

Policy and procedures for the management of water systems and the control of legionella bacteria

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1.0 GENERAL

1.1 Document Control Sheet

Amendment Table

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1.2 Introduction

This document sets out Lambeth Council's commitment to manage the quality of water supplied within its buildings and its existing Safe Working Practices and Policy on Control of legionella bacteria in water systems. Staff involved with maintenance or the provision of water systems, supervising such work, or issuing contracts for work, should fully familiarise themselves with the contents of this document.

1.3 Policy Statement

Lambeth Borough Council recognises the need to protect its employees and others from the harmful effects of legionella bacteria by:

- (a) complying with the current relevant Regulations;
- (b) providing standards not less than those set out in the Approved Code of Practice (L8) for the Control of Legionella Bacteria in Water Systems and Technical Guidance (HSG274 Parts 1-3);
- (c) appointing a person or persons to take managerial responsibility (Duty Holder) and to provide supervision (nominated responsible person) - see Appendix 1;
- (d) putting in place arrangements for preventing or controlling the risk;
- (e) implementing, managing and monitoring all precautionary control measures identified;
- (f) taking all reasonable steps to prevent its employees, tenants and others from breathing in droplets of water containing harmful levels of legionella;
- (g) keeping appropriate records and providing appropriate training.

In support of this, the Council intends to adopt as far as reasonably practicable the principles of control and management identified in H.S.E Approved Code of practice and Guidance Document L8 "The Control of Legionella Bacteria in Water Systems" (ACOP L8) and Technical Guidance (HSG274 parts 1-3).

A copy of L8 is kept by Directorate or Service Area Premises Managers and the Corporate Occupational Health and Safety Section or can be accessed via the HSE Link <http://books.hse.gov.uk/hse/public/saleproduct.jsf?catalogueCode=9780717617722>.

1.4 Background to the Organism

1.4.1 The Organism

Legionella bacteria are common and can be found naturally in environmental water sources such as rivers, lakes and reservoirs, usually in low numbers. Legionella bacteria can survive under a wide variety of environmental conditions and have been found in water at temperatures between 6°C and 60°C. Water temperatures in the range 20°C to 45°C seem to favour growth. The organisms do not appear to multiply below 20°C and will not survive above 60°C.

They may, however remain dormant in cool water and multiply only when water temperatures reach a suitable level. Temperatures may also influence legionella - bacteria held at 37°C have greater virulence than the same legionella bacteria kept at a temperature below 25°C.

Legionella bacteria also require a supply of nutrients to multiply. Sources can include, for example, commonly encountered organisms within the water system itself such as algae, amoebae and other bacteria. The presence of sediment, sludge, scale and other material within the system, together with bio films, are also thought to play an important role in harbouring and providing favourable conditions in which the legionella bacteria may grow.

A biofilm is a thin layer of micro-organisms which may form slime on the surfaces in contact with water. Such bio films, sludge and scale can protect legionella bacteria from temperatures and concentrations of biocide that would otherwise kill or inhibit these organisms if they were freely suspended in the water.

1.4.2 Background to the Disease

Legionnaires' disease was first identified following a large outbreak of pneumonia among people who attended an American Legion Convention in Philadelphia in 1976. A previously unrecognised bacterium was isolated from lung tissue samples, which was subsequently named *Legionella pneumophilla*.

Legionnaires' disease is a potentially fatal form of pneumonia which can affect anybody, but which principally affects those who are susceptible because of age, illness, immune-suppression, smoking etc. It is caused by the bacterium *Legionella pneumophila* and related bacteria. Legionella bacteria can also cause less serious illnesses, which are not fatal, or permanently debilitating. The collective term used to cover the group of diseases caused by legionella bacteria is legionellosis.

It is normally contracted by inhaling legionella bacteria, either in tiny droplets of water (aerosols), or in droplet nuclei (the particles left after the water has evaporated) contaminated with legionella, deep into the lungs.

1.4.3 Health Risks

Not everyone exposed will develop symptoms of the disease and those that do not develop the 'full blown' disease may only present with a mild flu-like infection.

The incubation period is between 2 – 10 days (usually 3 – 6 days). The initial symptoms of Legionnaires' disease include high fever, chills, headache and muscle pain. Patients may develop a dry cough and most suffer difficulty with breathing. About one third of patients infected also develop diarrhoea or vomiting and about half become confused or delirious.

L. pneumophila is also responsible for a short feverish form of the illness without pneumonia, known as **Pontiac fever**.

Another species of legionella, *L. micdadei*, is responsible for a similar form of the illness without pneumonia called **Lochgailhead fever** (after an outbreak in Lochgailhead, Scotland). The incubation period can be up to 9 days and a high percentage of those exposed to this agent tend to be affected. However, there have been no recorded deaths associated with either Pontiac or Lochgailhead fevers.

Infection with legionella bacteria can be fatal in approximately 12% of reported cases. This rate can be higher in a more susceptible population; for example immune-suppressed patients or those with other underlying disease. Certain groups of people are known to be at higher risk of contracting Legionnaires' disease; for example, men appear more susceptible than women, as do those over 45 years of age, smokers, alcoholics, diabetics and those with cancer or chronic respiratory or kidney disease or receiving immunosuppressant drugs. It is normally contracted by inhaling legionella bacteria, either in tiny droplets of water (aerosols), or in droplet nuclei (the particles left after the water has evaporated) contaminated with legionella, deep into the lungs.

The Public Health Laboratory Services data showed that the 24% of outbreaks between 1980 –1998 resulted from wet cooling systems, with 25% associated with hot water systems and 3% attributed to both cold water systems and whirlpool spas the remainder came from unknown sources. There is evidence that the disease may also be contracted by inhaling legionella bacteria following the ingestion of contaminated water by susceptible individuals. Person-to-person spread of the disease has not been documented. Legionnaires' disease can be treated effectively with appropriate antibiotics.

As legionella bacteria are commonly encountered in environmental sources they may eventually colonise manufactured water systems and be found in cooling tower systems, hot and cold water systems and other plant which use or store water. To reduce the possibility of creating conditions in which the risk from exposure to legionella bacteria is increased, it is important to control the risk by introducing measures which:

- Do not allow proliferation of the organisms in the water system; and
- Reduce so far as is reasonably practicable, exposure to water droplets and aerosol.

1.5 Requirements of Legislation

1.5.1 The Control of Substances Hazardous to Health Regulations 2002 (as amended) (COSHH)

Harmful bacteria such as legionella pneumophila (biological agents) are subject to controls of the Control of Substances Hazardous to Health Regulations 2002 (COSHH). The COSHH framework provides actions designed to control the risk and requires:

- (a) That risk assessments are carried out and any relevant action identified on is taken – prevention of exposure or substitution with a less hazardous substance if this is possible, or substitution of a process or method with a less hazardous one;
- (b) Adequate controls are put in place – maintenance, examination and testing of control measures, e.g. automatic dosing equipment for delivery of biocides and other treatment chemicals;
- (c) The provision of information, instruction and training for employees;
- (d) The provision of health surveillance of employees (where appropriate).

1.5.2 The Notification of Cooling Towers and Evaporative Condensers Regulations 1992

Any one who controls a premise which has equipment that includes a cooling tower and evaporative condensers must inform the local authority in writing with details of the 'notifiable devices' on the appropriate forms which are available from Local authorities or the Health and Safety Executive.

The exception to this requirement to notify is where systems contain water that is not exposed to the air and the water and electricity supply is not connected.

1.5.3 The Control of Legionella Bacteria in Water Systems Approved Codes of Practice

The Approved Code of Practice and associated guidance provides a basic framework for preventing further outbreaks of the disease and gives practical advice on, how to comply with the requirements of the Health and Safety at Work etc. Act 1974 (HSWA) and the Control of Substances Hazardous to Health Regulations 2002 (COSHH) concerning the risk from exposure to legionella bacteria.

