

30. Society Water Hygiene and management of Legionella					
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1. Introduction

The Society Water Hygiene policy sets out the aims and objectives of The Midcounties Co-operative Society (hereby referred to as “the Society”) to control water quality at all the Society’s sites. It is to be read in conjunction with the Written Scheme for each building. These documents provide the specific detail of how this policy should be implemented on a building by building basis.

The Society as employers have a general duty under The Health and Safety at Work Act 1974 to ensure so far as is reasonably practicable, the health, safety and welfare of all their Colleagues. Colleagues have a duty to take reasonable care for their own health and safety and of that of others who may be affected by their acts or omissions at work.

It is the responsibility of any person employed by the Society in whatsoever capacity to comply with the requirements of this Policy.

1.1 Scope

This Policy applies to the design, operation and maintenance of all water systems where there is the potential for legionella to grow and become dispersed as a respirable aerosol, whether systems include those owned or managed by the Society, or brought onto the Society’s sites by colleagues, or those visiting or working at any given site.

The sources include, but are not limited to, the following systems:

- Cold Water Services – Storage and Distribution
- Hot Water Services – Calorifiers, Direct water heaters and others
- Taps, showers, bib taps, etc.
- Thermostatic Mixing Valves (TMV)/Thermostatic Mixing Taps (TMT)
- Car wash systems
- All other systems identified by risk assessment as posing a risk

2. Policy Statement for Legionella Control

Water quality can represent a significant risk to health as highlighted by regular outbreaks of Legionnaires’ disease. The responsibility of the Society to achieve control within accepted parameters is formally recognised by this policy.

Legionnaires’ disease can prove fatal as has been confirmed by a number of preventable cases.

The Society accepts their responsibilities to take every reasonable precaution necessary to protect the welfare of people occupying and visiting their properties, as well as those passing by their buildings. To ensure that the highest reasonably practicable standards are maintained, guidance relating to the prevention of *legionella*, issued by authorities such as the Health & Safety Executive and the British Standards Institution, relating to the prevention of *legionella* will be adopted where relevant.

2.1 Policy Review

This Policy will be reviewed every two years, or whenever there is reason to believe that it is no longer relevant. The review will be completed by the Appointed Responsible Person or may be delegated to the Deputy Responsible Person.

Further details on the content of this review can be found in the Society's Water Hygiene Written Schemes

3. Arrangements

The foundation to the Society's approach to water quality control is:

- Identify and assess sources of risk through completing risk assessments
- Prepare written schemes for preventing, reducing or controlling the risk; including actions to be taken in the event of loss of control
- Implement, manage and monitor measures to control the risk
- Appoint appropriate persons to be managerially responsible for the Policy implementation
- Keep records of the precautions implemented

3.1 Risk Assessment

The Society will ensure risk assessments are undertaken, and a risk based approach to water system management is implemented and recorded.

Risk Assessments will be saved to the Society's C365 electronic compliance system and all actions will be monitored on a period basis for completion.

All Colleagues have a role in protecting health and safety for all and water quality is part of this, as such basic information will be provided to all Colleagues, and specific training and instruction will be given to all those directly involved with water safety management, to ensure competency levels are suitably maintained at all times.

3.1a Risk Assessment Schedule

New Risk Assessments will be undertaken every 3 years unless or until significant changes are made to the existing building water system or use.

3.2 Written Schemes

The Society will prepare Written Schemes for all sites owned and managed by the Society, aimed at clearly identifying the measures required to control the risks from exposure to Legionella bacteria, and how those measures are to be implemented and managed so that control over water systems is achieved and remains effective.

3.3 Responsibilities

General

Management has the overall responsibility for the implementation of this Policy to ensure a safe, reliable hot and cold water supply, within all the Society's sites. In addition, management has a statutory duty to ensure that compliance with this Policy is continual and not notional.

The Society has identified the following responsible positions to implement and maintain its water hygiene policy.

4. Key Roles for Policy Implementation

Statutory Duty Holder - Secretary & Head of Governance

The Statutory Duty Holder has the overall responsibility for ensuring compliance with all statutory regulations and therefore this Policy. To fulfil their responsibility, the Statutory Duty Holder will:

- Identify someone with sufficient authority to take responsibility for day to day management to be known as the “Appointed Responsible Persons”.
- Provide budgets for the successful training of the management team and operatives to protect water quality.
- Provide budgets for compliant design, maintenance, operation and monitoring of water systems.
- Maintain an awareness of compliance and intervene as necessary.

