice Legionnaires disease: The Control of legionella bacteria in water systems (L8)



- Health and Safety at Work etc Act 1974
- Management of Health and Safety at Work Regulations 1999 (as amended)
- Control of Substances Hazardous to Health Regulations 2002 (as amended)
- The Notification of Cooling Towers and Evaporative Condensers Regulations 1992

In addition there are guidance documents produced by the HSE to help in the management of water systems.

- 2.4 Failure to comply with these laws is a criminal offence that could result in unlimited fines for LTC (e.g. Section 3 HSWA) and possibly fines and imprisonment for individuals found to be individually culpable (e.g. Section 7 HSWA).
- 2.5 It is important to note that a 'latent disease' such as legionellosis is uninsurable and cannot be offset against Employers or Public Liability Insurance. Any civil claim would have to be met directly from LTC funds.

3.0 Scope of Policy

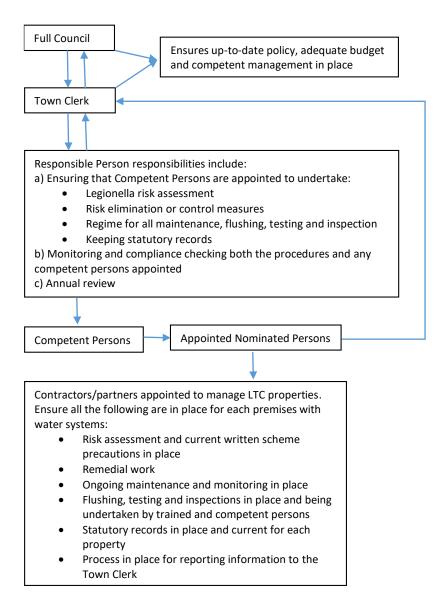
- 3.1 LTC accepts that under law it is the employer and in accordance with the Approved Code of Practice "Legionnaires' Disease: the Control of Legionella Bacteria in Water Systems" acknowledges that it is the Duty Holder with responsibility to protect its employees and others from the risk of legionellosis.
- 3.2 LTC will take all reasonably practicable steps to prevent exposure to harmful levels of the Legionella pneumophilia bacteria. To achieve this, LTC, through its managerial organisation, will allocate specific roles and functions to designated employees and to appropriate specialist organisations to manage and control the risk.
- 3.3 To comply with its legal duties LTC will control the risks by
 - Identifying and evaluating the potential sources of risk in all assets where water is present for which LTC has a responsibility;
 - b) Developing a written scheme for preventing or controlling the risks within those premises or sites:
 - c) Implementing, managing and monitoring precautionary measures;
 - d) Appointing someone to be managerially responsible and competent persons to carry out the routine inspections, tests, etc;
 - e) Maintaining records of the precautions and;
 - f) Check the effectiveness of the work that has been done.
- 3.4 The means by which the risk from exposure to the bacteria is to be controlled will be a joint function between LTC, any relevant partners and appointed external expertise and will be formulated upon completion of individual premises risk assessments and resultant written schemes for each site. LTC has appointed Northumbrian Water Ltd (member of the Legionella Control Association) to deliver its competent person arrangements including:
 - Full legionella risk assessments of hot and cold water systems and produce tailored logbook in accordance with L8 ACOP for LTC sites; and
 - Periodic monitoring, reporting, servicing and maintenance as identified in the risk assessments.



3.5 For properties that have leased arrangements the responsibilities will be clearly defined in the lease arrangements.

4.0 Roles and Responsibilities

4.1 To comply with legislation a clear management structure has been established, see the diagram below and Appendix 1. The full details of accountability and responsibility for managing the risks are given below the diagram:





a) Duty Holder - Town Clerk

Legal accountability for compliance with legislative requirements rests with LTC. LTC must ensure that adequate funding and systems are in place to enable all reasonably practicable steps to be taken to protect employees and other persons likely to be affected from exposure to legionella bacteria in water systems for which LTC is responsible. The Town Clerk advises LTC and puts in place measures to ensure LTC fulfils its obligations as 'Duty Holder', as defined in "Legionnaires Disease: the Control of Legionella Bacteria in Water Systems" (L8).

b) The Responsible Person(s)

The Town Clerk is the Responsible Person as defined by "Legionnaires Disease: the Control of Legionella Bacteria in Water Systems" (L8) and has the direct responsibility for ensuring the implementation of this policy within all properties under LTC ownership. This includes appointment of specialist contractors and liaison with landlords, tenants and leaseholders (where LTC retains responsibility for some or all of the property and/or its maintenance), and for allocating adequate funding for maintenance and improvement works. The scope of works to be ensured includes:

