

SCOTTISH VETERANS RESIDENCES

**LEGIONELLA RISK MANAGEMENT
PLAN**

October 2019

Scottish Veterans Residences

Legionella Risk Management Plan

Approved by:

Chief Executive

Signed:

Date:

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1. Introduction

- 1.1 Legionnaire's disease is a potentially fatal form of pneumonia. The bacteria reproduce to high numbers in warm, stagnant water (between 20°C and 46°C). Humidifiers, plumbing systems and hot water tanks, air washers, spa baths, pools, water softeners, showers, car washes, fire and sprinkler systems, air conditioning systems, cooling towers and many other systems using water and operating at temperatures in excess of 20°C can generate an aerosol presenting a Legionella risk. High temperatures of 60°C and over will kill the bacteria. Low temperatures of 20°C and below will cause the bacteria to become dormant.
- 1.2 Water system design and operation, methods of routine control, treatment and monitoring of the water contained in these systems and recommended cleaning and disinfection procedures must be considered if the risk is to be minimised.

2 Legal Implications

- 2.1 It is the responsibility of the Responsible Person to ensure an adequate Risk Assessment is carried out with details held on file.
- 2.2 Additionally the Responsible Person has a duty to ensure people involved with the control of Legionella in the premises are adequately trained, qualified and experienced to fulfil their duties in executing the risk management programme.
- 2.3 The following legislation is applicable to the management and control of Legionella;
 - Health and Safety at Work etc Act 1974
 - Management of Health and Safety at Work Regulations 1999
 - Control of Substances Hazardous to Health Regulations 2002
 - The Notification of Cooling Towers and Evaporative Condensers Regulations 1992
 - Approved code of Practice L8 –The control of Legionella bacteria in water systems
 - HSG 274 and HSG 282
- 2.4 Failure to comply with these laws is a criminal offence that could result in unlimited fines for the SVR (e.g. Section 3 HSWA) and possibly fines and imprisonment for individuals found to be individually culpable (e.g. Section 7 HSWA).

2.5 The following approved code of practice and guidance has been issued to assist in compliance with the law:

- L8 The Control of Legionella Bacteria in Water Systems - Approved Code of Practice and Guidance :2013 (V4) ISBN 0717617726.

3 Statement of Intent Regarding Water Hygiene & the Control of Legionella Bacteria in Water Systems.

3.1 SVR 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 has responsibility to protect its employees and others from the risk of Legionellosis.

3.2 SVR will take all reasonably practicable steps to prevent exposure to harmful levels of the Legionella bacteria. To achieve this, SVR, through its managerial organisation, will allocate specific roles and functions to designated employees to manage and control the risk.

3.3 Controlling the risk is to be achieved in two stages.

Firstly;

- a) Identification and evaluation of potential sources of risk in the premises;
- b) Development of a written scheme for preventing or controlling the risks within the premises.

Secondly;

- a) Implementation, managing and monitoring precautionary measures.
- b) Maintaining records of the precautions.

3.4 The means by which the risk from exposure to the bacteria is to be controlled will be a joint function of external expertise and in-house management and will be formulated upon completion of risk assessments and resultant written schemes.

4 Responsibility for Implementing SVR Policy

4.1 Accountability and responsibility for managing the risks is as follows:

a) **Duty Holder**

Legal accountability for compliance with legislative requirements rests with the Duty Holder. However, responsibility for establishing a health and safety framework for the management of Legionella risks on behalf of the SVR sits at Management Team level and as such recognises the importance that is given to the management of the SVR. assets from a health and safety as well as a commercial perspective. The 'Duty Holder' as defined in "*Legionnaires Disease: the Control of Legionella Bacteria in Water Systems*" (L8) will therefore advise the Management team on the way of delivering and ensuring the duties are met, through the framework detailed in **Appendix 1**.

b) **Strategic Management**

The Duty Holder can be viewed as 'owning' the premise, on behalf of the SVR and takes on the role for managing the premises.

The Health and Safety Adviser (Property Services Manager) has the responsibility of establishing a health and safety framework for all SVR matters. Corporate responsibility for ensuring that the duties relating to Legionella are met will be overseen by the Health and Safety Adviser (Property Services Manager).

c) **Property Service Manager**

The Property Service Manager is responsible for determining the use of the premises including liaison with the occupants and allocating funding for maintenance and improvement works. The Property Service Manager is also responsible for ensuring that monitoring obligations under the health and safety framework are met, and in respect of any issues relating to the maintenance of the buildings / properties that this is done through the 'Responsible Person' see Appendix 1

Monitoring and compliance checks will ensure this is happening with the 'Responsible Person' (see Appendix 1) undertaking the required programme of assessments and maintenance work as required on behalf of and in conjunction with the Property Service

Manager. The Property Service Manager will also have a monitoring role where 'appointed persons' responsible for the day-to-day management of the premises will be responsible for undertaking a range of monitoring activities that will need to be recorded within a logbook.