In selecting the Appointed Responsible Person, the Statutory Duty Holder should;

- Have a clear understanding of the role and the overall health and safety management structure and policy in the organisation
- Review the management programme and change/improve any aspects that are highlighted by the review process.
- Ensure the responsibilities of the appointed responsible person moves down the management structure to the deputy responsible person during periods of absence.
- Ensure that lines of communication are clear, unambiguous and audited regularly to ensure they are effective. This also applies to outside companies and consultants who may be responsible for certain parts of the control regime

Appointed Responsible Person – Health & Safety Manager

Has overall responsibility for the day to day management of water quality and will:

- Ensure suitable deputies are nominated to cover periods of absence
- Issue letters of notification of responsibility and store a copy of each letter for future reference
- Ensure all involved in water system protection maintain suitable levels of competence
- Ensure risk assessments are completed and written schemes are implemented
- Ensure that all Colleagues, users, contractors or other visitors working in areas or undertaking activities where Legionella hazards could exist or could be introduced into existing water systems, are made aware of potential hazards and controls detailed in the relevant Risk Assessments and Written Schemes. It is likely also that there are other hazards present where Legionella controls are employed, for example: scalding; COSHH; and environmental disposal hazards.
- Ensure all records are retained for at least 5 years.
- Report on performance against compliance criteria including incidents or near misses and all actual or suspected cases of Legionnaires disease in colleagues or others related to the Society’s activity.

Property Services Department

The Society’s Property Services Team is responsible for the handling and suitable instruction of any required works requests in relation to a sites water system.

Calls relating to non-compliance of Water Hygiene controls will be handled as a Priority 1 call, and appropriate SLA observed

Health & Safety Department

The Society's Health & Safety Team will monitor effective completion of site-based activities, during internal Health & Safety Audits, and implement measures to correct non-conformity.

Property Compliance Department

The Society's Property Compliance Team is responsible for maintaining records, and periodically auditing compliance via Society's C365 electronic compliance system. Records of monitoring and inspection will be kept for 5 years.

The Water Hygiene Contractor will provide the Compliance Team with all monitoring, inspection & test results and certificate produced on site, for the purpose of record keeping.

Site Management Team

The Society's Site Management teams are responsible for completing control measures and tasks as allocated in the Society's Written Schemes.

Water Hygiene Contractor

The selected Water Hygiene Contractor is responsible for delivering tasks as allocated in the Society's Written Schemes. Duties will include:

- Monitoring and sampling, reporting & logging
- Hot and cold water system management
- Ad-hoc training – on site
- Risk Assessment completion

A full list of tasks identified for completion are included in Appendix 4, but will include:

- Descaling of water systems
- Chlorination

The Water Hygiene Contractor will notify the Appointed Responsible Person, or the Deputy, of any situation that they deem to be of a high risk.

Consultants

At the time of this Policy the responsibilities for Legionella Consultancy Services lies with LegionellaSafe Services UK Ltd.

5.Training and Competence

The Society recognises that effective implementation of this Policy will rely on all those involved in water system management being suitably informed, instructed and trained and their suitability assessed.

Legionella awareness and responsible person training will be undertaken to a recognised standard such as City & Guilds. More specific training against this policy and site-specific written schemes may also be undertaken.

Training will be reviewed periodically, and refreshed at least every 3 years or when there is reason to believe that training is no longer suitable, such as poor performance against compliance criteria, or updates to guidance and legislation

A training needs analysis will be completed to ensure that any potential changes in key personnel/job roles are reviewed to ensure compliance to recognised roles and responsibilities.

Records of all training will be kept in line with the Society's internal policy

All service providers should be LCA approved and training certificates and competency statements for their site operatives quality are to be maintained and made available on request.

6. Notification of Outbreaks of Legionella

In England and Wales, legionnaires' disease is notifiable under the Health Protection (Notification) Regulations 2010. Under these Regulations, human diagnostic laboratories must notify Public Health Departments of microbiologically confirmed cases of legionnaires' disease.

An outbreak is defined as two or more cases where the onset of illness is closely linked in time (weeks rather than months) and where there is epidemiological evidence of a common source of infection, with or without microbiological evidence.

In such an event, the Society will fully comply with the local Authority and Proper Officer in their investigations.

In the event of a confirmed case of Legionella on a Society site, the Appointed Responsible Person, or the Deputy, will follow the Society's Major Incident Plan in relation to Legionella.

Any confirmed cases (e.g. a doctor notifies the Society as the employer) will be reported under RIDDOR guidelines.

