WATER HYGIENE, AIR CONDITIONING & LEGIONELLA POLICY

<table>
<thead>
<tr>
<th>Document Type</th>
<th>Corporate Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique Identifier</td>
<td></td>
</tr>
<tr>
<td>Document Purpose</td>
<td>This policy sets out the standards for ensuring that Worcestershire Health and Care NHS Trust meet the Statutory requirements to ensure protection for all staff, patients and visitors from the Legionella Bacteria</td>
</tr>
<tr>
<td>Document author</td>
<td>Derek Carter</td>
</tr>
<tr>
<td>Target Audience</td>
<td>All staff who are involved the design, installation and maintenance of the water systems within the Trust</td>
</tr>
<tr>
<td>Responsible Group</td>
<td>Health and Safety Committee.</td>
</tr>
<tr>
<td>Date Ratified</td>
<td>January 2014</td>
</tr>
<tr>
<td>Expiry Date</td>
<td>January 2017</td>
</tr>
</tbody>
</table>

The validity of this policy is only assured when viewed via the Facilities section on the Worcestershire Health and Care NHS Trust website (hacw.nhs.uk). If this document is printed into hard copy or saved to another location, its validity must be checked against the unique identifier number on the internet version. This internet version is the definitive version.
## Version History

<table>
<thead>
<tr>
<th>Version</th>
<th>Circulation Date</th>
<th>Job Title of Person/Name of Group Circulated to</th>
<th>Brief Summary of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 1</td>
<td>2012</td>
<td>Estates &amp; Facilities Department, Tracy Owen</td>
<td>Draft</td>
</tr>
<tr>
<td>Version 2</td>
<td>2012</td>
<td>Estates &amp; Facilities Department, Tracy Owen</td>
<td>Sections of text removed to form separate Written Scheme</td>
</tr>
<tr>
<td></td>
<td>Aug 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aug 2013</td>
<td>Mark Fenton, Head of Estates &amp; Facilities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aug 2013</td>
<td>Tracy Owen, Health, Safety &amp; Security Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Aug 2013</td>
<td>Greg Burgess Risk Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Infection Prevention and Control.</td>
<td></td>
</tr>
<tr>
<td>Version 4</td>
<td>May 2014</td>
<td>Estates and Facilities Department</td>
<td>Inclusion of HSG 274 reference</td>
</tr>
</tbody>
</table>
### INDEX

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy</td>
<td>4</td>
</tr>
<tr>
<td>1. Management Arrangements</td>
<td>5</td>
</tr>
<tr>
<td>2. Risk Management</td>
<td>10</td>
</tr>
<tr>
<td>3. Risk Management Plan</td>
<td>12</td>
</tr>
<tr>
<td>4. Design, Construction, Commissioning &amp; Handover</td>
<td>12</td>
</tr>
<tr>
<td>5. Maintenance and Occupation</td>
<td>15</td>
</tr>
<tr>
<td>6. Management Review</td>
<td>19</td>
</tr>
<tr>
<td>7. Records</td>
<td>21</td>
</tr>
<tr>
<td>8. Schematics</td>
<td>22</td>
</tr>
<tr>
<td>9. Technical Procedures</td>
<td>23</td>
</tr>
<tr>
<td>10. Pseudomonas Aeruginosa</td>
<td>26</td>
</tr>
<tr>
<td>11. Air Conditioning</td>
<td>26</td>
</tr>
<tr>
<td>12. References</td>
<td>26</td>
</tr>
<tr>
<td>13. Appendices</td>
<td></td>
</tr>
<tr>
<td>1. Key Personnel</td>
<td>27</td>
</tr>
<tr>
<td>2. Maintenance Regime</td>
<td>28</td>
</tr>
<tr>
<td>3. Checklist for New Water System Designs</td>
<td>29</td>
</tr>
<tr>
<td>4. Record Keeping Forms</td>
<td>31</td>
</tr>
<tr>
<td>5. Guidelines for Investigating Single Hospital Cases of Legionnaires</td>
<td>32</td>
</tr>
<tr>
<td>6. Emergency and Outbreak Actions</td>
<td>33</td>
</tr>
<tr>
<td>14. Consultation Checklist</td>
<td>35</td>
</tr>
</tbody>
</table>
Policy

The Worcestershire Health & Care NHS Trust places the highest priority on the safe management of air conditioning and water systems, to minimise the risk from LEGIONELLOSIS to patients, staff, visitors and others, recognising the particular risks associated with healthcare premises.

Air conditioning and water systems of the Trust are managed by the Estates Department under the direction of the Responsible Person (Water) in accordance with the guidance given in the Health Technical Memoranda (HTM) 04-01: ‘The control of Legionella, hygiene, ‘safe’ hot water, cold water and drinking water systems, and the relevant Health and Safety Executive publications, in particular L8: The control of Legionella bacteria in water systems and the Technical Guidance

A management structure is identified with responsibility for the implementation and management of the policy, the Head of Estates & Facilities being the Responsible Person (Water) as described in HTM04-01. The Deputy Responsible Person is the Estates Officer (Statutory). The Director of Resources ensures that funding is in place to ensure the necessary training and the rectification of defects identified during the Risk Assessment enabling the Estates department to meet its statutory obligations. The Head of Estates & Facilities ensures the department has the necessary capabilities to meet the legal requirements.

Risk assessments are carried out in accordance with L8 on all systems that may present a risk of legionellosis and a Written Scheme (W.S.) is produced to manage this risk for each property.

The risk of legionellosis is minimised by a systematic management of design, installation, maintenance and operation of risk systems as detailed in the W.S.

The procedures in the W.S. detail the responsibilities and safe systems of work for the operation of the various at risk systems.

Appropriate training and guidance is given to all persons using or working with water systems and air conditioning systems so that they are aware of the requirements of the Operational Policy and implement the appropriate safe systems to work. Training records are kept of all Legionella training.

Appropriate records are maintained at each property in accordance with the guidance given by the Health and Safety Executive.
1. Management Arrangements

General

The Chief Executive of Worcestershire Health & Care NHS Trust (WHCT) has overall accountability for all aspects of the quality of water supplies.