The extent of this will be dependent upon the type of monitoring required and the competency of the staff to undertake this work. In some cases this may be undertaken by 'appointed persons', in others it may need to be undertaken by the appropriate 'Responsible Person' (see Appendix 1) or a contractor on behalf of the Property Service Manager. This will only be done through the appropriate 'Responsible Person' (see Appendix 1) with the Property Service Manager funding the work.

d) The 'Responsible Person(s)'

The 'Responsible Person' as defined in Approved Code of Practice (L8) shall assume overall managerial responsibility for the premises to ensure that:

- All Legionella risk assessments and specialist water treatment and monitoring services shall only be commissioned through the Responsible Person.
- Premises are assessed for risks of Legionellosis. Where expertise is not available internally the Responsible Person will appoint suitably qualified and competent external expertise to undertake this function.
- 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 appointment of 'Appointed Person(s)' to take 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 the 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 will be recorded.

e) The 'Appointed Person(s)'

The 'Appointed Person' is the person(s) nominated by the 'Responsible Person' see Appendix 1, to carry out and/or organise the completion of routine tasks. The tasks include:

- Temperature Checks of Hot and Cold Water Systems
- Flushing of Calorifiers
- Flushing of Infrequently Used Outlets
- Cleaning of Shower Heads

and any other routine Legionella prevention tasks as directed by the responsible person. The Appointed Person will use in house and, if necessary, external resources to assist in the completion of these tasks. All tasks will be carried out in accordance with the instructions provided by the Responsible Person. The Appointed Person is to seek clarification from the Responsible Person whenever there is uncertainty on the task or procedures to be followed.

5 Assessing 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:

- a) the risk to health, i.e. whether the potential for harm to health from exposure is reasonably foreseeable unless adequate precautionary measures are taken;
- b) the necessary measures to prevent, or adequately control, the risk from exposure to Legionella 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 is outside the capability and expertise of the Duty Holder, therefore the Responsible Person will arrange for this function to be undertaken by an external organisation. The Responsible person will ensure the external organisation has the requisite knowledge, expertise and competency in accordance with the Approved Code of Practice (L8).
- 5.5 The risk assessment will identify the action plan of maintenance work required; the written scheme; the monitoring programme and logbook requirements.

6 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 via, Appointed 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 Training & 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 So far as internal employees are concerned, at least two people within the premises shall be trained so that if one trained employee falls ill or leaves, there is another appointed, trained person to ensure that the line of communication is unbroken. It is for the Responsible Person to ensure suitable training, in conjunction with the premises manager, is arranged. 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 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. The premises shall be monitored to ensure this regime is being implemented and all results from the monitoring shall be inserted into the site logbook/online database.
- 8.2 Premises shall have competent personnel to carry out the recommended monitoring regimes in-house although some water sampling and tasks requiring engineering skills shall be done by an approved contractor/competent person.

9 Premises Logbook

- 9.1 On completion of the risk assessment, a logbook shall be delivered to the appropriate Responsible Person, who shall validate the monitoring regime and in conjunction with the Appointed Persons put in place arrangements for implementation.
- 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 for the SVR
 - 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 logbook within 28 days of the test being taken and copied to the Health & Safety Adviser (Property Services Manager). A copy of the Risk Assessment shall be given to the Nominated Person as detailed above.

10 Disinfection

10.1 Water services shall be disinfected in accordance with BSEN 806 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 Auditing

11.1 It is essential that each Responsible Person ensures that both the monthly auditing of all logbooks and the monitoring of all risk assessments is being carried out.

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 Assessment and Logbook will be reviewed on a two yearly cycle.