7. New and Refurbishment Works

The Appointed Responsible Person will be responsible for ensuring that the Society mitigates the risks from Legionella when undertaking any refurbishment or replacements of water infrastructure. This will include a programme for the removal of dead legs.

For new builds the plans for any water distribution system should be reviewed by the Society's Consultants as part of the planning and construction project. This will ensure that in new build and refurbishment projects the water distribution systems are optimised in terms of Legionella control.

7.1 Remedial Works

Historic remedial works required on a site will be reviewed as part of the initial Annual Review visit by the Water Hygiene Contractor and a program implemented to address critical items

8. Dissemination and Implementation

This policy document will be published by the Society and kept available for reference. Any changes to this document must be implemented only with the authority of the Appointed Responsible Person.

8.1 Consultation, Approval, Ratification & Review

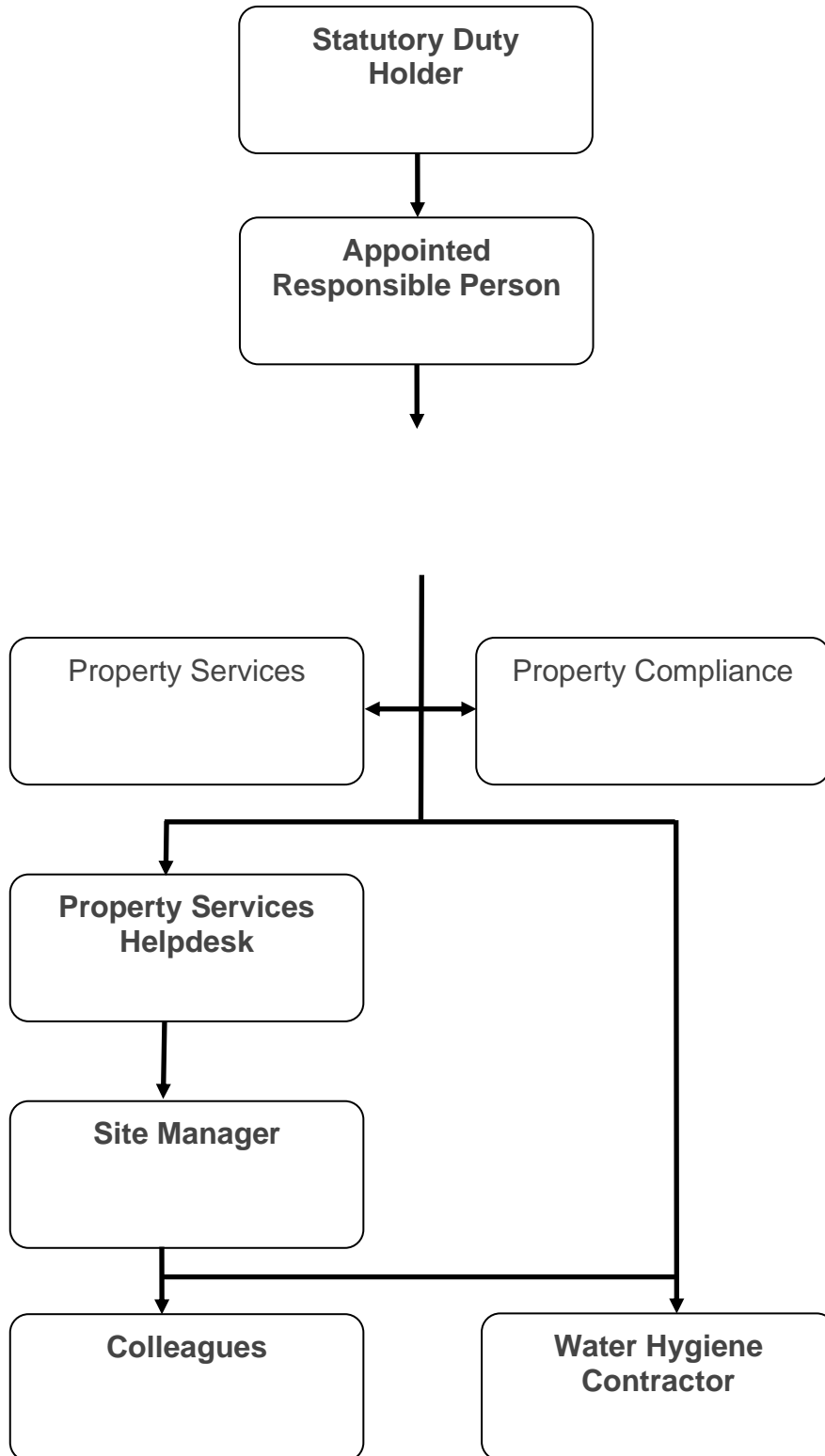
This document will be issued for formal consultation in draft form prior to issue. The following Colleagues will be consulted:

- Statutory Duty Holder
- Appointed Responsible Person/Health & Safety Manager
- Head of Property Services

The Statutory Duty holder is to review, approve and ratify this policy.