- All premises with water systems are identified and assessed for risks of legionellosis
- Where there is a reasonably foreseeable risk of legionellosis that steps are taken to mitigate
 this risk so far as is reasonably practicable, with consideration given to redesign or modify, and
 where the risks cannot be eliminated, for putting in place a written scheme for controlling the
 risks to minimise the risk of any exposure
- Risk assessments, control measures and operational procedures are being carried out in a timely and effective manner and all activities recorded in each logbook
- All maintenance, remedial, flushing, testing and inspection work required is carried out by competent trained persons to ensure compliance with legislation
- Any appointed Competent Person has the competence, experience knowledge and training required to undertake the work safely and in line with the situation and nature of the risks involved.
- Appropriate statutory records are maintained for each premises

The extent of these checks will be dependent upon the type of monitoring required and the competency of the staff to undertake this work. LTC has appointed Northumbrian Water Ltd owing to its high level of credibility in water monitoring and management.

In the event of a suspected or confirmed case of legionnaire's disease the Responsible Person will take control, see **Appendix 3**

Note: Where the Competent Person(s) does not have management responsibility and has issues with the required work to be conducted or who is responsible for undertaking the task, the Responsible Person will be the one to make the decision and to ensure the requirements are carried out.

c) The Competent Person(s)



The Competent Persons are those managers or contractors/partners appointed (see Appendix 1) to manage water and control legionella. LTC has appointed Northumbrian Water Ltd to ensure that:

- All remedial and maintenance work, including legionella risk assessments and specialist monitoring services are delivered as commissioned through the Responsible Person.
- All premises with water systems are assessed for risks of legionellosis.
- The use of systems that give rise to a foreseeable risk of legionellosis is avoided or, where this
 is not reasonably practicable, a written scheme for minimising the risk from exposure is
 prepared.
- The scheme of precautions including the appointed Nominated Persons responsibility for the maintenance of relevant plant, equipment and systems and to provide supervision is implemented and managed.
- Appropriate statutory and evidential records are maintained for each of the relevant premises.
- Appropriate monitoring systems are in place and implemented to ensure that the risks are being effectively managed.
- The results of any assessments, monitoring and maintenance work undertaken on behalf of the appropriate Responsible Person be recorded and reported to the Responsible Person as part of the compliance checks.

It may be necessary for the Competent Person to nominate one or more deputies as Nominated Persons with whom they can liaise to ensure the obligations under "Legionnaires Disease: the Control of Legionella Bacteria in Water Systems" (L8) are implemented.

All managers or occupiers of LTC owned/leased premises have a duty to co-operate with both the Responsible Person and Competent Person to ensure the duties placed upon the Duty Holder to control the risk of legionella can be fulfilled.

Where required, managers or occupiers of premises will be expected to undertake an implemented local scheme by the appropriate Competent Person, whereby a number of specified precautionary actions in accordance with the written scheme and "Legionnaires Disease: the Control of Legionella Bacteria in Water Systems" (L8) recommendations will be carried out and to undertake the monitoring functions required to be implemented on behalf of the Responsible Person/Duty Holder. The Competent Person or another appropriate specialist provider will provide full training for this work.

Note: Where the Competent Person does not have management responsibility for the Nominated Person and there are issues with the required work to be conducted or who is responsible for undertaking the task, the Competent Person will report the issue(s) to the Responsible Person who will agree the way forward.

d) The Nominated Person(s)

The Nominated Person(s) are the person(s) nominated by the appropriate Competent Person or Responsible Person, (see Appendix 1), to implement the scheme, undertake repairs or replacements and undertake the on-site monitoring tasks as outlined in the written scheme, e.g. regular temperature checks and flushing of infrequently used outlets.

These roles involve:



- Undertaking required repairs or replacement as required by the Competent Person following the risk assessments or other defects found
- Keeping the Competent Person aware of any issues with the water systems
- Assisting the Competent Person with the implementation of the written scheme through regular monitoring and supervision of everyone involved in related operational procedures and
- Maintaining the appropriate records either on site or by returning the information to the Competent Person for records held on a database.

5.0 Assessing the Risk

- 5.1 The specific requirements of the risk assessment can be found in the HSE publication, "Legionnaires' disease: the Control of Legionella Bacteria in Water Systems" (L8).
- 5.2 Before any formal management system for water systems can be implemented, a risk assessment has to be carried out to decide the possible risks. The purpose of the assessment is to enable a decision to decide:
 - The risk to health, i.e. whether the potential for harm to health from exposure is reasonably foreseeable unless adequate precautionary measures are taken; and
 - The necessary measures to prevent, or adequately control, the risk from exposure to legionella pneumophilia bacteria.
- 5.3 The risk assessment also enables the Duty Holder to show that all pertinent factors, and the steps needed to prevent or control the risk, have been considered.
- 5.4 The extent of specialist knowledge and expertise required to carry out this initial assessment may be outside the capability and expertise of the Responsible Person or Competent Person so this function may be undertaken by an external organisation either directly or through the Competent Person. The Responsible Person must ensure that the external organisation has the requisite knowledge, expertise and competency to undertake this work in accordance with the Approved Code of Practice (L8). LTC has appointed Northumbrian Water as the Competent Person and to appoint Nominated Persons.
- 5.5 The risk assessment will identify the action plan of maintenance work required; the written scheme; the monitoring programme; and the logbook requirements.
- 5.6 The risk assessment will be reviewed and updated every 2 years unless otherwise identified in the risk assessment, and whenever there is a reason to suspect that it is no longer valid either by the Competent Person or the Responsible Person.