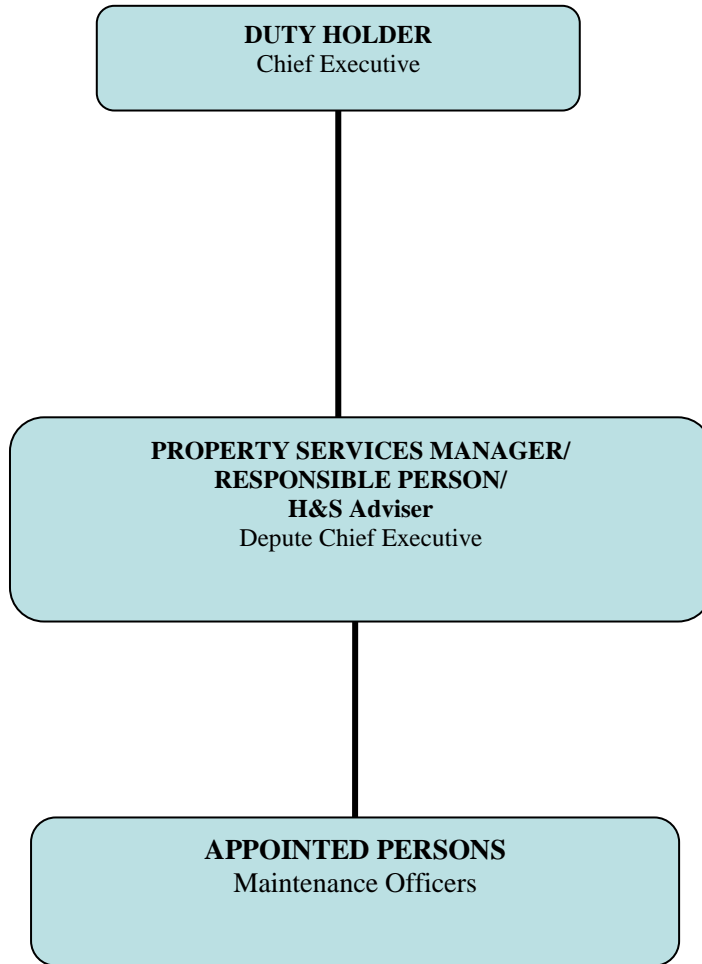
11.3 As part of the SVR compliance checks, an ongoing audit will be carried out by the Health and Safety Adviser (Property Services Manager) confirming that the required checks and monitoring systems within the premises are being carried out. This will not only provide assurance that SVR is complying with its statutory responsibilities, but will also demonstrate that the roles of the Responsible Person and Appointed Persons are being correctly and effectively undertaken.

12 Action in the Event of a Suspected or Confirmed Case of Legionnaire's Disease.

- 12.1 Details of the action to be taken if an outbreak is suspected or occurs, or where urgent action is required following routine inspections (e.g. high bacterial counts) is shown at **Appendix 3.**

Appendix 1

Legionella Risk Management Chart



Appendix 2

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

a) Plan of plant or 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
- Types and frequency of checks to be carried out to ensure the success of the scheme
- What to do if the scheme is found to be deficient

b) Details on how to use and/or carry out:

- The physical treatment programme (e.g. how to use temperature control 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

Appendix 3

Action to be taken in the event of a suspected, or confirmed, case of Legionnaire's disease.

If an outbreak is suspected or urgent action is required following routine inspections, the following course of action must be taken:

Reporting Procedure

The following reporting procedure will be into operation

- 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 must be notified to: -

1. The Responsible Person (see Appendix 1)
2. Health and Safety Adviser (Property Services Manager) (see Appendix 1)

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 he will engage external expertise to enable all necessary actions required to control the situation in accordance with L8 recommendations:

Note: An 'outbreak' is defined by the Health Protection Agency as two or more confirmed cases of Legionella occurring in the same locality within a six month period. The 'Proper Officer' (appointed by the local authority under public health legislation & a Consultant in Communicable Disease Control) in conjunction with HSE may invoke the following actions in the event of an outbreak:

- 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 done and final clearance is given to restart the system.
- Take water samples before any emergency disinfection takes place.
- Seek employee health records
- Full co-operation 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 and the Health and Safety Adviser (Property Services Manager) in conjunction with Appointed Persons 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.

Appendix 4

**Legionella Control
Acceptance of Role**

Duty holder

I understand and accept the duties placed upon me as the Duty Holder as defined in "*Legionnaires Disease: the Control of Legionella Bacteria in Water Systems*" (L8).

Signed..... Chief Executive

Date.....

Responsible Person

I understand and accept the duties placed upon me as the Duty Holder as defined in "*Legionnaires Disease: the Control of Legionella Bacteria in Water Systems*" (L8).

Signed.....

Date.....

Appointed Persons

I understand and accept the duties placed upon me as the Appointed Person as defined in the "*Legionella Risk Management Plan*".

Signed.....

Date.....

Signed.....

Date.....

Signed.....

Date.....