All relevant persons shall fully appreciate the actual and potential risks of legionella and the concept of risk management. Although compliance with the guidance may be delegated to staff, or undertaken by contract, accountability cannot be delegated.

A list of persons appointed is shown as Appendix 1. Key Personnel

Objective

The objective of these procedures is to reduce risk from legionella bacteria as far as is reasonably practicable by ensuring the provision of safe risk systems through proper design, installation, operation and maintenance.

In order to comply with the legal duties under the Management of Health & Safety at Work Regulations and more specifically under the Control of Substances Hazardous to Health Regulations, WHCT must (with respect to the risk of legionellosis):

a. appoint persons to be managerially responsible;
b. identify and assess sources of risk;
c. prepare a written scheme for preventing or controlling the risk;
d. implement and manage precautions;
e. maintain records of the precautions implemented.

The policy identifies the Head of the Estates & Facilities Department as the Responsible Person (Water) for the risk systems with roles and responsibilities as described in HTM04-01: The control of legionella, hygiene, ‘safe’ hot and cold water as well as drinking water systems. The control of the day to day contract/maintenance works will be the responsibility of the Deputy Responsible Person (Water) the Estates Officer (Statutory) currently D Carter.

Scope

The policy covers all risk systems in premises owned or managed by the Worcestershire Health & Care NHS Trust.
**Risk System** is a term used for the purpose of the policy and these procedures to describe systems that may present a foreseeable risk of legionellosis. These include:

- a. Water systems incorporating a cooling tower, (Note: Currently the trust does not have any evaporative cooling towers).
- b. Water systems including an evaporative condenser for air conditioning purposes; (Note: No evaporative condensers have been identified to the Estates Department).
- c. Hot and cold water services;
- d. Other plant and systems containing water which is likely to exceed 20°C and which may release a spray or aerosol (i.e. a cloud of droplet nuclei) during operation or when being maintained. (For example water fountains, water hoses)

All persons who manage or operate risk systems for WHCT are to be aware of their duties and that the agreed procedures are carried out to maintain a safe environment for patients, visitors and staff, and to take responsibility for their own health, safety and welfare – and those who may be affected by their activities.

This document indicates the requirements of the Trust; any departures from the policy must be documented and agreed with the Responsible Person (Water) or the Estates Officer (Statutory).

**NOTE:** the use of evaporative cooling towers and condensers is not permitted within WHCT.

**Specific management responsibilities**

**Responsible Person (WATER)**

The Responsible Person (Water) is appointed in writing and is required to liaise closely with other professionals in various disciplines. The Responsible Person (Water) has the responsibility to ensure that the following items are in place:

- a. That potential areas of risk and identification of where systems do not comply with the guidance;
- b. Liaising with the water undertaker and ensure that equipment that is permanently connected to the water supply is properly installed;
- c. Advising on the necessary continuing procedures and actions for the prevention or control of legionella;
- d. Monitoring the implementation and efficacy of these procedures and actions;
- e. Approving and identifying any changes to those procedures and/or actions;
- f. Maintaining and co-ordinating adequate records;
- g. The Trust has specialist competent help to assist the Estates Department;
- h. All necessary actions should an outbreak of Legionnaires’ disease be suspected are carried out.
The Responsible Person appoints at least one deputy to whom delegated responsibility may be given. The deputy will act on behalf of the Responsible Person in their absence.

The responsible person informs the Infection Prevention Control Department of any unsatisfactory plant or system performance that may affect legionellosis/water hygiene risk.

RESPONSIBLE PERSON WATER: Head of Estates & Facilities

DEPUTY RESPONSIBLE PERSON (WATER) Estates Officer (Statutory)

Infection Prevention and Control Department (Water)

The Infection Prevention and Control (IPC) Team will co-chair a water group if indicated by any deviation from acceptable norms are highlighted relating to water quality; sample results or plumbing work is undertaken. The Estates Officer (Statutory) will chair this meeting.

The function of the IPC Department is to:-

a. advise on potential risks to patient groups and also treatments offered within a setting;

b. advise on the continuing procedure for the prevention and/or control of legionellae;

c. carry out the necessary action if an outbreak of legionnaire’s disease is suspected;

d. advise on the location of “high risk” patient services (the Trust does not provide any augmented care services as discussed in HTM 04-01 addendum;

e. provide information to clinical staff on best practice advice relating to all clinical hand wash basins in healthcare facilities;

f. consider water safety when involved in planning of new builds and refurbishment projects;

g. promote best practices through a programme of infection prevention and control audits;

h. review routine sampling results making recommendations on management.

The IPC Department informs the Responsible Person (Water) or their Deputy if circumstances change within any ward/department that might affect legionellosis/water hygiene risk.

Those persons with key management responsibilities and their lines of communication with respect to each other and other relevant supporting staff are represented below:-

Roles and responsibilities of other staff

Estates/Engineering Professionals and Managers

Specialist professionals shall ensure that they follow the guidance laid down in this document and the relevant primary reference publications upon which this is based. They shall also ensure that they are fully aware of current legislation, by attending relevant awareness and training sessions. In particular, these professionals shall report any defects, suspicions or concerns regarding the design, condition, operation or performance of water systems that might increase the risk of legionella proliferation. Records of all actions taken with respect to legionella control shall be generated and maintained.
Design Professionals and Managers

The design of new and refurbished water systems shall follow the guidance contained within this document or W.S., e.g. see Design Control. Note: A Written Scheme (WS) is produced for each site and includes a schematic of the site water system. This applies whether design is undertaken by staff internal to WHCT or by external consultants. The person commissioning external designers is responsible for ensuring the design requirements of the Policy and W.S. are met.

Building Occupiers e.g. Departmental Managers

Managers of departments have control over the use of water in their department. Likewise these managers hold the legal consequences of the operational aspects of Legionella control. In order to fulfil their legal obligations, departmental managers should follow the guidance contained within this document. In particular, these managers ensure that all water outlets are used at least twice weekly (daily in “high risk” areas) or permanently removed; report any defects, suspicions or concerns regarding the design, condition, operation or performance of water systems that might increase the risk of legionella proliferation; keep relevant records; and attend legionella awareness/training sessions.