The Code applies to the control of legionella bacteria in any undertaking involving work activity and to premises controlled in connection with trade or business whose activity:

- gives rise to a risk of harmful exposure to legionella bacteria;
- where there is a reasonably foreseeable risk of harmful exposure to legionella bacteria in any premise where water is used or stored; and
- where there is a means of creating and transmitting water droplets which may be inhaled. These include the following:
 - water systems incorporating a cooling tower;
 - water systems incorporating an evaporative condenser;
 - hot and cold water systems; and
 - other plant and systems containing water which is likely to exceed 20 c and which may release a spray or aerosol during operation or maintenance such as vehicle washers, humidifiers and spa baths.

The Code also provides advice on risk assessment and on avoiding systems that give rise to a foreseeable risk of legionellosis, the preparation of a written scheme for minimising the risk from exposure and for implementing and managing that scheme.

It also gives advice on the management, selection, training and competence of personnel and on preventing further outbreaks of the disease.

To comply with legal duties, employers and those with responsibilities for the control of premises should:

- Identify and assess sources of risk – this includes checking whether conditions are present which will encourage bacteria to multiply, e.g. is the water temperature between 20-45°C; there is a means of creating and disseminating breathable droplets, e.g. the aerosol created by a shower or cooling tower; and if there are susceptible people who may be exposed to the contaminated aerosols;
- avoid the use of systems that give rise to a foreseeable risk of legionellosis or, where this is not reasonably practicable, prepare a written scheme for minimising the risk from exposure;
- Prepare a scheme for preventing or controlling the risk;
- Implement, manage and monitor precautions – if control measures are to remain effective, then regular monitoring of the systems and the control measures is essential. Monitoring of general bacterial numbers can indicate whether microbiological control is being achieved. Sampling for legionella is another means of checking that a system is under control ;

- Keep records of the precautions (records pertaining to the control scheme should also be clearly documented and managed to provide an audit trail should this information be required by Health and Safety Executive (HSE) or an Environmental Health Officer (EHO);and
- Appoint a person to be managerially responsible.

1.5.4 The Work at Height Regulations 2005

These regulations apply to any person who controls the work of others (e.g. facilities managers or building owners who may contract others to work at height) to the extent they control the work.

To comply with these regulations, employers and those with responsibilities for the control of premises must do all that is reasonably practicable to prevent anyone falling by ensuring that where work is done at height:

- all work at height (including the means of access) is properly planned and organised;
- those involved in work at height are competent;
- the risks from work at height are assessed and appropriate work equipment is selected and used;
- the risks from fragile surfaces are properly controlled; and
- equipment for work at height is properly inspected and maintained.

2.0 ORGANISATIONAL RESPONSIBILITIES AND ARRANGEMENTS

2.1 Organisational and Service Area Responsibilities

The revised document for the control of legionella arrangements in water systems emphasises the responsibility, accountability and management of a control scheme. Staff responsibilities and lines of communication should be properly defined and clearly documented.

In a complex organisation such as the London Borough of Lambeth roles and responsibilities are numerous. Therefore, to ensure that Lambeth Council ultimately comply with Regulations and Approved Codes of Practice and Industry Standards relating to water quality management and in particular the control of legionella bacteria in water systems, the Council, have delegated responsibilities to nominated duty holders (competent Persons) who will be responsible for implementing the Councils management arrangements along with others (contractors, partners etc).

2.1.1 The Chief Executive is responsible for ensuring the organisation complies with the Water Quality Management Policy and the overall strategy for the safe operation and execution of premises activities including:

- consideration of water quality management issues within the premises under Council control;
- devolving the principal functions of water quality management to the responsible Directors for appropriate execution by them and their staff/consultants;

- supporting applications by Service areas for necessary or anticipated resource allocation to properly manage water quality in Council premises;
- ensuring any breaches of regulations or failure to comply with the water quality management arrangements are fully investigated.

2.1.2 Directors

Duty holders shall ensure that:

- A senior manager on the Leadership Team is assigned the responsibility as nominated person for the purposes of:
 - keeping the management team and the Corporate Occupational Health & Safety Manager informed on the implementation of this policy;
 - ensuring that an annual audit report on policy compliance compiled by the Corporate Occupational Health and Safety section on findings and statistics is submitted to and discussed by the leadership Team.
- A nominated responsible person(s) is appointed with delegated authority to:
 - take day-to-day responsibility for controlling any identified risk from legionella bacteria;
 - manage, maintain, review and update the Directorate's water quality arrangements, and report on policy compliance to the nominated person on a quarterly basis;
 - Monitor the implementation of managing agents, partners & contractors' water quality management arrangements and service.
- Senior managers responsible for water quality management have:
 - been trained in the requirement of the policy and procedures and that they are aware of their responsibilities for implementing them;
 - Been provided with adequate time and resources to enable them to carry out their duties in the management of water quality.

2.1.3 Responsible Persons

Persons with designated responsibility under this policy (Appendix 1) take day-to-day responsibility for controlling any identified risk from legionella bacteria and ensure that they discharge those duties in compliance with the relevant current legislation and Council policies.

The appointed '*responsible person*' should be a manager (e.g. Planned Maintenance Manager) or have similar status and sufficient authority, competence and knowledge of the installation to ensure that all operational procedures are carried out in a timely and effective manner

The *responsible person* must have a clear understanding of their duties and the overall health and safety management structure and policy in the organisation. They will be responsible for taking the managerial responsibility and to provide supervision for the implementation of the precautionary maintenance procedures. The responsible person or persons will appoint additional persons or consultants (e.g. premises manager, Care takers) to carry out risk assessments and maintenance procedures on their behalf.

2.1.4 Additional Responsible Persons

Additional Responsible Persons must have the ability, experience, instruction, information, training and resources to enable them to carry out risk assessments and implement appropriate measures to ensure that any risks are adequately controlled.

Where the additional responsible person does not possess the necessary expertise to implement the requirements set out in this document or the appointed persons nominated to carry out the necessary daily checks and maintenance tasks are not available in house, it might be necessary to enlist help and support outside the organisation.

2.1.4.1 Planned Maintenance Manager will ensure that:

- Design compliance policy and systems are put in place.
- Monitor service delivery and arrangements
- Audit performance
- Review procedures

2.1.4.2 Principal Heating and Water Engineer (or other appointed person) will:

- Be the Deputy Responsible Person
- Ensure compliance with policy and procedures.
- Order works from providers as necessary
- Monitor service delivery and arrangements
- Audit performance

2.1.4.3 Water Quality Officers (where appointed) will:

- Ensure compliance with policy and procedures.
- Order works from providers as necessary
- Monitor service delivery and arrangements
- Audit contractors & performance

2.1.4.4 Building Managers, Scheme Managers and Wardens

Ensure application and compliance with policy and regulations in premises under their control by:

- Facilitating any monitoring and inspection work;
- Facilitating any required remedial work;
- Ensuring cleaning, flushing, de scaling work is completed as required;
- Ensuring no modifications/alterations to water systems are carried out without first consulting with a competent person;
- Ensuring adequate records are maintained;
- Notifying the competent person of any equipment not on testing schedule.

2.1.4.5 Schools

The chair of the Board of Governors will:

- Be the Duty Holder with responsibility for the control of Legionella in Local Authority maintained and voluntary controlled schools; ensure that guidance and support is provided to governing bodies within the voluntary aided and foundation schools sector.

The governing body has responsibility for ensuring systems are put into place, monitored and maintained.

Head Teachers will:

- be the responsible person for the building under their control;
- ensure that monitoring systems are adhered to and the logbooks completed;
- appoint 'assistants' to carry out routine testing and monitoring to ensure compliance with the guidelines and procedures.