Appendix 1

Communication Pathway



Appendix 2

Appointed Responsible Person – Responsibility

It is the responsibility of the Appointed Responsible Person to:

- Have sufficient authority, competence and knowledge of the installation to ensure that all operational procedures are carried out effectively and in a timely way
- Ensure that the Water Hygiene Risk Assessment is up-to-date and available for inspection at all times. At any time, there is reason to believe the risk assessment is no longer valid, the risk assessment should be reviewed. Ensure the assessment, management and communication procedures are regularly reviewed
- Be properly trained to a level that ensures tasks are carried out in a safe, technically competent manner; and receive regular refresher training
- Ensure that the records system is kept up to date and made site specific
- Be fully aware of the status of the sites' water systems which represent a risk to the health of anyone who may come into contact with them
- Liaise with the deputy responsible person and keep them up-to-date
- Gain advice as necessary, from suitably qualified consultants, microbiologists, clinicians and infection prevention and control specialists
- Ensure Society's MIP process is followed in the event of an Outbreak and make necessary arrangements to support any investigation relating to such an outbreak.

Appendix 4

Extract from HSG 274 Part 2: The control of legionella bacteria in hot and cold water systems

Table 2.1: Checklist for hot and cold water systems

Service	Action to take	Frequency
Calorifiers	Inspect calorifier internally by removing the inspection hatch or using a boroscope and clean by draining the vessel. The frequency of inspection and cleaning should be subject to the findings and increased or decreased based on conditions recorded	Annually, or as indicated by the rate of fouling
	Where there is no inspection hatch, purge any debris in the base of the calorifier to a suitable drain Collect the initial flush from the base of hot water heaters to inspect clarity, quantity of debris, and temperature	Annually, but may be increased as indicated by the risk assessment or result of inspection findings
	Check calorifier flow temperatures (thermostat settings should modulate as close to 60 °C as practicable without going below 60 °C) Check calorifier return temperatures (not below 50 °C, in healthcare premises not below 55 °C)	Monthly
Hot water services	For non-circulating systems: take temperatures at sentinel points (nearest outlet, furthest outlet and long branches to outlets) to confirm they are at a minimum of 50 °C within one minute (55 °C in healthcare premises)	Monthly
	For circulating systems: take temperatures at return legs of principal loops (sentinel points) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises). Temperature measurements may be taken on the surface of metallic pipework	Monthly
	For circulating systems: take temperatures at return legs of subordinate loops, temperature measurements can be taken on the surface of pipes, but where this is not practicable, the temperature of water from the last outlet on each loop may be measured and this should be greater than 50 °C within one minute of running (55 °C in healthcare premises). If the temperature rise is slow, it should be confirmed that the outlet is on a long leg and not that the flow and return has failed in that local area	Quarterly (ideally on a rolling monthly rota)
	All HWS systems: take temperatures at a representative selection of other points (intermediate outlets of single pipe systems and tertiary loops in circulating systems) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises) to create a temperature profile of the whole system over a defined time period	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control

POU water heaters (no greater than 15 litres)	Check water temperatures to confirm the heater operates at 50–60 °C (55 °C in healthcare premises) or check the installation has a high turnover	Monthly–six monthly, or as indicated by the risk assessment
Combination water heaters	Inspect the integral cold water header tanks as part of the cold water storage tank inspection regime, clean and disinfect as necessary. If evidence shows that the unit regularly overflows hot water into the integral cold water header tank, instigate a temperature monitoring regime to determine the frequency and take precautionary measures as determined by the findings of this monitoring regime	Annually
	Check water temperatures at an outlet to confirm the heater operates at 55–60 °C	Monthly
Cold water tanks	Inspect cold water storage tanks and carry out remedial work where necessary	Annually
	Check the tank water temperature remote from the ball valve and the incoming mains temperature. Record the maximum temperatures of the stored and supply water recorded by fixed maximum/minimum thermometers where fitted	Annually (Summer) or as indicated by the temperature profiling
Cold water services	Check temperatures at sentinel taps (typically those nearest to and furthest from the cold tank, but may also include other key locations on long branches to zones or floor levels). These outlets should be below 20 °C within two minutes of running the cold tap. To identify any local heat gain, which might not be apparent after one minute, observe the thermometer reading during flushing	Monthly
	Take temperatures at a representative selection of other points to confirm they are below 20 °C to create a temperature profile of the whole system over a defined time period. Peak temperatures or any temperatures that are slow to fall should be an indicator of a localised problem	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control
	Check thermal insulation to ensure it is intact and consider weatherproofing where components are exposed to the outdoor environment	Annually
Showers and spray taps	Dismantle, clean and descale removable parts, heads, inserts and hoses where fitted	Quarterly or as indicated by the rate of fouling or other risk factors, e.g. areas with high risk patients
POU filters	Record the service start date and lifespan or end date and replace filters as recommended by the manufacturer (0.2 µm membrane POU filters should be used primarily as a temporary control measure while a permanent safe engineering solution is developed, although long-term use of such filters may be needed in some healthcare situations)	According to manufacturer's guidelines