A guidance note is issued to inform all staff and especially managers of these requirements.

Managers must report department/ward closures to the Responsible Person (Water) or their nominated Estates Officer and to the Infection Prevention and Control Department.

Trades Staff

Trades staff, whether employed or contracted, shall conduct all of their water system related tasks in accordance with the Policy and W.S. documents and the requirements of the Planned Preventative Maintenance system. In particular, trades staff members shall employ their highest standards of workmanship; use only WRAS approved materials when working on water systems; report any defects, suspicions or concerns regarding the design, condition, operation or performance of water systems that might increase the risk of legionella proliferation; keep relevant records; and attend legionella awareness/training sessions. Where blind ends (i.e. blanked-off pipes that do not serve outlets) are found they should be reported to the Responsible Person or their Deputy.

All other relevant staff

Any staff members that can affect legionellosis risk (installing drinks machines, water coolers, etc) shall conduct their tasks in accordance with this guidance; report any defects, suspicions or concerns regarding the design, condition, operation or performance of water systems that might increase the risk of Legionella proliferation; keep relevant records; and attend legionella awareness/training sessions. Where blind ends (i.e. blanked-off pipes that do not serve outlets) or under-utilised outlets are found they should be reported to the Responsible Person (Water) or their nominated Estates Officer.
Employee Consultation

Employees are consulted via the Health & Safety Committee regarding the assessment and control measures. Additionally each risk assessment/risk minimisation scheme report for the organisation shall include an Employee Summary for dissemination to unions/employees at the discretion of the Responsible Person (Water).

Competent Assistance

The Responsible Person (Water) or the Estates Officer (Statutory) shall seek the advice and assistance of an independent environmental consultant to undertake such tasks as:-

- Risk assessment;
- Management audit;
- Review
- Updating of policy and procedures;
- Training. Appropriate records are to be maintained of all personnel who undergo training.

Copies of the Policy and Procedures, and advice on their implementation are available from the WHCT intranet or through the Estates Department.

Advice on risk system design and other technical issues is provided by the IPC Department, the Estates Department, or through them by appropriate engineering consultants

Guidance is also issued by the Health and Safety Executive: notably

Also advice on the trust’s legal responsibilities is available from the H&S Management Guidelines.
2: Risk Management

Audit

An annual legionellosis risk management audit is undertaken in order to ascertain the effectiveness of the broad management arrangements. The methodology for audit may vary from year-to-year in order to ensure a fresh outlook on each occasion. The audit report includes recommendations for improvement and forms part of the legionellosis risk management system. (Note: This is not a Risk Assessment. Such assessments are carried out every 2 years).

Risk Screening

Prior to the carrying out of on-site risk assessments, a risk screen may be performed in order to prioritise the water systems for detailed risk assessment, in order that the potentially highest risk systems are surveyed first.

Confined Spaces

Advice can be sought from Safe Work in Confined Spaces Approved Code of Practice, Regulations and Guidance (L101) if any plant is located in confined spaces or is itself a confined space (such as a tank).

Estates will provide a Confined Spaces Permit to allow work to proceed subject to important criteria being met.

Control of Substances Hazardous to Health

Water treatment chemicals, including chlorine-containing chemicals and solutions, are often toxic or corrosive. They should be used cautiously to ensure that they do not endanger the users or other occupants of the building. Appropriate chemical resistant gauntlet type gloves will be required. Water treatment should be carried out by, or under the direction of, people who are suitably qualified and experienced.

The use of water treatment chemicals should be subject to a COSHH assessment and permission would be required from the water authority prior to any discharge to sewers, storm water drains and watercourses. The Environment Agency should be contacted prior to direct discharge to water courses.

Scalding

WHCT will ensure that all that is reasonably practicable will be done to follow the requirements of HTM.04-01 in respect of controlling scalding risk.
Risk assessment

The Responsible Person (Water) undertakes a formal review of legionellosis risk assessment under the following circumstances:

- Every two years
- Whenever there is a reason to believe the latest risk assessment may no longer be valid e.g. due to a change of building use or a change in the water system such as a new tank;

The Review risk assessment shall be based on the on-site re-assessment of risk carried out on an annual basis for premises with high vulnerability occupants and every two years for other premises. Desk based review of risk assessments is also undertaken on a quarterly basis.

At the time of each risk assessment, schematics of hot and cold water systems are checked to show that they are up to date and the existence of water connections to outside services is checked.

The Responsible Person (Water) shall ensure that risk assessment:

- Is undertaken employing competent assistance, registered with the Legionella Control Association;
- Identifies and evaluates potential sources of risk;
- Encompasses all buildings and all water systems.
3: Risk Management Plan

Action Plan

The risk assessment shall form the basis of an Action Plan with the W.S. describing the particular means by which the risk from exposure to legionella is to be controlled. The remedial actions within the Action Plan shall be reasonably practicable and prioritised on the basis of risk, cost and difficulty. Adequate funding must be made available to carry out any remedial work highlighted by the Risk Assessment and for training purposes.

Procedures

The policy and procedures documents are distributed internally by the Responsible Person (Water), to those persons with responsibilities for legionellosis risk management, and made available through the Trust website.

Training, Competence and Contractors

The Estates Department will provide legionellosis risk management training to its staff, appropriate to the responsibilities of each staff member. For example technical and procedural training is provided to trades staff. The Responsible Person (Water) is to be provided with training specific to their legionellosis risk management role and responsibilities. Attendance at training will be recorded.

Contracts for third parties will clearly define the responsibilities of both parties.

4: Design, Construction, Commissioning and Handover

Design Control

In order to avoid potentially costly remedial works, the design of new buildings and their water systems is controlled in order to “get it right first time”. The checklist provided in Appendix 3, is based on some of the questions contained within an audit checklist used by HSE inspectors. The checklist should be used by relevant Estates staff and or supplied to design consultants in order that they may check their own designs. This checklist is not a design brief and is not intended to deal with all potential issues, but as a management check. If these issues are incorrect it is likely that other aspects of the design are also not compliant with good or best practice.