2.1.4.6 Specialist Water Treatment and Environmental Service Providers will:

- carry out Risk Assessments where appropriate;
- carry out tests as required on water systems;
- carry out investigations and remedial works as instructed;
- avoid conflict of interest when appointing specialist companies.

2.1.4.7 Consultants and Contractors

Consultants and Contractors appointed to advise the Council or carry out maintenance tasks on its behalf must be able to demonstrate a minimal level of competence in their appointed areas of work. The level of service provided by consultants/contractors should meet the Code of Conduct developed jointly by the Water Management Society and the British Association for Chemical Specialist.

Consultants and Contractors will also discharge their duties in compliance with:

- relevant legislation
- Industry standards
- contractual obligations, and
- client Policies and procedures

2.1.4.8 Employees

If you are an employee or working under someone else's control, you must:

- report any safety hazard to them;
- use the equipment supplied (including safety devices) properly, following any training and instructions (unless you think that would be unsafe, in which case you should seek further instructions before continuing).

2.1.4.9 TMO's, TMC's, Voluntary Organisations and Partnerships

Appendix 1 identifies post holders within the organisation that have specific responsibility for ensuring that those contractors, consultants and employees, that they manage comply with this policy and associated regulations. Post holder responsibilities will differ in areas managed by TMO's, TMC's, voluntary organisations, partnerships etc.

2.1.4.10 Corporate Health and Safety Senior Practitioner will:

- Produce and maintain a strategy in line with current legislative requirements and guidance.

- Check and agree the contents of any training programme produced to assist with the competency of staff to fulfil their designated roles.
- Check and agree the outline format for risk assessments, site log books and other documentation concerning Legionella management.

2.1.4.11 Service Area Health and Safety Leads will:

- Provide advice to their service area in support of this strategy in controlling and reducing risks associated with Legionella bacteria and advising on statutory duties.
- Monitor/audit to ensure that service areas are discharging their duties within their areas of responsibility.
- Investigate cases and outbreaks of Legionnaires' disease in line with this strategy.

2.2 Competency

Those who are appointed to carry out the control measures and strategies should be suitably informed, instructed and trained and their suitability assessed. They should be properly trained to a standard that ensures that tasks are carried out in a safe, technically competent manner.

Although training is an essential element of competence, it is not the only factor - competence should be viewed as combination of sufficient training, experience, knowledge and other personal qualities that are needed to undertake a job safely.

Position and job title of people responsible for carrying out the various tasks under the written scheme (Appendix1) will be included within the water logbook.

To enable suitably trained and competent individuals to fulfil their duties they must be provided with the necessary equipment, time and resources to carry out those duties.

3.0 PROCEDURES

3.1 Managing the Risk

The Council has identified that Council, staff, residents, pupils, contractors, visitors and the general public using its premises, adjacent buildings and thoroughfares may be at risk if adequate water management controls are not put in place in the following areas:

1. Cooling Towers
2. Showers
3. Domestic Hot Water Systems
4. Tank Fed Cold Water Systems
5. Infrequently used outlets
6. Drinking Water Distribution
7. Air Washers
8. Humidifiers
9. Ornamental water fountains
10. New Equipment/Alterations
11. Residences
12. Sports facilities, e.g. jacuzzis
13. Any other area or equipment that may create a tiny droplet water spray

The Council have therefore introduced a system to manage its water systems.

3.2 Notification to the Local Authority

The Environmental Health Department must be informed (Appendix 2) of any equipment which includes a cooling tower and/or evaporative condenser (in accordance with the Notification of Cooling Towers and Evaporative Condensers Regulations 1992 (NCTEC)) unless they systems contain water that is not exposed to the air and the water and electricity supply are not connected. If new equipment is being installed this notification should be carried out before the equipment is brought into use. They should also be informed of any notifiable device, which become redundant and is decommissioned or dismantled.

3.3 Control Methodology

Legionella control - as a policy the Council adopts a temperature regime, however where historically problems have been encountered in maintaining temperature control an engineered solution would be applied to maintain the correct temperature.

3.3.1 Asset Listing

In order to help manage assets owned by the Council, Lambeth has adopted a unique numbering system that initially identifies all cold water storage tanks. This system is designed to help record routine maintenance and any remedial work carried out by contractors. Each cold water storage tank is to be given a unique reference, which will remain until the cold water storage tank has been de-commissioned.

The asset number or unique premises number will have a bar code or passive tag, which when read by a PDA device (if applicable) will synchronise all data relating to the asset.

3.3.2 Risk Assessment

Suitable and sufficient risk assessments in accordance with BS8580 (Appendix 3) will be completed for premises to identify:

- any risks to individuals health from work activities and water systems on the premises (Appendix 4a), i.e. whether the potential for harm to health from exposure is reasonably foreseeable unless adequate precautionary measures are taken;
- necessary measures to prevent, or adequately control, the risk from exposure to legionella bacteria.

A site survey of all water systems will be conducted culminating in a schematic drawing and logbook for each system, which will be instigated, held and updated by the person responsible for water quality management for the Directorate.

The assessment will be reviewed regularly or if there is a risk the assessment is no longer valid. An indication of when to review the assessment and what needs to be reviewed should be recorded. This may result from, for example:

- changes to the water system or its use;
- changes to the use of the building in which the water system is installed;
- the availability of new information about risks or control measures;

- the results of checks indicating that control measures are no longer effective;
- a case of legionnaires' disease/legionellosis is associated with the system.

Where the assessment demonstrates that there is no reasonably foreseeable risk or that risks are insignificant and unlikely to increase, no further assessments or measures are necessary.

3.3.3 Control Measures

Where the risk assessment shows that there is a reasonable foreseeable risk and this can not be totally eliminated a written scheme for controlling the risk from exposure must be put in place. This Scheme should specify measures to be taken to ensure that it remains effective and should include, an up-to-date schematic showing layout of the plant or system, including any part temporary out of use.

The nominated person(s) identified in Appendix 1 will ensure that arrangements are in place to:

- schedule, design, advise on purchase of equipment and monitor all controls necessary to control legionella bacteria within the Council;
- carry out, procure and report on all controls necessary to manage legionella bacteria within the Council;
- ensure directorate's systems and equipment are serviced (including inspection, cleaning and disinfecting) and maintained to a standard to control legionella bacteria within its premises.

Service Areas will ensure that records of servicing and maintenance are kept and are readily available for inspection. (Refer to HSG 274 parts 2 section 2.2 appendix 15)

3.3.4 Monitoring and Routine Inspection

Where there is a significant risk there is a need to ensure that the control measures remain effective. This should be the duty of the competent person or where appropriate, an external contractor and should involve:

- (a) Checking the performance of the system and its component parts:
- (b) Inspecting the accessible parts of the system for damage and signs of contamination; and
- (c) Monitoring to ensure that the treatment regime continues to control the required standard.

The frequency and extent of the routine monitoring will depend on the operating characteristics of the system. See Appendix 5, 6 and 7 for checklists.

If routine inspection of Hot water services and exceptionally cold water services show it to be necessary for them to be cleaned and disinfected in the following situations, the procedures set out in Appendix 8 should be followed.

3.3.5 Planned Maintenance

Preventative Planned Maintenance works are to be undertaken in accordance with the current Schedules detailed in the relevant contract(s).

3.3.6 Remedial Works

During the Planned Maintenance programme adopted by premises managers, remedial work may be required to address urgent or potentially damaging repairs to plant and equipment.

These works are additional to routine maintenance and therefore in the majority of cases are repaired by nominated contractors against agreed costs as defined within contracts.

It is Lambeth policy that prior to a contractor undertaking any remedial work(s), that they provide a detailed method statement and risk assessment, including any COSHH details (Control of Substances Hazardous to Health) that may be required.

