

Legionella Management Procedure	
Enabling Policy Statement; Executive Owner; Approval Route:	Our Safety - Chief Operating Officer - Compliance Committee
Associated Policy Statements:	Our Safety – Chief Operating Officer
Authorised Owner:	Director of Health and Safety
Authorised Co-ordinator:	Health and Safety Manager (Professional Services)
Effective date:	28 April 2023
Due date for full review:	27 April 2026
Sub documentation:	Legionella Management Plan/Scheme of works (Estates & Facilities) Appendix 1: List of Designated Persons

Approval History

Version	Reason for review	Approval Route	Date
1.0	Reviewed and updated (including in accordance with new Policy Framework). Replaces Control of Legionella Bacteria Within Water Systems Policy (Version 2, dated October 2018).	Compliance (Health, Safety and Wellbeing) Committee	28 April 2023

1. Purpose

This Procedure defines the responsibilities and procedures for managing the control of Legionella bacteria within University of Surrey water systems and equipment, thus ensuring the adequate protection of staff, students, visitors, whilst working or visiting University buildings, demonstrating compliance with legal requirements, and the effective management of risk.

2. Scope and Exceptions to the Procedure

This Procedure applies to all areas of activity associated with the University and applies to all staff, students, contractors, and all University of Surrey controlled premises and activities.

3. Definitions and Terminology

This Procedure uses the following definitions for key terms in relation to legionella management:

Duty Holder – The person in control of the premises, where human-made water systems are used that could be a potential source for legionella bacteria growth.

Responsible Person – a competent person or persons to take day-to-day responsibility for controlling any identified risk from legionella bacteria, known as the ‘Responsible Person’. It is important for 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.

Additionally, *Designated Persons* have also been appointed within Faculties/Departments to assist the *Duty Holder* (see associated document List of Designated Persons).

Water System – Means a portable or non-portable water system for both hot or cold-water sources, for a building or site. It may consist of a network of pipe work systems installed within a building or location, that can be in isolation to or connected with each other together. Water system can include and are not limited to hot and cold taps, boilers, calorifiers, expansion vessels, heat pumps, water fountains, showers, baths, scientific equipment, sprinklers, fire hoses, pools, medical equipment, cooling towers, and evaporative condensers.

Legionella Bacteria – is a bacterium called *Legionella pneumophila* and may be found in purpose-built water systems. Legionellosis is a collective term for diseases caused by legionella bacteria, including the most serious Legionnaires' disease, as well as the similar but less serious conditions of Pontiac fever and Lochgailhead fever.

Infrequently Used Assets – Infrequently used assets are a water system (connected pipework, storage tanks and equipment) that is not in regular use (other than as part of an established flushing regime). For this purpose, the University uses the definition of regularly used as defined in HSG 274-part 2 guidance, as water systems not used for a period equal to or greater than seven days. Any assets and water system designated as infrequently used by the building legionella risk assessment will be included in an established flushing regime.

Flushing – Flushing (running the taps or outlet constantly) is one of the most effective control measures for legionella bacteria. In areas where there is little or no use, the outlets should be flushed through for several minutes. The frequency of flushing will be determined by the local legionella risk assessment, this is often a weekly task.

Schematic Diagram – A schematic diagram is a simplified but accurate illustration of the layout of the water system, including parts temporarily out of use. These are not formal technical drawings but show what the systems comprise, illustrating plant and equipment setup, including servicing, control valves, and any components relevant to the legionella risk.

Temperature Testing – This is the practical step of checking water systems running temperature by competent persons to ensure that cold and hot water systems are within the acceptable temperature ranges to prevent the growth of Legionella bacteria within human-made water systems. The process is often referred to as the temperature control regime and is the most critical control measure for legionella growth in domestic hot and cold-water systems.

Competency – a person who has the skills, knowledge, attitude, training, and experience to undertake the role effectively.

Training – is equipping staff, students (and others where the University has a duty of care) with relevant skills to deal appropriately with a given health and safety situation.

Briefing – is informing all necessary people of relevant knowledge and information in relation to Health and Safety to ensure safe completion of their task.

Training and briefing will be made available in a range of formats according to the needs of the trainee and different groups of staff, students, and others.

4. Procedural Principles

4.1. Commitment

The University will adopt the principles of control and management identified in HSE Approved Code of Practice (ACOP) and Guidance Document HSG274 Parts 1 to 3 published 2013/14 “The Control of Legionella Bacteria in Water Systems”.