Base exchange softeners	Visually check the salt levels and top up salt, if required. Undertake a hardness check to confirm operation of the softener	Weekly, but depends on the size of the vessel and the rate of salt consumption
	Service and disinfect	Annually, or according to manufacturer's guidelines
Multiple use filters	Backwash and regenerate as specified by the manufacturer	According to manufacturer's guidelines
Infrequently used outlets	<p>Consideration should be given to removing infrequently used showers, taps and any associated equipment that uses water. If removed, any redundant supply pipework should be cut back as far as possible to a common supply (e.g. to the recirculating pipework or the pipework supplying a more frequently used upstream fitting) but preferably by removing the feeding 'T' Infrequently used equipment within a water system (i.e. not used for a period equal to or greater than seven days) should be included on the flushing regime</p> <p>Flush the outlets until the temperature at the outlet stabilises and is comparable to supply water and purge to drain. Regularly use the outlets to minimise the risk from microbial growth in the peripheral parts of the water system, sustain and log this procedure once started. For high risk populations, e.g. healthcare and care homes, more frequent flushing may be required as indicated by the risk assessment</p>	Weekly, or as indicated by the risk assessment
TMVs	<p>Risk assess whether the TMV fitting is required, and if not, remove</p> <p>Where needed, inspect, clean, descale and disinfect any strainers or filters associated with TMVs</p> <p>To maintain protection against scald risk, TMVs require regular routine maintenance carried out by competent persons in accordance with the manufacturer's instructions. There is further information in paragraphs 2.152– 2.168</p>	Annually or on a frequency defined by the risk assessment, taking account of any manufacturer's recommendations
Expansion vessels	Where practical, flush through and purge to drain	Monthly–six monthly, as indicated by the risk assessment

Appendix 5

Extract from HSG 274 Part 3: The control of legionella bacteria in hot and cold water systems

Table 2.2 Car wash and Fountain controls

Vehicle wash systems	<p>Check and clean filtration systems, collection tanks and interceptor tanks and check treatment system</p> <p>A biocide programme should be in place and should be monitored and controlled similar to the standards required in cooling towers</p> <p>Clean and disinfect system and ensure sludge tanks are emptied</p>	As indicated by risk assessment
	Sample for legionella	Initially to establish that control has been achieved and thereafter quarterly or as indicated by risk assessment
Fountains and water features	Clean and disinfect ponds, spray heads and make-up tanks including all wetted surfaces, descaling as necessary	As indicated by the risk assessment, and depending on condition

Appendix 6

References

Health and Safety at Work etc. Act 1974, Sections 2, 3 and 4

Management of Health and Safety at Work Regulations particularly Regulations 2, 3, 4 and 6

Control of Substances Hazardous to Health Regulations (COSHH)

The Water Supply (Water fittings) Regulations

The Water Supply (Water Quality) Regulations

Reporting accidents and incidents at work: A brief guide to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

Public Health (Infectious Diseases) Regulations

Food Safety Act

The Notification of Cooling Towers and Evaporative Condensers Regulations

HSE Approved Code of Practice (ACOP) 'Legionnaires Disease - The control of Legionella bacteria in water systems', L8 (4th edition 2013)

HSG274 Parts 1-3 2013 Legionnaires' Disease Technical Guidance

BS 8558:2011, Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages

BS 8580:2010 – Water Quality – Risk assessments for Legionella Control – Code of Practice

BS 7592:2008 – Sampling for Legionella bacteria in water systems – Code of Practice

Minimising the Risk of Legionnaires' Disease. TM13: Chartered Institution of Building Services Engineers

Legionella and the Prevention of Legionellosis – World Health Organisation