Post work(s), a detailed engineer's report would be required and signed-off by their supervisor and/or manager. All reports are to be forwarded to the person responsible for water quality management, for audit purposes within the Directorate.

3.3.7 Faults Log

The faults log is to be used to identify and record any event that is unexpected, e.g. Boilers locking out, thus not providing secondary hot water, water companies repairing mains pipe work in the street. Both are examples of unexpected incidents that potentially could have an impact on water quality. These uncontrollable factors need to be recorded in the water logbook.

3.3.8 Legionella Sampling and Analysis

Sampling methods are to be in accordance with **ISO 11731:1998** and the biocide neutralised where possible.

The laboratory should also apply a minimum theoretical mathematical detection limit of less than, or equal to, 100 legionella bacteria per litre of sample.

3.3.9 Original Certificates following Analysis

All original laboratory certificates following analysis are to be filed in chronological order with the most current facing. Certificates are to be archived for a minimum of five years.

All samples to be analysed by a laboratory accredited by the United Kingdom Accreditation Service (UKAS) and that takes part in the Public Health Laboratory Service Water Microbiological External Quality Assessment Scheme for the isolation of legionella from water.

All certificates of analysis to be scanned and filed electronically in their respective electronic water log book on the Directorate's property management system, the HPS server (M Drive) or other dedicated website.

3.4 Records/Electronic Water Systems Logbook

The responsible person for water quality management will produce a water systems logbook for each building (or group of buildings).

The method we would like to adopt as part of this policy for maintaining all records pertaining to water quality is in the form of an electronic water logbook. We believe, in order to help manage the water quality at multiple sites in accordance with The Approved Codes of Practice and corresponding Regulations would require this data to be managed electronically.

In the case of hostels, sheltered accommodation, schools and FM managed buildings etc., water log books would be kept on site and managed by the responsible person/building managers.

Reports and records pertaining to the results of any monitoring, inspection, test or check carried out and the dates, will be retained for at least five years and be available for audit.

3.5 Legionella positive/outbreak procedure

A clear understanding has to be made between a legionella sample proving positive and an outbreak situation.

In the event of a suspected outbreak, Lambeth Councils appointed outbreak Control Team will lead on the investigation and other procedures (Appendix 4 and 4a).

3.6 Monitoring, Review and Audit Arrangements

Regular audits on water quality management arrangements will be undertaken by or on behalf of Lambeth Council, Housing Client Monitoring Officers, or others specifically designated to carry out this task.

The purpose of the audit **is** to provide a systematic examination against defined criteria to determine whether activities and related results conform to contractual planned maintenance arrangements and whether these arrangements are being implemented effectively and are suitable to achieve Lambeth Council's policy and objectives.

All records will be subject to audit and any irregularity in records, resulting in a break in the 'Audit Trail' will be investigated and the outcome included in the audit report, e.g. if Housing cold water storage tank has been cleaned and chlorinated. Lambeth auditors would expect to see the following documentation to support the works carried out:

- Method Statement – detailing a step by step approach to carrying out the works;
- Risk Assessment – detailing all associated risks and steps taken to manage the risk;
- COSHH Data – material safety data sheets of any chemicals used;
- Engineers Report – time on site, works undertaken, engineer & supervisors signature, time off site;

To ensure that precautions continue to be carried out and that adequate information is available, a record of the assessment and precautionary measures and treatments should be kept. All records should be signed and dated by those people performing the various tasks assigned to them.

Audits would be carried out annually or as necessary by those appointed by Lambeth, e.g. Housing, Client Monitoring Officers and filed in section 4 of the Water Logbook.

A copy of the audit report would be presented to the 'Responsible Person' as detailed in Appendix 1 – Responsibility Structure and to the Corporate Occupational Health and Safety Team who will submit the report to the Corporate Joint Health and Safety Committee for information, discussion and any appropriate action required.

3.7 Training

Key personnel will be identified and provided with specialist and regular refresher training by a competent person to carry out their tasks.

Refresher training will be provided as and when required, e.g. change in regulations or Council policy and procedures.

Training Records will be kept and updated by the Learning and Development section on the Councils L & D training database.

Trained personnel will be provided with the necessary equipment to enable them carry out their duties.

3.8 Communication

Poor communication has been indicated in previous legionella outbreaks as a contributory factor. Communications and management procedures are therefore important particularly, where several people are responsible for different aspects of the operational procedures. For example, responsibility for applying precautions may change when shift-work is involved, or when the person who monitors the efficacy of a water treatment regime may not be the person who applies it. In such circumstances, responsibilities should be well defined in writing, unambiguous and audited regularly to ensure they are effective.

This also applies to communications to contractors and consultants who may be responsible for parts of the control regime.

For systems which operate automatically there may be a need to write in a callout procedure

The employment of a contractors or consultants does not absolve the duty holder of responsibility for ensuring that control procedures are carried out to the standard required to prevent the proliferation of legionella bacteria.

3.9 Information to Employees/Residents and Others

All staff and others who are involved in the running and maintenance of water systems must be given information to ensure they are aware of the risks associated with the equipment.

There is a general housekeeping protocol within this document which will help and inform residents of how best to maintain good water quality. See Appendix 10b.

All responsible persons should be identified in a written scheme which clearly states their duties and they should have access to both the Written Scheme and risk assessments held by the person responsible for water quality management as detailed in Appendix 1 for the Directorate

3.10 Corporate Health and Safety Audit

The Corporate Health and Safety Team will include a section in water quality management in their annual directorate audits to assess their compliance with the Council Water Quality Management arrangements and submit reports to the following groups:

- Senior Leadership Team
- Directorate Management Team
- Statutory Compliance Working Group
- Corporate Joint Health and Safety Committee
- Directorate Health and Safety Groups

3.11 KPI Standards

This document should form part of the Corporate and Housing Management KPI standards.

3.12 Maintenance of Policy and Arrangements

Ownership of this policy lies with the Corporate Occupational Health and Safety Team in partnership with Housing Management

The overall aim of the ongoing management of this policy and associated arrangements is to ensure that all water quality management, through use of existing procedures, re-inspections and remedial works are effectively managed across the Council to reduce identified risks to their lowest practical level.

To ensure that after initial implementation of the policy, management arrangements evolve to meet any changes in the organizations structure and working practices the policy shall be maintained, monitored and continually reviewed.

4.0 APPENDICES

Appendix 1

DETAILS OF DUTY HOLDERS

Title and contact numbers of individuals with responsibilities under this policy:

Service Area	Duty Holder	Contact Details
Service Area	Directorate Health & Safety Lead	To be confirmed After consultation
<ul style="list-style-type: none"> Resident Services Adults and Health Finance & Investment Children Services Sustainable Growth & Opportunity 	<ul style="list-style-type: none"> Nominated Director (Health & safety Lead) Resident Services Nominated Director (Health and Safety Lead) Adults and Public Health Nominated Director (Health & safety Lead) Corporate Resources Nominated Director (Health and Safety Lead) Children's Services Nominated Director (Health and Safety Lead) Sustainable Growth & Opportunity 	
<u>Others</u>		
School	<ul style="list-style-type: none"> Head Teacher/Governing Bodies 	
TMO's, TMC's & Voluntary organisations and/or partnerships.	<ul style="list-style-type: none"> Estate Managers/Board 	

Designation or Service	Nominated Person & Position.	Contact Details
Inspection of hot water storage vessels /calorifiers	Nominated Contractor	See Risk Ass.
Cleaning of hot water storage vessels /calorifiers	Nominated Contractor	See Risk Ass.
Routine Temperature Checks	Nominated Contractor	See Risk Ass.
Inspection of Cold Water Storage Tanks	Nominated Contractor	See Risk Ass.
Cleaning of Cold Water Storage Tanks	Nominated Contractor	See Risk Ass.
Inspection, cleaning and disinfection of shower heads	Nominated Contractor	See Risk Ass.
Routine Maintenance of water softeners	Nominated Contractor	See Risk Ass.
Flushing of infrequently used outlets	Nominated Contractor	See Risk Ass.
Routine Maintenance of TMV's	Nominated Contractor	See Risk Ass.
Routine Maintenance of Spa baths	Nominated Contractor	See Risk Ass.
Sprinkler and hose reel systems	Nominated Contractor	See Risk Ass.
Other Risk Systems	Nominated Contractor	See Risk Ass.