The University will:

- Ensure the safe and effective management of all water systems, identifying and assessing sources of risk.
- Ensure resources are made available to achieve compliance to the requirements set out in HSG274 Parts 1 to 3 and the L8 Approved Code of Practice.
- Prepare a scheme for preventing or controlling the risk of legionella bacteria.
- Implement, manage, and monitor all precautionary control measures identified in all buildings under their responsibility.
- Keep appropriate records of precautionary measures.
- Identify the responsibilities of employees and contractors whilst working for or on behalf of the University.
- Put in place a risk escalation process to advise appropriate management, as necessary.
- Notify the local authority of the location of any cooling towers and condensers on site, including when these systems have been shut down or decommissioned and no longer in use on site.
- Have appropriate written documentation in place to ensure there is an adequate safe system of work in place, including any necessary emergency procedures for mitigation works and for any potential legionella exposure events.
- Ensure everyone is aware of their roles and responsibilities. That any person required to use or work on any water system within their normal work activities, that may have or pose a legionella risk, are appropriately informed, instructed, and where necessary trained and supervised.

4.2. Arrangements

To meet the above objectives, the University will:

- Clearly define the organisational arrangements for achieving compliance (see roles and responsibilities section of this Procedure).
- Identify, assess, and appropriately document sources of risk within buildings they are responsible for. This includes making, and keeping up to date, a record of the location and condition of all water systems installed within buildings under their control and checking whether conditions are

present which will encourage bacteria to multiply.

Note: Examples of such conditions include determining if the water temperature is between 20°C and 45°C, if there is a means of creating and disseminating breathable droplets (e.g., the aerosol created by showers), and if there are susceptible people who may be exposed to the contaminated aerosols.

- Prepare a scheme for preventing or controlling the risk, including the review, and monitoring the effectiveness of this scheme.
- Ensure there is an appropriate safe system of work in place for work on any high-risk water systems, including, where necessary, a permit to work.
- Implement, manage, and monitor all precautionary control measures identified and installed.
- Keep records of precautionary measures, including inspection records, maintenance and service records, cleaning and disinfection records, sample testing results, temperature testing records and infrequently used assets flushing records.
- Appoint a competent Responsible Person (and nominated deputy) in writing, to ensure the requirements of this Procedure and other relevant Legionella-related performance standards are met.
- Review legionella management arrangements periodically or whenever there are changes in relevant legislation, guidance, or University activities.

4.3. Legionella Scheme of Works

The written scheme of work establishes how the University manages and monitors water systems it owns or manages for risk of legionella. Overall implementation of this document is the responsibility of the Duty Holder for Legionella, however, the responsibility for reviewing and ensuring this document is suitable and sufficient, as well as the need for sub-documentation, is the responsibility of the Responsible Person for Legionella.

4.4. Water System Specific Procedures

Specialist procedures and documentation are in place for high-risk water systems and for emergency operations, including but not limited to:

- Shutting down and working on cooling towers and evaporative condensers.
- Work on water systems, including flushing and cleaning of a system.
- Use of chlorine (or some other appropriate substance) to clean and disinfect a system.

The examples given are not exhaustive and further procedures are in use. All documents are the responsibility of the Responsible Person for Legionella. It is their responsibility to ensure these documents are suitable and sufficient, comply with all necessary industry standards, and are reviewed regularly.

4.5. Roles and Responsibilities

All responsibilities can be delegated, unless otherwise stated, but it remains the responsibility of the named individual to ensure they are completed in accordance with this Procedure and other sub-documentation to this Procedure.

- 4.5.1. Head of Maintenance Services as the 'Duty Holder' has overall responsibility for implementing the requirements of this Procedure, including:
- Appointing a Responsible Person (and nominated Deputy) to assist them with the execution of their responsibilities and agreeing the arrangements for their involvement in any works, along with such other measures necessary for the execution of this role holder's duties.
 - Ensuring there is an adequate safe system of work in place for management of and work on water systems, including having a permit to work system if needed for work on high-risk systems or cutting into buildings water system infrastructure.

- Formally identifying the roles and responsibilities of their staff in respect of the day-to-day management of maintenance/building work.
- Applying for such resources as are appropriate to discharge the University's statutory obligations and the requirements of this Procedure.
- Periodically reviewing, with the Competent Person (and other relevant staff), the effectiveness of the above management system.