The design and installation of the cold and hot water services, and associated plant and equipment, in new, upgraded or refurbished premises will comply with:-

b. BS6700:2006 British Standard Specification for design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages.

The following documents will be consulted for guidance for the general design and operation of water systems on WHCT premises:

a. HSE Approved Code of Practice (L8) – “Legionnaires’ disease: the control of legionella bacteria in water systems” and the Technical Guidance Parts 1, 2 and 3.


d. HSG 274: Legionnaires’ disease Technical guidance (2014)

e. HTM O4-01 Managing Pseudomonas aeruginosa in healthcare settings (2013)

Copies of these documents are held by the Estates Department and Project staff but should be readily available to competent design practices.

When new designs are produced, consideration is made of the impact of new technologies/techniques and their impact on water consumption.

**Water Supply (Water Fittings) Regulations 1999**

On 1 July 1999, the Water Supply (Water Fittings) Regulations replaced the Water Byelaws in governing the prevention of waste, misuse, undue consumption and contamination of public water supplies in domestic and commercial plumbing installations and represent important protection for public health and the environment. The Regulations are based on performance standards, e.g. British Standards, European Standards being maintained under the Construction Products Directive. The Regulations are not retrospective and so will not apply to water fittings that were installed in accordance with the Byelaws before 1 July 1999.

The Regulations are enforced by water companies, and further advice should be sought from them or from the Water Regulations Advisory Scheme on 01495 248454 or from its website at www.wrasa.co.uk. The scheme has produced a guidance document to provide a more detailed explanation of the requirements.

The Regulations introduced a new specification to prevent the backflow of water from 1 May 2000. This brings the UK approach into line with the emerging harmonised European Standard. The system consists of five fluid categories which reflect the potential toxicity of the downstream fluids. These categories relate to the risk posed to public health should fluids contaminate drinking water. The specification then equates each fluid category to the range of suitable backflow prevention devices. Particular reference should be made to the determination of fluid categories when considering alternative water treatment systems. The addition of a treatment chemical to potable water may result in it changing its fluid category, with the resultant change of backflow prevention being required.
The Estates Department must be informed of any new equipment being connected to the water system.

**BS.6700**

General issues of design, sizing, layout, construction and commissioning are discussed in BS6700: 2006. Material and fittings acceptable for use in the water system are listed in the directory published by the Water Research Centre. Low corrosion materials (copper, plastic, stainless steel etc) should be used where practicable. Non-metallic materials are deemed to be compliant provided they meet with the appropriate British Standard, BS6920. “Suitability of non-metallic products for proper use in contact with water intended for human consumption with regard to their effect on the quality of water”.

Building Regulations are complied with where appropriate.

**External Contractors**

A specification appertaining to new works will include:-

a. A standard form within the contract documentation to define roles, responsibilities and procedures of parties concerned.

b. Submission where applicable of risk assessments and method statements with relation to compiled schedules.

**Maintaining Control of Systems during Construction and Testing**

During the period of construction and testing, an appropriate biocide will be continuously applied to prevent the accumulation of bio-film in a wetted system. The system(s) will be regularly flushed to ensure the biocide reaches all parts of the system, particularly outlets.

**Testing and Commissioning**

Estates maintenance and project managers should ensure that new installations of hot and cold water services are tested and commissioned in accordance with HTM.04-01.
5: Maintenance and Occupation

Occupation of New Premises – Procedure until Occupation

This procedure is designed to prevent the risk of legionellosis developing in a new building/department through the interim period following construction, commissioning and handover to occupancy.

Design and Build Contracts – outbreaks of legionnaires’ disease have been associated with ‘design and build’ type contracts, under which the client retains no Clerk of Works on site and where there is no ‘commissioning’ period on completion of the work. It is vital that immediately before occupation that cleaning and disinfection (C&D) is undertaken and a testing regime put in place to ensure that the C&D has been successful.

Once the system is in use and has been cleaned and chlorinated prior to handover, a Responsible Person shall be nominated to monitor and observe the system, and ensure that the system is operated in accordance with WHCT ‘Procedure for Temporary Closure’ and the relevant record sheets completed.

At the point of handover all relevant information on system performance together with as-fitted drawings and design criteria of the domestic hot water systems and cold water services shall be submitted to the relevant Estates Officer who is responsible for the premises.

Occupancy of the new property should be as soon after handover as possible to prevent further costs being incurred due to the need for re-chlorination of the water systems. From handover until the time which the building is fully occupied, flushing of any unused or little used outlets will be undertaken on a twice weekly basis.

Routine Operation of Water Outlets

In all health care buildings water draw-off will form part of the daily cleaning process. Written instructions for this practice are to be issued to domestic staff. However it is the responsibility of the building manager to ensure this flushing regime is being maintained.

Procedure in the Event of Closure of Part or All of a Building

Background

Where part or all of a building is going to close for a period greater than one week, it is the responsibility of the Building Manager to inform the Responsible Person (Water) or their nominated Estates Officer of the details in writing.
Following a closure decision, negotiations between the relevant manager and the Responsible Person (Water) or their nominated Estates Officer must take place to ensure that the following procedure is established and documented, and to clearly define what actions named individuals shall perform.

**Period of Closure**

The period of closure should be established at the earliest point in negotiations. The period for which an area is closed can play an important part on the cost of implication and involvement of a closure.

**Temporary Closure**

Where a closure is expected to not exceed 60 days a flushing regime must be set up to run every tap and shower for 3 minutes and flush every toilet twice weekly. In the case of showers and toilets this also ensures the water seal in the traps is maintained. The nominated individual should then complete the record sheet, signed by themselves and their relevant manager, the completed form being forwarded to the Responsible Person (Water) or their nominated Estates Officer. If the department has no one on site then the Estates department will carry out the work with the cost being recharged to the requesting department.