For details of responsibility pathway refer to the risk assessment pertaining to each property.

Appendix 2

NOTIFICATION FORM TO LOCAL AUTHORITIES

1. Cooling Tower Notification

All premises where cooling towers and evaporative condensers are situated must register with Lambeth Council.

Some air conditioning systems, e.g. those which use evaporative cooling, may pose potential health risks if not properly maintained.

The main purpose of the registration is to identify potential areas that could give rise to spread of infectious disease, e.g. legionella, and to ensure preventative measures are taken to eliminate the risk of such infection arising to employees and the public.

Registration is required under The Notification of Cooling Towers and Evaporative Condensers Regulations 1992.

Who to contact

London Borough of Lambeth

Neighbourhood & Growth

3rd Floor Civic Centre

6 Brixton Hill

London SW2 1EG

Phone: 020 7926 6180

foodhealthandsafety@lambeth.gov.uk

Website: www.lambeth.gov.uk

Appendix 3

RISK ASSESSMENT

- 1.1 It is a legal duty to carry out an assessment to identify and assess whether there is a risk posed by exposure to legionella from the hot and cold water system or any work associated with it. A suitable and sufficient assessment is required to identify and assess the risk of exposure to legionella bacteria from work activities and water systems on the premises and any necessary precautionary measures **in accordance with British Standard BS8580:2010**.

The risk assessment should consider all aspects of operation of the hot and cold water systems and, while there will be common factors, the individual characteristics of each system should be taken into account. Site personnel who manage the systems to determine current operational practice should be consulted. The commissioning, decommissioning, periods of operation, maintenance, treatment and subsequent management of each individual aspect of operation will require review and validation to ensure site procedures are effective.

1.2 Residential accommodation: Landlords

Landlords who provide residential accommodation, as the person in control of the premises or responsible for the water systems in their premises, have a legal duty to ensure that the risk of exposure of tenants to legionella is properly assessed and controlled. This duty extends to residents, guests, tenants and customers. They can carry out a risk assessment themselves if they are competent, or employ somebody who is.

Landlords must carry out legionella risk assessments (LRA) of the hot and cold water systems in all residential accommodation even though the risk is relatively low. Health & Safety Executive (HSE) Stated that it is permissible to produce a cloned LRA for domestic water systems in properties of a similar type.

Refer to Appendix 2.1 of HSG274 Pt2 p53/54 for further information in undertaking a *risk assessment*.

1.3 Continuity of Risk

Contractors undertaking legionella risk assessments often have their own criteria for establishing risk which often varies amongst contractors. This is because there are no known standards for contractors to work too. Therefore, in order to establish continuity of risk, we need to refer to a set of common standards.

It is difficult to establish levels of risk from a numbering system as one contractor's method of allocating a number associated to a risk is different from another's. Although risk is reflected in various ways, we prefer risk to be associated with physical conditions of distribution, plant & equipment thus having the potential to supply domestic hot and cold water that falls outside of the Water Supply (Water Quality) Regulations 2000.

Therefore, it is proposed that we refer to levels of physical risk in conjunction with British Standard BS8580:2010 only as follows:

Low – This level of risk would not have an immediate effect on water quality.

Examples:

- missing screened vent;

- not insulated;
- slight sediment;
- etc.

Medium – This level of risk could potentially have a detrimental effect on water quality within a short period i.e. 6 Months.

Examples:

- elevated stored water temperature;
- missing lid;
- short circuiting of water;
- etc.

High – This level of risk could potentially have an immediate effect on water quality.

Examples:

- heavily stagnated;
- faecal contamination from Birds;
- heavy sediment;
- advanced corrosion;
- etc.

Risk Rating	Response
Low	within 12 Months
Medium	within 6 Months
High	Immediately

Appendix 3a

ASSESSING THE RISK TO VULNERABLE GROUPS

Infection with legionella bacteria can be fatal, more so in susceptible persons; for example immuno-suppressed patients or those with other underlying disease. Certain groups of people are known to be at higher risk of contracting Legionnaires' disease; for example, men appear more susceptible than women, as do those over 45 years of age, smokers, alcoholics, diabetics and those with cancer or chronic respiratory or kidney disease.

The disease is usually diagnosed by a combination of tests. The organism may be cultured from the patient's sputum, bronchial washings or lung tissue.

Types of Properties

Lambeth Housing Regeneration and Environment buildings and plant are considered to fall into four categories for the purposes of precautions against legionella infection, these are:

a) Sheltered Accommodation

Sheltered accommodation, by definition, houses elderly tenants who are immuno-suppressed and would be susceptible to the effects of legionella bacteria, more so than a healthy individual. Lambeth Housing has a number of sheltered schemes where a duty of care needs to be prioritised for this group of tenant's and is reflected in this policy.

Purpose built accommodation predominately designed for the elderly and the infirm, often having individual self contained flats with communal services. Accommodation in sheltered housing is in unfurnished properties specially designed or adapted for elderly people. They are usually built in-groups, which we call schemes. They provide a convenient and comfortable home in a setting where tenants can continue to maintain their independence.

Tenants can come and go as they please, in an environment that is safe. Nearly all sheltered flats are one-bedroom properties. There are a few 2 bedroom properties and bedsits. All flats in one bedroom and two bedroom properties are self-contained with their own kitchen, toilet and bathroom. Only one scheme in Lambeth has shared bathing facilities. All sheltered flats are connected to an emergency alarm call system. Some sheltered properties are specially designed or adapted for people with disabilities and allow wheelchair access.

Persons risk category in sheltered accommodation is **HIGH**.

b) High Rise Structures (5+ Floors)

Many high rise flats in the Borough of Lambeth are of One, Two and Three bedroom flats. The population within these properties are classified as generally of good health with no underlying health risks that could be seriously affected by legionella bacteria. They either have a communal domestic hot and cold water service or communal cold water down service and individual hot water cylinders serving DHW to each flat. The majority of all properties have a boosted cold water supply (Drinking Water) to the kitchen of each property. Most high rise structures have a boosted cold water supply to support any fluctuations in the local water undertaker's distribution systems.

Persons risk category in high rise structures is **LOW**.

c) Low Rise Structures (<4 Floors)

Many low-rise flats in the Borough of Lambeth are also of One, Two and Three bedroom flats. The population within these properties are classified as generally of good health with no underlying health risks that could be seriously affected by legionella bacteria. They either a communal domestic hot and cold water service or communal cold water down service and individual hot water cylinders serving DHW to each flat. However unlike the high rise properties the majority of all these properties rely on the mains water pressure generated by the water undertaker. Should the water undertaker reduce pressures to 1 bar which is a legal minimum requirement this could potentially create supply problems to the third and fourth floors.

Persons risk category in low-rise structures is **LOW**.

d) Hostels

Hostels vary in the kind of accommodation that they offer. Some are for men or women only, some take married couples and a few may accept families with children. Residents within Hostels are deemed as 'vulnerable' by the Council. This can be due to health conditions amongst other things. We have a mixture of male only, female only and hostels for singles and families. It would be reasonable to assume that the incidents of immune-suppression would be higher than the average population. It is very likely that at any time we may have residents who would therefore be considered as high risk in relation to legionella susceptibility.