4.5.2. Responsible Person(s) including deputies as appointed by the Duty Holder has delegated authority to ensure compliance and is responsible for ensuring:

- The development of applicable sub-documentation on the control of legionella in water systems.
- Compliance with this Procedure and with all other sub-documentation.
- Legionella risk assessments are completed for each building, and that they are regularly reviewed in accordance with the current industry standards (i.e., reviewed regularly and whenever it is suspected it is no longer valid, for example if there is a significant change to the system).
- Works from approved suppliers and providers are completed to required industry standards.
- Any monitoring and testing regime established is adhered to, and appropriate mitigations are put in place for any issues found.
- The establishment of a suitable inspection regime and ensuring it is adhered to.
- Facilitating any monitoring or inspection work, as needed.
- The University's water hygiene compliance page is updated, and any compliance issues that affect the level of institutional compliance are reported to key stakeholders.
- The review of any risk assessments and method statements of works being completed on water systems, to ensure they are suitable, and all necessary risks are adequately mitigated. This will include the approval of any Permits-to-Work.
- The organisation of necessary legionella training.
- All those required to work on a water system (including contractors) are competent to do so, based on the risk, complexity and type of work being conducted.
- That any changes to buildings water systems and installed assets, are adequately updated within Estates & Facilities buildings records, including within its CAFM System and buildings drawings (particularly water system schematics).
- All water system work under the control of the Head of Maintenance Services is appropriately planned and organised, engaging with all necessary University stakeholders to ensure the least amount of disruption to essential services. Where necessary any disruption to essential University services will be adequately controlled or mitigated in relation to the potential impact to the University.

4.5.3. Director of Health and Safety is responsible for:

- The provision of advice and guidance on the application of legislative requirements.
- Liaising with the enforcement authority, as needed.
- Reporting any confirmed legionella exposure to the enforcement authority under RIDDOR.
- Ensuring that appropriate records relating to any exposure event are held for the necessary period.

4.5.4. Head of Projects (Planning and Development) is responsible for:

- Ensuring that the requirements of this Procedure are implemented and for drawing to the attention of the Duty Holder and Competent Person any matters which may inhibit the execution of this Procedure, and which lie outside the post holder's remit to resolve.
- The application of, and allocation of, resources towards the effective management of Legionella issues within University Projects, including the correction of any compliance

issues within a projects scope, when possible and feasible to do so.

- Obtaining advice from the Responsible Person for the installation, modification or removal of water systems as part of a project.
- Ensuring that on project completion and handover to the University, appropriate information on the installation and modification to a buildings water systems or water assets, are adequately updated within Estates Facilities buildings records, including within its CAFM System and buildings drawings (particularly water system schematics).

4.5.5. Designated Person(s) will assist the ‘Duty holder’ in fulfilling their obligations under the Approved Code of Practice and Guidance Document HSG274 Parts 1 to 3 published 2013/14 “The Control of Legionella Bacteria in Water Systems” and where applicable Departments/ Faculty’s will nominate a Designated Person. They will be responsible for:

- Ensuring they and those within their area of responsibility follow this procedure, as well as the requirements of any other specialist procedures for water systems and treatment works that are in place.
- Highlighting any assets within their areas of control, that would be considered ‘infrequently used’ to the Responsible Person, and where such assets are identified to ensure that their staff are flushing these assets as necessary, recording this on the central recording system. They must also bring to the attention of the Responsible Person any areas or assets where they believe there is any risk of exposure.
- Ensuring that no modification/alteration or addition to water services are carried out without the approval of the Duty Holder or Responsible Person.

Note: The current list of Department/Faculty Designated Person can be found in Appendix 1.

4.5.6. Service Support Manager for Compliance is responsible for:

- Assisting the Responsible Person in performing their duties.
- Carrying out legionella risk assessments as instructed and deemed necessary by Responsible Person for each building, reviewing every two years or as deemed appropriate based on the risk.
- Carrying out tests and inspections on water systems as necessary and as established by the developed schedule of Planned Preventative Maintenance (PPM) tasks within our written procedures, and as per established standards within HSG274 Parts 1 to 3.
- Reviewing any risk assessments and method statements of works being completed on water systems to ensure they are suitable, and risks are adequately mitigated. This will include the approval of any Permits-to-Work.
- Completing fully documented reports with any recommendations clearly identified and track works completion against established deadlines.
- Reporting any areas of non-compliance with this Procedure or shortfalls in relation to requirement under HSG274 Parts 1 to 3 that are present to the Responsible Person. Initial discussions should be with the Duty Holder.
- Liaising with Departments/Facilities Designated Person(s) to facilitate access into restricted or hard to access areas for routine water safety checks, inspections and for any remedial works required, including the alteration, modification, and installation of any water system.