Before the closed area is re-occupied the Estates Department shall carry out an inspection and test of the water systems and report its condition to the Responsible Person (Water) for any remedial works that may be required. Note this testing regime will require up to two weeks for the results to be obtained.

It is the responsibility of the relevant manager to notify the Estates Department of their intention to re-open a temporarily closed area.

**Indefinite Closure**

In the instance that part or all of a building is to close with no planned re-opening date, or where the closure period exceeds 60 days, negotiations must be held as detailed in the “background” subsection above, and funding made available to the Estates Department by the manager of the department that is closing, in order to disconnect and drain the water services within the affected area. The relevant manager should be aware that considerable cost for modifications could be needed to achieve this requirement in some large properties.

**Detail of Works for an Indefinite Closure**

Where relevant – all water tanks associated with the affected area are drained, cleaned and dried out.
All pipe work and devices are drained and where applicable domestic hot water calorifiers (or other storage vessels) opened up, cleaned and left open to the atmosphere.

Pipe work is disconnected from the mains services and capped off, mains cold water services isolated and capped off from the system and all relevant pipe work drained.

Notices shall be posted throughout the affected area stating that all water services are disconnected.

The Estates Department ensures that an adequate water seal exists in unused toilets to prevent odours from the foul drain system entering the premises.

Adequate records for actions, and amended water service schematic diagrams shall be produced by the Estates Department showing all relevant modifications and disconnections made to the water systems. The Indefinite Closure Form shall be used for record keeping purposes.

Re-occupation of an Indefinitely Closed Area

In the event of re-occupation of an indefinitely closed area, full negotiations must take place between the relevant manager and the Estates Department prior to the re-occupation exercise.

The Estates Department will require the following information:-

- The planned re-opening date.
- Any proposed changes of use of the area.
- Any areas which will not be used.

The Estates Department will provide the relevant manager with a cost to put the water systems (for which the relevant manager must provide funding) back in service.

Before the water system is put back into service, any necessary modifications and maintenance shall be carried out prior to the cleaning of the system.

Operation of Water Systems

See the Written Scheme for the Operation and Maintenance of Water Systems

Domestic Cold Water Systems (DCWS)

The Trust has numerous properties with different types of DCWS:

- Towns main fed.
- Water storage tanks and
- Boosted supplies from storage tanks.
- Water softeners are installed on some systems to provide soft water to boiler systems, etc.
Non-Mains Water Supplies

Natural water sources such as borehole supplies or rainwater harvesting may be contaminated with legionella. There are no such supplies currently in use by WHCT. Sampling for legionella testing MUST be undertaken if such supplies are used in future. Note this type of water can only be considered for toilet flushing or garden watering and is subject to approval by the Infection Prevention and Control Department.

Cold Water Cisterns and Cold Feed Tanks

All new domestic cold water storage cisterns and tanks shall comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 for cold water storage (heating system header tanks – F&E are excluded). WHCT is subject to a risk assessment over a two year programme as required by the new ACOP. The findings of the risk assessments include prioritised recommendations. The actions necessary to bring existing tanks to the standards required by the Water Supply (Water Fittings) Regulations 1999, and timescales appropriate are tabled in the legionellosis risk minimisation scheme, and are to be reviewed as part of legionellosis risk re-assessment.

Connections to Outside Services

The existence of these connections and their necessity is checked on an annual basis.

Pressurisation/Supply Pumps

The use of any pressurisation unit must be subject to a specific risk assessment. Systems having a buffer vessel which present a risk of stagnation must be avoided where possible.

Domestic Hot Water Systems

Calorifiers and Hot Water Cylinders are all means of producing domestic hot water and are subject to the procedures below. Hereafter the term “Calorifier(s)” is used to describe any of the above mentioned domestic hot water storage vessels.
Hot Water Storage and Distribution

The storage of domestic hot water should be arranged to ensure that a water outflow temperature of at least 60°C is achieved. It is important to maintain temperatures above this figure (legionella organisms will only survive for a short period above this temperature – approximately two (2) minutes).

Permanent continuous monitoring of water temperatures via a building management system or data logger is recommended for higher risk premises in order to demonstrate performance.

The outflow water temperature, under prolonged maximum continuous demand (at least 20 minutes) from calorifiers should not be less than 60°C.

While it is accepted that occasionally under peak instantaneous or prolonged demand that the water outflow temperature will fall, it is not acceptable for this to occur frequently (more than twice in any 24 hour period) and/or for long periods (exceeding 20 minutes).

Under no circumstances shall the domestic hot water flow temperature fall below 50°C during the normal operation of the system.

The temperatures should be maintained 24 hours a day, seven days per week for in patient areas only.

A minimum domestic hot water circulation temperature of 55°C at outlets (and inlets to TMVs) shall be maintained in accordance with HSG 274.

6: Management Review

Review

If there is an outbreak of Legionnaires Disease or any other serious water issue a Water Hygiene Group is to be formed to be chaired by the Responsible Person:

- Assess the problem and identify any failings within the regime of testing and control.

- Assess the progress with respect to management issues

- Identify progress against the action plan in order to identify any problems with the implementation of specific remedial measures.

- Note: An outbreak is defined as two or more confirmed cases of legionellosis occurring in the same locality within a six-month period.
Calorifier Flow and Return Temperatures:

Outgoing water from the calorifier should be at least 60°C, and water returning to the calorifier should be at least 55°C. These temperatures can be taken from adequately calibrated temperature gauges fitting to the vessel and return pipe work. If temperature gauges are not fitted, then suitable surface temperature probes may be used.

Input Temperature to Thermostatic Mixer Valves:

Where fitted, the input temperatures to thermostatic mixer valves should be at least 55°C within a minute of running the water. Outlets with TMV’s should be monitored on a sentinel basis.