Persons risk category in hostel accommodation is **HIGH**.

e) Voids

Properties that are void for periods of more than one week need to have the faucets flushed weekly in order to reduce the risk of contamination of otherwise stagnant water held in the distribution system(s). Prior to occupancy, the housekeeping protocol needs to be undertaken to ensure safe water systems for the new tenants. See Appendix 10a.

Persons risk category in void accommodation is **HIGH**.

f) Houses

These properties refer mainly to 1, 2, 3, or 4 Bedroom Houses with their own street entrance and individual systems for generating hot and cold water. Whilst the risk is deemed low in these types of properties as the turnover of water is generally regarded as high due to low volumes of storage. Lambeth Council still has a duty of care to ensure that the quality of water delivered complies with all current regulations. In order to address this, a sample of Houses would be inspected each year across the Borough.

Persons risk category in Houses is **LOW**

g) Parks & Fountains

Whilst parks & fountains do not represent a structure, they do present a potential risk for the dissemination of legionella bacteria in recreational areas. Risk assessments do need to be carried out in these areas in order for a water safety plan to be introduced, managed on a continuous basis.

Persons risk category in Parks and Recreational Areas is **HIGH**

h) Schools, Nurseries etc.

The occupants categorised in these types of structure represent young children and therefore present a higher risk. Schools and nurseries close for periods of time during holidays so any risk assessment must make allowances for this in the water safety plan.

Persons risk category in Schools & Nurseries is **HIGH**.

i) Community Halls & Leisure Facilities

The complexity of these structures can vary greatly from a small community centre to a large leisure complex. Any risk assessment must consider all features that pose a potential risk for the dissemination of legionella bacteria along with the demographic of the occupants.

Persons risk category in Community Halls & Leisure Complex is **HIGH**.

RISK RATINGS

POTENTIAL SEVERITY	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5

PROBABILITY

Potential Severity

5	=	Fatality
4	=	Major
3	=	Minor
2	=	Negligible
1	=	None

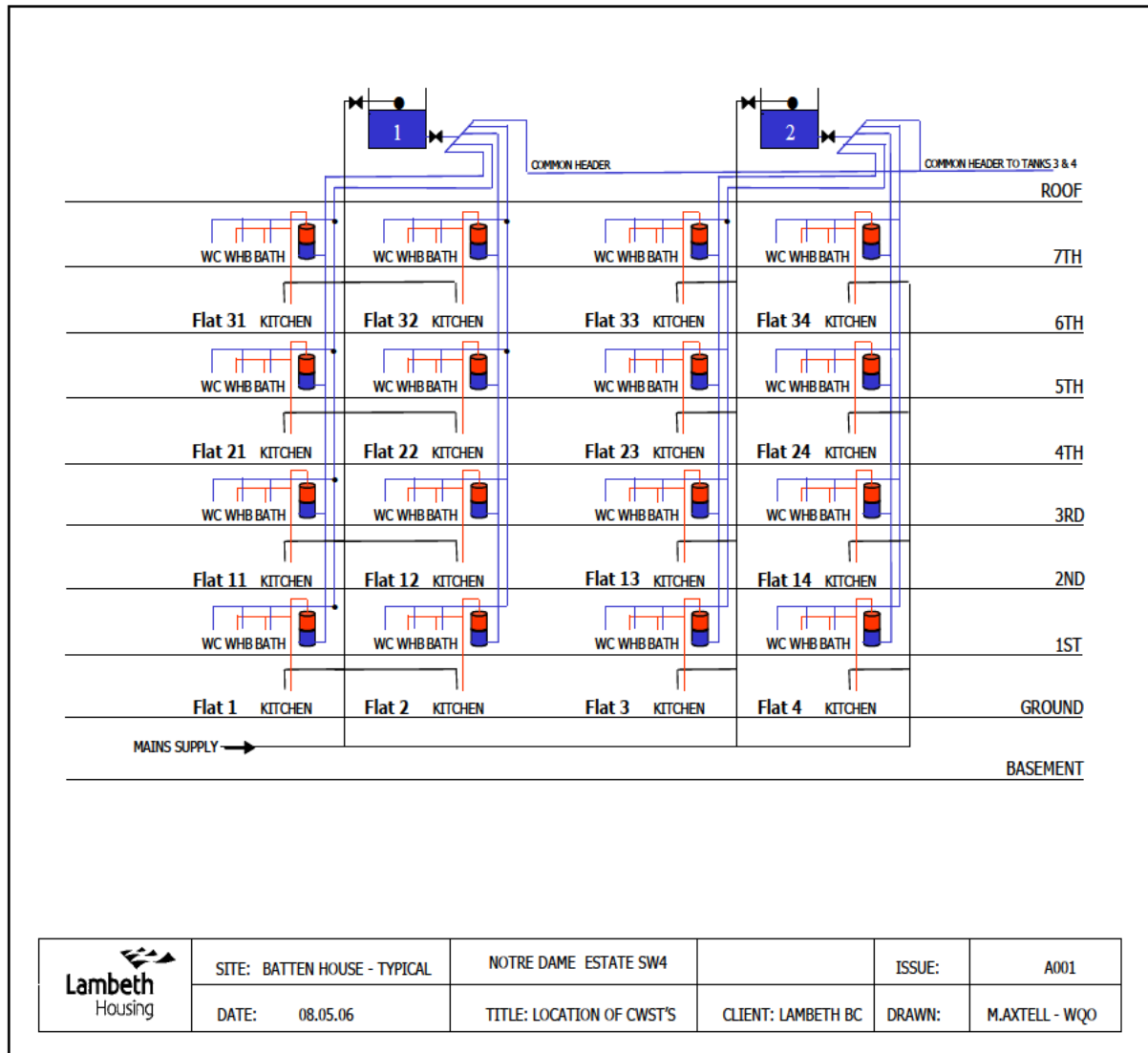
Overall Risk Rating

1-6	Low
8-12	Medium
15-25	High

POTENTIAL SEVERITY X PROBABILITY = RISK RATING

Appendix 3b

EXAMPLE OF SCHEMATIC REQUIRED AS PART OF RISK ASSESSMENTS



All records should be signed by those performing the various tasks assigned to them. These records shall be retained for five years.

Appendix 4

LEGIONELLA POSITIVE/OUTBREAK PROCEDURE

A clear understanding has to be made between a legionella sample proving positive and an outbreak situation. An outbreak is defined by the Public Health Laboratory Service (PHLS) as two or more confirmed cases of legionellosis occurring in the same locality within a 6-month period. Location is defined in terms of the geographical proximity of the cases and requires a degree of judgement. It is the responsibility of the Proper Officer for the declaration of an outbreak. The Proper Officer is appointed by the local authority under public health legislation and is usually a Consultant in Public Health Medicine (CPHM) employed by the Health Board and acting as Designated Medical Officer for the local authority.

In the event of a suspected outbreak, Lambeth Council's appointed outbreak Control Team will lead on the investigation and other procedures.

Positive Legionella Sample:

Should a water sample prove positive, taken directly by anyone representing Lambeth Housing i.e. Agency Staff, Contractors, Employees or Consultants they are to inform the Nominated Responsible Person (NRP) as detailed in section 1 – Responsibility Structure. The (NRP) will communicate with the competent persons as detailed in Section 1 and will instruct in accordance with table 4 below, until system(s) are verified clear of legionella bacteria. All correspondence to be filed in the Water Logbook for audit purposes.

Table 2.2 HSG274 Pt2: Action levels following legionella sampling in hot and cold water systems.