4.5.7. Maintenance Team Leaders and Plumbing Fitters are responsible for:

- Carrying out weekly/monthly inspection/monitoring maintenance tasks, as instructed.
- Conducting inspections, installation, modification, and removal works as per the established risk assessments and written procedures, including adhering to any Permit-to-Work requirements and mitigations.
- Ensuring all documentation is completed and returned to the Service Support Manager for Compliance.

- Reporting any possible area of risk observed whilst completing other duties to the Service Support Manager for Compliance.

4.5.8. Plumbing Technicians are responsible for:

- Completing and overseeing work that they are competent and have been trained to oversee as agreed with the Responsible Person or Service Support Manager for Compliance.
- Conducting the safe isolation of key mechanical and water systems that they have been trained and approved to do (in place of the Responsible Person or Service Support Manager for Compliance).
- The checking of any Permit-to-Work in place for contractors or other third parties that they have been approved to do. They must not approve the Permit-to-Work for themselves.
- Assisting the Responsible Person or Service Support Manager for Compliance with their duties, as much as they have been trained and are competent to do so.

4.5.9. Staff Conducting Flushing are responsible for:

- Highlighting any assets within their areas of responsibility that may come under the definition of infrequently used, ensuring this is brought to the attention of their department or faculty designated person and the Responsible Person for Legionella.
- Completing the flushing of any assets designated as infrequently used within their area of responsibility once weekly, ensuring that this task is performed in any periods of absence by another suitable person.
- Filling in the appropriate central recording form for infrequently used assets.
- Bringing to the attention of their Designated Person and the Responsible Person for Legionella any risks or failure to perform flushing.

4.5.10. Specialist water treatment contractor(s) are responsible for

- Working in accordance with the findings of any risk assessment, permit to work system, and the requirements of any information, instruction, and training (including induction) provided.
- Carrying out and reviewing legionella risk assessments, tests and inspections on water systems, specific investigations, and remedial works, as instructed by the Responsible Person.
- Reporting to the Responsible Person any areas of non-compliance to the University Procedure or requirements under HSG274 Parts 1 to 3 published 2013/14 that are present.
- Attending the contractor's 'Green Book' induction training within the last 12 months before starting work on site.

4.5.11. EFCS Business Support Manager will be responsible for:

- Ensuring that the Planned Preventative Maintenance tasks are accurately programmed into the CAFM system to be completed at appropriate frequencies as deemed suitable by the Responsible Person for Legionella and as per HSG274 part 1 to 3 guidance requirements.
- Updating water system assets and building information within the CAFM system once this information is supplied from other Estates & Facilities personnel, such as the Head of Projects or SSM for Compliance.

4.5.12. Occupational Health Service will be responsible for:

- Providing occupational health advice to management and staff on issues relating to legionella.
- Ensuring that following any exposure, that this is recorded on the employee's medical

notes and retained for the necessary period.

4.5.13. General Contractors are responsible for:

- Working in accordance with the findings of any risk assessment, permit to work system, and the requirements of any information, instruction, and training (including induction) provided.
- Ensuring compliance with this Procedure and any others that are brought to their attention in relation to water systems.
- Developing appropriate risk assessments and method statements for working on water services systems. Ensuring all appropriate documentation is completed and forwarded to their University contact.

4.5.14. Members of staff and students – we ask all staff and students to play a part in ensuring that people are not exposed to legionella by flushing outlets on their return to site, if they have been left dormant for any extended period (seven days or more). This is requested through basic staff information routes and within residential information supplied to students.

4.5.15. Legionella Management Group – the purpose of this Group is to contribute to the development and direction of legionella management at the University. The Group will monitor legionella management performance and provide a forum for obtaining input from relevant departments on matters relating to legionella management.

The Group will meet quarterly and report to the University Compliance (Health, Safety and Wellbeing) Committee and Health and Safety Consultative Committee via the EF/CS H&S Management Group.

5. Governance Requirements

5.1. Implementation: Communication Plan

This procedure will be available via the University procedures webpages. This Procedure is also available on the University Health and Safety Intranet site.

Relevant Health and Safety Committees and EF/CS Committees will be notified, and information disseminated through line management. Faculty Health and Safety Committee will also be informed, as required.