Typical Testing Frequencies:
(See the Written Scheme for each property for full details)

<table>
<thead>
<tr>
<th>System/Service</th>
<th>Task</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>All low use taps,</td>
<td>Flush system for 3 minutes</td>
<td>At least once per Week</td>
</tr>
<tr>
<td>showers, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Cold water</td>
<td>Incoming mains cold water temperature</td>
<td>Six monthly</td>
</tr>
<tr>
<td>tank</td>
<td>Tank water temperature</td>
<td>Six monthly</td>
</tr>
<tr>
<td>Domestic cold Water</td>
<td>Sentinel tap temperatures</td>
<td></td>
</tr>
<tr>
<td>Water outlets</td>
<td>High risk systems</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>Significant risk systems</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>Moderate risk systems</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>Temperature at representative number of taps on a rotational basis. Test all taps at small premises. (Less than 20).</td>
<td>Check representative taps monthly so that over 12 months all are checked.</td>
</tr>
<tr>
<td>Domestic hot Water</td>
<td>Flow and return temperature</td>
<td></td>
</tr>
<tr>
<td>calorifiers</td>
<td>High risk systems</td>
<td>BMS and Monthly</td>
</tr>
<tr>
<td></td>
<td>Other systems</td>
<td>Monthly</td>
</tr>
<tr>
<td>Domestic hot</td>
<td>Sentinel tap</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High risk systems</td>
<td>Monthly</td>
</tr>
<tr>
<td>Water outlets</td>
<td>temperatures</td>
<td>Significant risk systems</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate risk systems</td>
</tr>
<tr>
<td></td>
<td>Temperature at representative number of taps</td>
<td>Check representative taps monthly so that over 12 months all are checked.</td>
</tr>
<tr>
<td></td>
<td>On a rotational basis</td>
<td></td>
</tr>
<tr>
<td>Thermostatic mixing valves</td>
<td>Hot and Cold Water temperature to TMV and outlet. Mark as Sentinel tap.</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>Outlet temperature and shut off.</td>
<td>6 Monthly</td>
</tr>
</tbody>
</table>
The forms are being changed to use Digital Writing (handwriting data capture & recognition from paper - Digi Pens). Copies of the completed forms will be left on site and will also be securely held on our server.

8: Schematics

Drawings and schematics are held in the Estates computer drawing database. This database allows specific drawings/schematics to be produced on request.

Water system schematics are produced for all hot and cold water systems, with the exception of point of use water heaters and small tenanted domestic premises served by individual single-pipe water systems. The schematics show the storage systems in plant rooms and tank rooms. Distribution schematics may also be produced.

The complexity of schematics will depend upon the outcome of legionellosis risk assessments.

For each water system that presents a risk from legionella bacteria, a schematic or drawing shall be held, showing:-

- Origin of water supply;
- General layout of the system;
- How the system operates;
- All associated storage and header tanks;
- All standby equipment;
- Any parts of the system that may be out of use temporarily;
- Any problem areas such as deadlegs;
- Regular operation and test points.

These schematics/drawings may also show:-

- All system plant, e.g. water softeners, filters, strainers, pumps, non-return valves and all outlets, for example showers, wash hand basins etc;
- All associated pipe work and piping routes.

Estates staff [maintenance and projects] ensure that any changes to the domestic water systems and associated equipment are recorded so that the CAD database is kept up to date. The relevant form is completed for each modification. The form is forwarded to the Estates Information Officer and the relevant Project officer for appropriate action.
Drawings/schematics are also checked to coincide with risk re-assessment, to ensure that they are up to date.

System schematics are displayed in a frame in the relevant plant room, complete with a valve schedule.

9: Technical Procedures

Tank Cleaning Procedure

No members of staff (WHCT or contractors) shall not be permitted to enter any water storage system [i.e. tank, calorifier] or Air Handling Plant (AHU), if they are suffering or have recently suffered from any gastric or other communicable illness, or a condition which may result in their increased susceptibility to legionellosis. It is the responsibility of the individual to inform their supervisor immediately if applicable. It is the responsibility of the person supervising the work to ask.

All tanks are classified as potable water tanks.
The Supervising Officer (the individual responsible for the management of the task in question) shall notify all users of the proposed line of action, and of any disruption or modification to service.

All equipment and tools to be employed during the cleaning and disinfection process must be dedicated only to this task - this will include hire equipment. All equipment should be disinfected in a high concentration of chlorine solution prior to commencement of the process.

Cold Water Tanks with Water Temperature Greater Than 20°C

This procedure is to be implemented when cold water tanks [domestic hot water header tanks or cold down service tanks] are found to contain water with a temperature of greater than 20°C.

When water at greater than 20°C is supplied by cold water outlets, which normally supply water at a temperature of less than 20°C, then the temperature of the relevant storage tank should be checked, and the following procedure followed if necessary.

Examples of failures which may be responsible for tepid cold water [greater than 20°C]:

- High ambient temperature and heat gain - may be accentuated by poor ventilation, glass windows above tanks, lack of or poor insulation.
- Mixing valve failure causing back feeding - non return valves are recommended.
- Domestic hot water system venting over the tank.
- Failure of the primary heating coil.
• During the summer months the outside air temperature could exceed 30 °C and the incoming mains water may already be above 20 °C. There is very little to be done in this instance.

See the Written Scheme for the procedure to be followed when a report of a tepid Cold Water occurrence is received.

**Showers**

This section does not apply to showers in small domestic properties which are the responsibility of tenants. Currently the trust does not own this type of property.

Showers which are rarely used should be removed, or run daily for a 3 [three] minute period.

All Department Heads will be informed as to this requirement, and requesting notification of showers that require removal. Showers will be labelled "**THIS SHOWER MUST BE RUN DAILY**". A written instruction is issued to all users / managers with showers indicating their responsibility to ensure that showers are run on a daily basis.

Shower heads are cleaned and de-scaled where necessary, on a quarterly basis. Alternatively shower heads may be replaced with new ones.

There are no point-of-use showerhead filters (0.2um) currently in use within the trust. In all cases the IPC Department must approve the use of such filters.

**Domestic Hot Water Temperature Less Than 45°C**

Whenever the DHW temperature falls below 45 °C for any reason, the Infection Prevention and Control Department will be informed, in writing, by the Responsible Person [Water] or their nominated Estates Officer.