Legionella bacteria(cfu/litre)	Action required
More than 100 but less than 1000	Either: (a) If the minority of samples are positive, the system should be re sampled. If similar results are found again, a review of the control measures and risk assessment should be carried out to identify any remedial actions necessary or (b) If the majority of samples are positive, the system may be colonised, albeit at a low level. An immediate review of control measures and risk assessment should be carried out to identify any other remedial action required. Disinfection of the system should be considered.
More than 1000	The system should be re sampled and an immediate review of the control measures and risk assessment carried out to identify any remedial actions, including possible disinfecting of the system. Retesting should take place a few days after disinfection and at frequent intervals afterwards until a satisfactory level of control is achieved.

Legionella Outbreak: See flowchart Appendix 4a

As part of the outbreak investigation and control, the following requests and recommendations may be made by the enforcing authority.

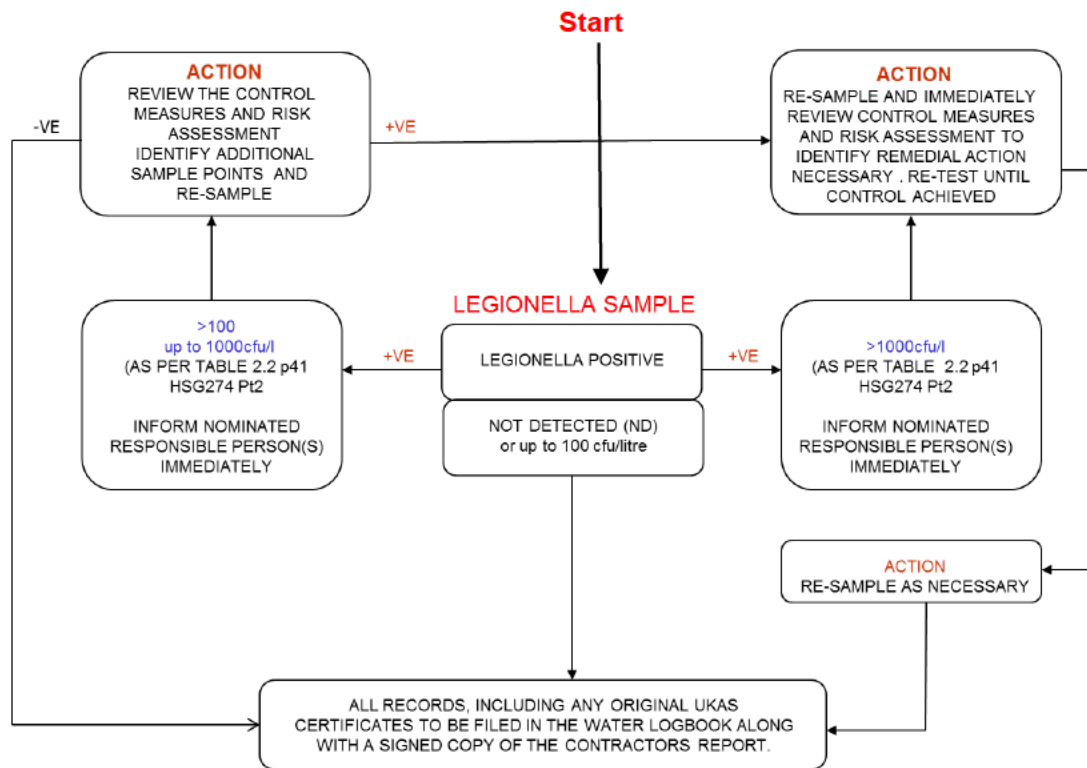
- (a) To shut down any processes that are capable of generating and disseminating airborne water droplets and keep them shut down until sampling procedures and any remedial cleaning or other work has been carried out. Final clearance from the Proper Officer to be sought prior to the reinstatement of plant.
- (b) To take water samples from the system before any emergency disinfecting being undertaken. The investigating officers from the local authority may take samples or require them to be taken.
- (c) To provide staff health records to discern whether there are any further undiagnosed cases of illness and to help prepare case histories of the people affected.
- (d) To co-operate fully in an investigation of any plant that may be suspected of being involved in the cause of the outbreak, for example:
 - tracing of all pipe work runs;
 - detailed scrutiny of all operational records;
 - statements from plant operatives and managers;
 - statements from water treatment / term contractors or consultants.

Any infringements of relevant legislation may be subject to a formal investigation by the appropriate enforcing authority.

Legionnaires' disease is not notifiable under public health legislation in England and Wales.

Appendix 4a

LEGIONELLA POSITIVE ACTION FLOWCHART FOR DOMESTIC HOT AND COLD WATER SYSTEMS



DISCLAIMER

The above flow chart is generic and therefore, should only be used as a guide. It should be interpreted with guidance from qualified person(s) on a case by case basis. Issue 07/14
The above flowchart is based on information pertaining to HSG274 Part 2 – Domestic Hot & Cold Water Systems.

Appendix 5

Table 1.1

CHECKLIST FOR COOLING WATER INSTALLATIONS

Service	Task	Frequency
Cooling towers and evaporative condensers	Monitor water quality, water use and biocide/chemical use to assess and ensure effectiveness of water treatment regime, including key chemical and microbiological parameters, and observations of internal condition of pond, pack and water.	See Table(s) 1.8 & 1.9 of HSG274 Pt1 Link to HSG274 Pt1
	Central control function, conductivity sensor calibration blow down function, uniformity of water distribution, condition of sprays/troughs, eliminators, pack, pond, immersion heater, fans and sound attenuators.	Monthly to three monthly, according to risk
	Clean and disinfect cooling towers/evaporative condensers make-up tanks and associated systems, including all wetted surfaces, descaling as necessary. Packs should be removed and cleaned where practicable.	Monthly to three monthly, according to risk

Refer to Notification of Cooling Towers and Evaporative Condensers Regulations 1992 as detailed in Appendix 2.

Appendix 6

Table 2.1 (HSG274) Pt2

CHECKLIST FOR HOT AND COLD WATER SERVICES

Service	Task	Frequency
Hot water services	Arrange for water samples to be taken from hot water calorifiers, in order to note condition of drain water	Annually
	Check temperatures in flow and return at calorifiers	Monthly
	Check water temperatures up to one minute to see if it has reached 50°C in the sentinel Taps	Monthly
	Visual check on internal surfaces of calorifiers for scale and sludge. Check representative taps for temperature as above on a rotational basis	Annually
Cold water services	Check tank water temperature remote from ball valve and mains temperature at ball valve. Note maximum temperatures recorded by fixed max/min thermometers where fitted	Six monthly
	Check that temperature is below 20°C after running the water for up to two minutes in the sentinel taps	Monthly
	Visually inspect cold water storage tanks and carry out remedial work where necessary. Check representative taps for temperature as above on a rotational basis	Annually
Shower heads	Dismantle, clean and descale shower heads and hoses	Quarterly or as necessary
Little-used outlets	Flush through and purge to drain, or purge to drain immediately before use, without release of aerosols	Weekly

Appendix 7

Table 3.1 (HSG274) Pt3

CHECKLIST FOR OTHER RISK SYSTEMS

Service	Task	Frequency
Ultrasonic humidifiers/foggers and water misting systems	If equipment fitted with a UV light(s), check to ensure effectiveness of lamp (check to see if within working life) and clean filters	Six monthly or according to manufacturer's instructions
	Ensure automatic purge of residual water is functioning	As part of machinery shut down
	Clean and disinfect all wetted parts	As indicated by risk assessment
	Sampling for legionella	As indicated by risk assessment
Spray humidifiers, air washers and wet scrubbers	Clean and disinfect spray humidifiers/air washers and make-up tanks including all wetted surfaces, descaling as necessary	Six monthly
	Confirm the operation of non-chemical water treatment (if present)	Weekly
Water softeners	Clean and disinfect resin and brine tank – check with manufacturer what chemicals can be used to disinfect resin beds	As recommended by manufacturer
Emergency showers and eye wash sprays	Flush through and purge to drain	Six monthly or more frequently if recommended by manufacturer
Sprinkler and hose reel systems	When witnessing tests of sprinkler blow down and hose reels ensure that there is minimum risk of exposure to aerosols	As directed
Spa baths	Check filters – sand filters should be backwashed daily	Daily
	Check water treatment – pools should be continuously treated with an oxidising biocide	Three times daily
	Clean and disinfect entire system	Weekly
Indoor fountains and water features	Clean and disinfect ponds, spray heads and make-up tanks including all wetted surfaces, descaling as necessary	Internal depending on condition

Appendix 8

CLEANING & DISINFECTION PROCEDURE FOR DOMESTIC HOT & COLD WATER SYSTEMS

Hot water services and, exceptionally, cold water services, should be cleaned and disinfected in the following situations:

1. If routine inspection shows it to be necessary;
2. If the system or part of it has been substantially altered or entered for maintenance purposes in a manner which may lead to contamination; or
3. During or following an outbreak or suspected outbreak of legionellosis.