This Procedure will be brought to the attention of stakeholders via a range of media, including:

- SurreyAlert
- SurreyNet
- Staff Health and Safety Handbook
- Resident guides
- Frequently asked questions (on SurreyNet).

5.2. Implementation: Training Plan

Communicated through specific, relevant training – including inductions, legionella awareness training, legionella management and responsible persons training and ‘duty holder’ training.

Specialised training will be conducted as necessary for key staff positions and task responsibilities for the management of legionella risk. This training is not limited to, but can include, condensers and water-cooling towers training, specialist approved persons course for safe isolation of associated equipment, onsite training and supervision by responsible persons, formal qualifications, and toolbox talks for specialist tasks like flushing of infrequently used outlets.

5.3. Review

The Duty Holder, Responsible Person(s), and Director of Health and Safety will monitor for required changes and updates. Minor changes will be reviewed by the Legionella Management Group and approved by the Compliance (Health, Safety and Wellbeing) Committee. Major reviews will also be reviewed by the Legionella Management Group, prior to submission to Compliance (Health, Safety and Wellbeing) Committee for approval, and if required, noted at the Executive Board.

This Procedure will be reviewed every three years or in line with relevant changes in legislation, if sooner. The Health and Safety Consultative Committee will be consulted during the review process, as required.

5.4. Legislative Context and Higher Education Sector Guidance or Requirements

5.4.1. Applicable Legislation

This Procedure is in accordance with the requirements of:

- The Health and Safety at Work Etc. Act 1974.
- The Management of Health and Safety at Work Regulations 1999.
- The Control of Substances Hazardous to Health Regulations 2002.
- Notification of Cooling Towers and Evaporative Condensers Regulations 1992.
- HSE L8 – Legionnaires’ disease, The control of Legionella bacteria in water systems: Approved Code of Practice (ACOP) and guidance (v4).
- HSE HSG274 Parts 1, 2, & 3 Guidance documents.

5.4.2. Legislative context

This Procedure sets out to comply with the required ‘duty of care’ placed upon the University. Under Health and Safety Law a required ‘duty of care’ is generated between organisations and individuals when carrying out activities that could foreseeably cause harm. The duty is owed through the employer-employee relationship and extends to assurance that services provided by others (like contractors) are undertaken safely. With the level of assurance provided commensurate with the risk of the activity undertaken. In addition, anyone carrying out an activity owes a ‘duty of care’ to anyone who may be put at risk by said activity, such as students, staff, and visitors.

This duty of care cannot be delegated away; instead, the act of delegation must be accompanied by a realistic and workable system of monitoring or supervision to ensure that the delegated task has been adequately implemented (i.e., the responsibility is not met by giving directions; it is met when those directions have been confirmed as carried out). The result is a cascade of delegated accountability that runs throughout the organisation via the line management network, accompanied by a system of monitoring, supervision, and feedback.

It is a requirement of the University, as the insured body, to comply with all regulations imposed by any competent authority and take all reasonable precautions to prevent or minimise accidents, loss, injury, or damage. In addition, the University will comply with appropriate guidance and recommendations of relevant professional bodies, wherever reasonably practical.

5.5. Sustainability

This Procedure has no impact on carbon emissions or on energy consumption.

6. Stakeholder Engagement and Equality Impact Assessment

6.1. An Equality Impact Assessment was completed on **08/02/2023** and is held by the Authorised Co-ordinator.

6.2. Stakeholder Consultation was completed, as follows:

Stakeholder	Nature of Engagement	Date	Name of Contact
Governance	Development and creation of this Procedure v1.0.	2 February 2023	Andrea Langley, Regulatory Compliance Manager.
Sustainability	Development and creation of this Procedure v1.0.	2 February 2023	Andrew Harmen Energy Manager.
Members of the Legionella Management Group	Development and creation of this Procedure v1.0.	2 February 2023	Members of this Group.
Members of the Compliance Management Group	Development and creation of this Procedure v1.0.	2 February 2023	Members of this Group.
Equality, Diversity & Inclusion	Development and creation of this Procedure v1.0.	2 February 2023	Jo McCarthy-Holland, Equality & Diversity Manager.
Members of the EF/CS Health & Safety Management Group	Development and creation of this Procedure v1.0.	2 February 2023	Members of this Group.
Health and Safety Consultative Committee	Development and creation of this Procedure v1.0.	2 February 2023	Members of this Group.