6.0 Written Scheme



- 6.1 Where the risk assessment shows that there is a reasonably foreseeable risk, steps should be taken to mitigate this risk wherever possible. When all the risks cannot be totally avoided there must be a written scheme for controlling the risk.
- 6.2 The Responsible Person is to arrange for and implement remedial works and, including via Competent Persons, oversee the implementation and monitoring of the control measures in strict compliance with maintenance programmes and timescales stipulated in the written scheme.
- 6.3 Items to be included in the written scheme are shown at **Appendix 2.**

7.0 Training and Qualifications

- 7.1 It is a function of the Responsible Person to ensure that those who are appointed to carry out any form of control measure, whether or not internal employees or external organisations, are suitably trained and able to perform the functions within respective areas of responsibility.
- 7.2 LTC has appointed Northumbrian Water Ltd. However, in the event that internal employees are Nominated Persons, at least two people shall be trained so that if one trained employee falls ill or leaves LTC, there is another trained Nominated Person to ensure that the line of communication is unbroken. It is for the Responsible Person to ensure suitable training is arranged, in conjunction with the appropriate managers and contractors. Training should ensure employees are trained to an adequate standard of basic awareness relating to water quality and Legionnaires disease to enable them to undertake their specific functions.
- 7.3 The Responsible Person must ensure that reasonable enquiries are made to ensure that external organisation's employees are competent and suitably trained and have the necessary equipment to carry out their duties within the written scheme in a safe and adequate manner.

8.0 Monitoring Regime

- 8.1 The written scheme will identify specific monitoring and maintenance regimes that will need to be formulated and carried out on a localised basis. Premises shall be monitored to ensure this regime is being implemented and all results from the monitoring shall be inserted into the site logbook.
- 8.2 Trained personnel shall conduct the recommended monitoring regimes and water sampling and an approved contractor/Competent Person shall do the tasks requiring engineering skills.

9.0 Premises Logbook

- 9.1 On completion of the risk assessment, a bespoke logbook (either hard copy or an on-line copy) shall be formatted by the external contractor and delivered to the appropriate Responsible Person, who shall validate the monitoring regime and in conjunction with the Competent Persons put in place arrangements for implementation. For LTC, the risk assessments, monitoring and records are conducted by Northumbrian Water Ltd and delivered and agreed with the Responsible Person.
- 9.2 The logbook shall contain
 - Full site address
 - Name of site contact (managerial)
 - Name of risk assessor and the company name
 - Name of Responsible Person , Competent Person and Nominated Person



- Date of assessment
- Schematic drawing of water system, i.e. storage tanks and associated pipe work
- Detail of operation, relevant to the controlling the risk
- Controls to be implemented, complete with schedule
- 9.3 Chlorination and Legionella test certificates shall be inserted into the premises' logbook within 28 days of the test being taken and copied to the appropriate Responsible Person (see Appendix 1.) A copy of the Risk Assessment shall be retained by the Competent Persons as detailed above and a copy kept on each site, or available electronically where possible.

10.0 Disinfection

- 10.1 Water services shall be disinfected in accordance with BS6700 or other industry standards for any of the following reasons:
 - New installations before being taken into use to remove contamination which may have occurred during construction or installation
 - If a routine inspection shows it necessary
 - 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 legionellosis or any other water borne infection/disease.
- 10.2 If this task cannot be carried out in-house, an external contractor will be appointed.

11.0 Auditing

- 11.1 It is essential that each Responsible Person ensures that there are arrangements in place to review and monitor the work of the Competent Person and that the management of all logbooks, written schemes and risk assessments are being carried out and kept up to date as appropriate, and that the Duty Holder is kept aware of how the management of legionella is progressing.
- 11.2 After all Risk Assessments have been completed and the monitoring programme is established, the record shall be continually updated in accordance with the programme for the individual site and all documentation shall be kept in an accessible location for auditing. The Risk Assessments and Logbooks will be reviewed at least annually by the Competent Person and Responsible Person.