The following procedure must be employed following a reduction of domestic hot water temperature to below 45 °C for any reason.

Such temperature reductions can result from system failures such as:

• Primary heat source failure;

• Calorifier water temperature controls failure;
- Domestic hot water distribution pump failure;

- System shut down for modification or repairs.

**Notifications**

Under the Water Supply [Water Fittings] Regulations 1999 if any of the following are to be carried out or installed, the Water Undertaker must be notified before commencing the work:

Erection of a building or other structure

Extension or alteration of a water system [other than in a dwelling]

Change of premises use

Installation of any of the following, other than as a like-for-like replacement:

- Bath of over 230 litres capacity
- Bidet
- Shower unit of a specified type
- Pump or booster
- Reverse osmosis unit
- Water treatment unit
- RPZ valve or other mechanical device [category 4 or 5 fluids]
- Garden watering system
- Water system laid outside a building
- Construction of a pond or swimming pool

The Water Undertaking has 10 days to grant or withhold consent and/or impose conditions. After 10 days have expired and nothing has been heard, consent is deemed to have been given. Approved contractors [members of ‘Watermark’ or similar approval schemes] are exempt from certain of the above, but on completion of the work they must send a copy of the Contractors Certificate to the Water Undertaking.
Safe Purging Of Stagnant Water

Stagnant water may potentially contain high legionella counts. In order to avoid the risk of legionellosis, precautions are taken to avoid the creation of aerosols and to avoid the exposure of people to any unavoidable aerosols.

The specific precautions may vary according to the particular circumstances, but typically include:

- Running a hose from the outlet into a container of clean water;
- Running hoses directly into a drain cover;
- Running fire hoses at a distance from occupied buildings
- Closing windows and air conditioning intakes where aerosols are created outdoors;
- Wearing respiratory protective equipment [note: this does not protect nearby members of the public and others who are not wearing masks].

Care should be taken to avoid the possibility of back siphonage into mains water supplies or other parts of the water system, when purging stagnant water.

Strainers

Strainers should be cleaned, maintained and disinfected on a regular basis.

10. Pseudomonas Aeruginosa

Pseudomonas Aeruginosa is not dealt with within this policy as there is currently no Augmented Care or neonatal facilities within the Trust – see the Written Scheme (WS) for advice and a typical Risk Assessment. These are kept in the Water log Book at each property.

11. Air Conditioning

All Air Conditioning units within the Trust are maintained and repaired by an outside contractor. None are of the evaporative type. However some hired in units may be of this type and extra care must be taken to ensure the cleanliness of the water in the system. Information is provided for all portable units.

12. References

a. HSE Approved Code of Practice (L8) – “Legionnaires’ disease: the control of legionella bacteria in water systems” and the Technical Guidance Parts 1, 2 and 3.


d. HSG 274: Legionnaires' disease Technical guidance (2014)

e. HTM O4-01 Managing Pseudomonas aeruginosa in healthcare settings (2013)
Appendix 1 Key Personnel

The following persons have defined roles within the Control of Legionellosis Operational Policy and procedures:

Chief Executive WHCT

Responsible Person [Water] Estates & Facilities Manager

Deputy Responsible Person [Water] Estates Officer (Statutory)

Infection Prevention and Control Team (Legionella)

The Trust Infection Prevention and Control Committee will be responsible ensuring appropriate access to microbiology and infection prevention and control results interpretation and risk assessment.

Estates and trade staff competent persons

As per the listing held within the Estates department.
### Appendix 2: Maintenance Regime.

Each risk system is assessed and a specific maintenance regime agreed by the Head of Estates and the Nominated Person.

<table>
<thead>
<tr>
<th>System /Service</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water softeners</td>
<td>Clean and disinfect resin and brine tank – check with manufacturer what chemicals can be used to disinfect resin bed</td>
</tr>
<tr>
<td></td>
<td>As recommended by manufacturer</td>
</tr>
<tr>
<td>Emergency showers and eye wash sprays</td>
<td>Flush through and purge to drain</td>
</tr>
<tr>
<td></td>
<td>Weekly as a PPM item.</td>
</tr>
<tr>
<td>Sprinkler, wet riser and hose reel systems</td>
<td>When witnessing tests of sprinkler blow down, wet risers and hose reels ensure that there is minimum risk of exposure to aerosols</td>
</tr>
<tr>
<td></td>
<td>As directed</td>
</tr>
<tr>
<td>Trace Heating</td>
<td>Performance check</td>
</tr>
<tr>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>Pipe work insulation</td>
<td>Check where accessible</td>
</tr>
<tr>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>Alarm / monitoring checks</td>
<td>Probes and or Thermometers (including handheld) to be calibrated</td>
</tr>
<tr>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>Dental equipment</td>
<td>Drain down and clean</td>
</tr>
<tr>
<td></td>
<td>At the end of each working day</td>
</tr>
</tbody>
</table>
Appendix 3 Checklist for New Water System Designs

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design and Construction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>If you are fitting a new system, do any of the materials or fittings used in the water systems support the growth of micro-organisms?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Are low corrosion materials used?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>If fitted, are thermostatic mixing valves [TMV's] sited as close as possible to the point of use?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Are the TMV's Type 3? (Note: Only Type 3 is acceptable in HealthCare Settings).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Does the design avoid the use of spray mixer taps?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Design and construction: Cold water system</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Are low use outlets installed upstream of higher use outlets?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Has cold water storage been assessed and minimised, i.e. holds enough for a day’s use only?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Is piping insulated and kept away from heat sources [where possible]?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Is the cold water tank:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* fitted with a cover and insect screen[s] on any pipework open to the atmosphere?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* located in a cool place and protected from extremes of temperature?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* accessible?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Design and Construction: Hot Water System</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Does the calorifier storage capacity meet normal daily fluctuations in hot water use while maintaining a storage temperature of at least 60°C and at the most distant outlet, a temperature of at least 55°C?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Are the hot water distribution pipes insulated?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>If more than one calorifier is used, are they connected in parallel?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Does the calorifier have the following fitted:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* a drain valve?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* a temperature gauge on the inlet</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* an access panel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 4. Record keeping Forms

- Temporary Closure of All or Part of a Building
- Indefinite Closure of All or Part of a Building
- Cold Water Tank Inspection
- Calorifier / TMV / Sentinel Outlet Temperatures
- Incoming Mains Water Temperatures & storage tank temperatures.
- Air Handling Unit Inspection
- Incident Report
- Calorifier Maintenance
- Shower Head Cleaning
- Outlet Flushing

These forms are being formulated for the Ubisys Digital writing system and are contained within the Written Scheme.
Appendix 5 – Guidelines for Investigating Single Hospital Cases of Legionnaire’s Disease

These guidelines have been developed from “Guidelines for investigating single cases of Legionnaires’ disease” published in Communicable Disease & Public Health journal Vol. 5 No. 2 June 2002. Authors - JV Lee and C Joseph of the Health Protection Agency [HPA].