Disinfection of the water services may be carried out in two ways:

1. By use of suitable chemical disinfectants (e.g. chlorination) (see BS6700: 1997) when it is necessary to disinfect the whole system including storage tanks; or
2. By thermal disinfection, i.e. by raising the water temperature to a level at which legionella will not survive.

Chemical Disinfection

Before chemical disinfection is carried out it is essential that the system is clean and it is important to ensure that all parts of the system are disinfected, not simply restricting it to those parts which are readily accessible.

Chemical disinfection is usually carried out by chlorinating the water in the cold water storage tank to 20–50 mg/litre free residual chlorine. The chlorinated water is then allowed to flow to all parts of the system by successively opening the outlets in the system, e.g. taps and showers (until there is an odour of chlorine), then closing them and leaving the system to stand for an appropriate contact time.

The contact time will vary depending on chlorine concentration (from at least one hour at 50mg/litre to at least two hours at 20mg/litre). The required concentration should be maintained in the header tank throughout the chlorination procedure. The chlorine concentration should be monitored throughout disinfection to ensure that there is sufficient residual chlorine level. Lower concentrations and longer contact times are considered acceptable, as set out in BS 8558.

The system should be neutralized and thoroughly flushed following chlorination. As an alternative method appropriate concentrations of chlorine dioxide (as recommended by the manufacturer), may also be used as a disinfectant.

Thermal Disinfection

Thermal disinfection can be carried out by raising the temperature of the whole of the contents of the calorifier then circulating this water throughout the system for at least an hour. To be effective, the temperature at the calorifier should be high enough to ensure that the temperature at the taps and appliances does not fall below 60°C. Each tap and appliance should be run sequentially for at least five minutes at the full temperature, and this should be measured. For effective thermal disinfection the water system needs to be well insulated.

The risk of scalding should be considered and in particular care taken to ensure that the water services are not used, other than by authorised personnel, until water temperatures have dropped to within 'normal' operating ranges.

Appendix 9

RESPONSIBILITY PATHWAY

Site Name:	
Site Address:	
Site Telephone No.:	

	<u>Name</u>	Position	Address/Tel No.
Duty Holder:			
Responsible Person(s):			
Nominated Responsible Person(s) for Day-to-Day Management.			
Housekeeping:			
Water Treatment Company: (Consultants)			

Note: The above Responsibility Pathway and Job Titles may vary depending on the individual site/customer structure. This section is completed to the best of our knowledge at the time of the survey.

Void Housekeeping Protocol



• All hot and cold taps to be run for 1 minute	
• All faucets to be de-scaled and disinfected with a proprietary solution	
• WC to be flushed a couple of times	
• Shower head to be de-scaled and disinfected with a proprietary solution	
• Shower head to be removed and flushed direct to drain at the maximum temperature for 1 minute	

The above tasks are to be recorded in the site Water Log book.

Note: The above tasks are also to be carried out when a room has been vacated for more than 1 week and MUST be carried out prior to occupancy.

If whilst undertaking the above tasks there are any concerns these are to be reported to your line manager.

This document should always be used in conjunction with the corporate Water Quality Policy.

General Housekeeping Protocol



Dear Resident,

The water in London is naturally hard and as a result can leave scale deposits on our taps and shower head.

In order to maintain good water quality these scale deposits need to be removed and disinfected with a regular household brand of cleaning fluid from your local supermarket.

Should your property be vacated for long periods, e.g. holidays or hospitalisation, the taps need to be flushed through on a weekly basis to avoid stagnation of water in the pipe work.

Should you require any further information please contact your local housing officer.

Appendix 11

REFERENCE DOCUMENTS

Legionnaires' disease: The control of legionella bacteria in water systems.
Approved Code of Practice L8 (Fourth edition) HSE Books 2013
www.hse.gov.uk/pubns/books/l8.htm

Health and Safety at Work etc Act 1974 (c 37) The Stationery Office 1974
ISBN 978 0 10 543774 1

Hazardous substances at work: A brief guide to COSHH Leaflet INDG136(rev5)
HSE Books 2012 www.hse.gov.uk/pubns/indg136.htm

The Notification of Cooling Towers and Evaporative Condensers Regulations 1992
SI 1992/2225 The Stationery Office

Reporting accidents and incidents at work: A brief guide to the Reporting of Injuries, Diseases and
Dangerous Occurrences Regulations (RIDDOR) Leaflet
INDG453(rev1) HSE Books 2013 www.hse.gov.uk/pubns/indg453.htm

Consulting workers on health and safety. Safety Representatives and Safety Committees
Regulations 1977 (as amended) and Health and Safety (Consultation with Employees) Regulations
1996 (as amended). Approved Codes of Practice and guidance L146 (Second edition) HSE Books
2012 ISBN 978 0 7176 6461 0
www.hse.gov.uk/pubns/books/l146.htm

BS 8580 Water quality. Risk assessments for Legionella control. Code of practice British Standards
Institution

Guide to risk assessment for water services The Water Management Society
www.wmsoc.org.uk/publication.html

A Recommended Code of Conduct for Service Providers
The Legionella Control Association 2013
www.legionellacontrol.org.uk.

Water Fittings and Materials Directory Water Regulations Advisory Scheme
www.wras.co.uk/Directory

BS 6920-2-1+A3 Suitability of non-metallic products for use in contact with water intended for human
consumption with regard to their effect on the quality of the water. Methods of test British Standards
Institution

Health and safety in care homes HSG220 HSE Books 2001
ISBN 978 0 7176 2082 1 www.hse.gov.uk/pubns/books/hsg220.htm

Water systems: Health Technical Memorandum 04-01: The control of Legionella, hygiene, 'safe' hot
water, cold water and drinking water systems
Department of Health 2006

Scottish Health Technical Memorandum 04-01 Health Facilities Scotland
www.hfs.scot.nhs.uk/publications-1/engineering/shm-04-01/

Water Supply (Water Fitting) Regulations 1999 SI 1148/1999
The Stationery Office

Water Byelaws 2004 Scottish Water
www.scottishwater.co.uk

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Legionnaires' disease Page 63 of 65

BS 3198 Specification for copper hot water storage combination units for domestic purposes
British Standards Institution

Managing health and safety in construction. Construction (Design and Management) Regulations 2007. Approved Code of Practice L144 HSE Books 2007 ISBN 978 0 7176 6223 4
www.hse.gov.uk/pubns/books/l144.htm

Approved Documents for Building Regulations in England and Wales:
www.planningportal.gov.uk/buildingregulations/

Approved Documents for Building Regulations in Scotland:
www.scotland.gov.uk/Topics/Built-Environment/Building/Building-standards

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