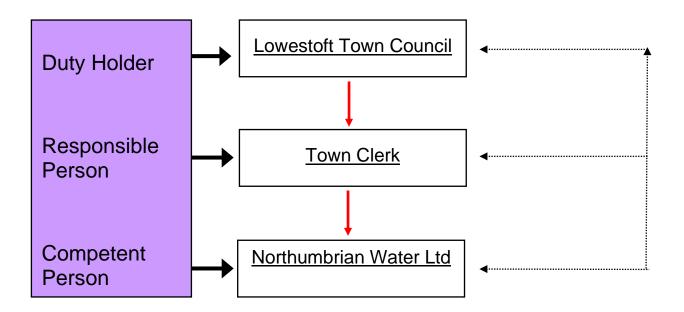
12.0 Action in the Event of a Supected or Confirmed Case of Legionnaire's Disease

12.1 If an outbreak is suspected or occurs that may be attributed to the water system within a building, or where urgent action is required following routine inspections (e.g. high bacterial counts) the action to be taken is shown at **Appendix 3**.



APPENDIX 1 – MANAGEMENT STRUCTURE

Legionella Risk Management Organisation Responsibility Role



Key:





APPENDIX 2 - WRITTEN SCHEME AND WHAT TO INCLUDE

Items to be included in the written scheme are as follows:

- a) Premises Details, including full address and use of premises
- b) Name and role of those responsible for managing the site for water risks
- c) Current Risk Assessment
 - Details of the water distribution, outlets, assets and their risk rating
 - · Remedial actions required and the priority to remove the risk
 - Control scheme and monitoring schedule
 - Results of any samples
- d) Plan of water system layout (a schematic plan is enough), which should contain:
 - The latest up-to-date copy and parts which are temporarily out of use
 - A description of the safe and correction operation of the system
 - Precautions to be taken
 - What to do if the scheme if found to be deficient

e) Details on:

- The acceptable ranges for hot and cold water systems
- Chemical treatment programme (including manufacturer's data on effectiveness, the concentrations and contact time required for the substance used)
- Information on storage, handling, use and disposal of the chemical in use
- System control parameters (plus allowable tolerances), physical, chemical and biological parameters, and measurement methods and sampling location, test frequencies and procedures for maintaining consistency
- What to do in case the control limits are exceeded, including the channels of communications
- Procedures for cleaning and disinfection
- f) The correct operation of the water-system plant should be described so that faults are easier to identify:
 - Procedures for commissioning and re-commissioning
 - Procedures for shutdown
 - Checks for warning systems and diagnostic systems in case of system malfunction
 - Maintenance requirements and frequencies



APPENDIX 3 – ACTION IN THE EVENT OF A SUSPECTED OR CONFIRMED CASE OF LEGIONNAIRE'S DISEASE

Action in the event of a suspected or confirmed case of Legionnaire's disease.

If an outbreak is suspected that may be attributed to the water system within a building, or where urgent action is required following routine inspections, the following course of action must be taken:

Reporting Procedure

It is necessary to put the following reporting procedure into operation and it shall be followed.

- a) In the event of a legionella-positive water sample or TVC (total viable counts) exceeding the action limit or
- b) Anything untoward being found during a risk assessment

this must be notified to: -

- The appropriate Responsible Person (see Appendix 1)
- The appropriate Competent Person (see Appendix 1)

In the event of the Responsible Person or the Competent Person not being available, the message shall be relayed to the local Environmental Health Officer.

The message shall state: -

- a) Water sample positive or nature of defect that requires action
- b) Address of premises concerned
- c) Location of water sample taken
- d) Sero-group of organism isolated
- e) Bacteria count.

When the issue is identified to the appropriate Responsible Person they will engage external expertise to enable all necessary actions required to control the situation in accordance with L8 recommendations:

Where an 'outbreak' (two or more confirmed cases as per Government and HSE guidance), the 'Proper Officer' (appointed by the local authority under public health legislation and a Consultant in Communicable Disease Control) in conjunction with HSE may take actions which might include:

- To shut down any processes capable of generating and disseminating airborne water droplets and keep shut down until sampling procedures and remedial cleaning or other work has been conducted and final clearance is given to restart the system.
- To take water samples before any emergency disinfection takes place.
- To seek employee health records
- Requiring LTC to fully co-operate in subsequent investigation of any plant, including;
 - tracing of all pipe work runs
 - detailed scrutiny of all operational records
 - statements from plant operatives and managers' statements from water treatment contractors/consultants.



Any infringement of legislation may be subject to formal investigation by the HSE.

The appropriate Responsible Person in conjunction with the Competent Person will:

- Monitor that the appropriate action is being taken
- Determine whether further advice/assistance is needed
- Determine whether the incident is reportable to **HSE** and if so ensure that this is done
- Maintain a record of events and carry out an investigation into the cause.

Revisions	
Date	Amendment
January 2022	10.1 added other industry standards, removed reference to Chief Executive and no longer relevant job titles. Amended flow chart.