These guidelines are produced for Consultants in Communicable Disease Control [CsCDC], microbiologists, clinicians, environmental health officers [EHOs] and other public health specialists involved in the control and prevention of Legionnaires’ disease. It will be the responsibility of the hospital’s Infection Prevention and Control Department [Water] to lead the investigation into a single case in a hospital, it is essential that the local CCDC is informed as soon as possible. The hospital’s Infection Prevention and Control Department [Water] will be responsible for updating this procedure.

Local management of the investigation:

• Local Memorandum of Understanding [MoU] – this must be agreed between all relevant agencies [HSE, CCDC, HPA laboratory, Environmental Health Departments].
• Clinical diagnosis of Legionnaires’ disease must be supported by confirmed or presumptive microbiological evidence.
• As soon as a laboratory diagnosis has been made by a microbiologist the case should be reported to the local CCDC and local infectious diseases clerk.
• Investigation to be commenced following the pre-defined MoU. Investigations for Legionella infections may take place outside the residential area of the patient. If this is the case the suspected / confirmed diagnosis result should be immediately sent to the public health department in whose area the patient resides, the local CCDC can commence follow up procedures.
• The CCDC to obtain the patient’s movements for the two weeks prior to the onset of illness. This will include full address and postcode of place residences, place of work, travel details, accommodation details [overnight stays]. This should also include details of possible hospitals visited and other potential common sites and exposure to legionella.
• All cases should be reported to CDSC in confidence, via telephone or encrypted fax to a named person. Once clinical, microbiological and exposure histories have been obtained for the case these should be detailed on the standard CDSC reporting form.
• Investigations specific to hospitals will require reviewing the risk assessment for controlling legionella and maintenance records by the incident control team in conjunction with the Responsible Person [Water].
• The review of the risk assessment & maintenance records should identify if there are any deficiencies in controls as detailed by the HSE and NHS guidance. If any such deficiencies in the control are found these should remedied as soon as possible. Any precautionary disinfection of any part of the water system should only be completed after sampling. This sampling will be under the direction of the incident control team and carried out in accordance with BS7592.
• A case search for other confirmed or presumptive cases of Legionnaires’ disease associated with the hospital or community should be conducted.
Appendix 6 Emergency and Outbreak Actions

The contact details, both during office hours and out-of-hours, of the Responsible Person (Water), Deputies and Infection Prevention and Control Department are kept on the main switchboard and the major incident control room.

Course of action to be followed if an outbreak of Legionnaires’ disease is suspected.

An outbreak is defined by the Health Protection Agency [HPA] as 2 or more confirmed cases of legionellosis occurring in the same locality within a six month period.
WHCT will follow the guidance presented in Appendix 1 of the “Operational Management” volume of HTM.04-01.
The Responsible Person [Water] will be informed of a suspected case of Legionnaires’ disease by the Infection Prevention and Control Department. An investigation will be carried out in association with the Health Protection Agency and the local Consultant in Communicable Disease Control.

It is essential systems are not drained or disinfected prior to taking samples

The investigation will concentrate upon all potential sources of Legionella contamination, including:-

a. domestic hot and cold water storage and distribution systems;
b. showers or spray washing equipment;
c. drainage systems and traps;
d. whirlpool baths or hydrotherapy pools;
e. condensate trays and traps from air conditioning cooling coils;
f. humidification equipment;
g. ice-making machines and water coolers.

The Responsible Person [Water] will be required to:-

a. provide details of all pipe layouts and associated equipment;
b. provide adequate documentation detailing operation and maintenance procedures;
c. assist the investigation team by locating outlets from which samples can be taken. Easy access to these sampling points is essential;
d. identify water supplies to medical equipment such as orthodontics, renal dialysis, respiratory therapy;
e. provide any off-site information e.g. local excavation or earthmoving works, alterations to water supply or drainage systems.
If any relevant legislation has been infringed then WHCT may be subject to a formal investigation by the Police and/or Health and Safety Executive.

Once the samples have been taken and the cause of infection identified, it is the responsibility of the Infection Prevention and Control Officer [Water] and the Responsible Person [Water] to carry out disinfection procedures and effect any remedial action.
11. CONSULTATION CHECKLIST

Author, please attach this to each copy of the policy being sent to a meeting for comments.

Dear Chairman, please would you review this policy at your committee and return any amendments/comments to ______________________________ by _____/_____/_____

Title of meeting ______________________________

Date of meeting ______________________________

Name of policy ______________________________

Name of author ______________________________

<table>
<thead>
<tr>
<th>Are there any elements of the policy which present Operations issues that require further discussion? If yes, Please provide a contact name for the author.</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is the policy referenced?

Does the policy include a training plan?

If you are the appropriate forum, have the necessary resources been agreed to implement this policy?

Is there a plan for policy implementation?

Does your meeting recommend further consultation with Groups or staff other than listed at the front of the policy?
Other comments
From meeting:-

<table>
<thead>
<tr>
<th>Policy accepted without further comment. (Please circle)</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy needs further amendment. (Please circle)</td>
<td>Yes / No</td>
</tr>
</tbody>
</table>

Name of Chair ______________________________
Date ______/_____/______
Signature _________________________________