



Water Quality Management Procedure (Plan)

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1 Scope

- 1.1. The scope of this document is to ensure that the Trust follows a coherent and legally compliant water management procedure
- 1.2. To ensure that water provided by the Trust is at the correct temperatures and that it is safe to use/drink

2 Procedure

- 2.1. A Risk Assessment will be held at each site detailing the water system layout, water asset register, sentinel outlets and testing points
- 2.2. Temperature Testing will be carried out by the Trusts' Facilities Management contractor in accordance with the regime set out in appendix A
- 2.3. Inspections of the water systems will be carried by the Trusts' Facilities Management (FM) contractor out in accordance with the regime set out in appendix B
- 2.4. All non-conformities will be reported to the Estates Team, Responsible Person and Appointed Person together with any recommended necessary action which cannot be resolved at the time of finding or action taken at the time of finding.
- 2.5. Testing of microbial and bacterial water quality/sampling will be undertaken at the intervals specified in the risk assessment by the Trust's appointed contractor.
- 2.6. Any outlets designated or identified as low use outlets shall be flushed through for a minimum of 3 minutes per week per hot and cold tap and be recorded on site by the PiC (or their nominated person)
- 2.7. No flexible hoses shall be used in the Trust for water connections – any flexible hoses found in existing buildings must be replaced with copper/steel pipework within 12 weeks of identification.
- 2.8. No deadlegs are permitted anywhere in the Trust – pipework with no running water constitutes a risk of legionella growth. Any deadlegs found must be removed within 12 weeks of identification and the associated outlets isolated until the work has been carried out
- 2.9. Thermostatic Mixer Valves (TMVs) **shall not** be fitted unless specifically approved by the Appointed & Responsible Persons.



- 2.10. Where existing TMVs are fitted the Appointed & Responsible Person will assess if the TMVs are required and if necessary order their removal and replacement with standard mixer taps
- 2.11. As soon as any water quality or legionella contamination is identified or even suspected, action must IMMEDIATELY be taken to prevent the spread of legionella and reduce the risk to staff & visitors. Following the procedure below (as detailed in the flowchart shown in Appendix C):
 - 2.11.1. Investigate IMMEDIATELY
 - 2.11.2. Isolate outlets and remove from service
 - 2.11.3. Advise all concerned of the risk
 - 2.11.4. Submit IWR1 (incident reporting process)
 - 2.11.5. Retest urgently, if contamination confirmed then follow 2.11.5 below – if not confirmed reinstate outlet and advise staff
 - 2.11.6. Make a plan for remedial works
 - 2.11.7. Carry out remedial works
 - 2.11.8. Test the quality of water when remedials are complete
 - 2.11.9. If tests are clear, reinstate supplies and advise all concerned
 - 2.11.10. If tests are not clear, additional remedial works must be planned and only when water tests results are clear may supplies be reinstated.

3 Responsibilities

- 3.1. This procedure is aligned to the Water Quality Management Policy which identifies the lines of accountability at policy level.
- 3.2. The **Chief Executive Officer** has overall accountability for all aspects of the quality and safety of the water supplies and systems throughout the Trust. They will nominate in writing the following responsible officers, to take day to day responsibility for controlling the identified risk from legionella bacteria as well as for the prevention and control of legionella
- 3.3. The **Responsible Person** is responsible for managing the procedure
- 3.4. The **Appointed Person** is responsible for implementing the procedure



- 3.5. The **Estates Team** are responsible for monitoring the procedure and carrying out audits as outlined in the procedure
- 3.6. The **Person in Charge (PiC)** (Operational Unit Managers, Make Ready Centre Managers, all Site Managers, 111, Fleet & HQ Managers) who are shown in the locally held site information sheets are responsible for their areas.
- 3.7. **All Trust Employees/Contractors** must ensure that they take reasonable care for their health & safety and that of other employees, clients, contractors, visitors and members of the general public who may be affected by their actions, with the use of the premises water systems and associated services
- 3.8. A full list of responsibilities is shown at Appendix D

4 Audit and Review

- 4.1. There will be an audit of the temperature readings supplied by the Trusts' FM Contractor carried out by the Responsible Person and Appointed Person every quarter of 12.5% (combined total for both persons) of the sites tested and also as/when required to investigate issues which may arise.
- 4.2. This procedure will be reviewed every two years or sooner if new legislation, codes of practice, significant management changes occur or national standards are introduced/updated.
- 4.3. Risk Assessments will be carried out every two years, whenever changes to the water systems are made or sooner if new legislation, codes of practice or national standards are introduced.

5 References

- 5.1. **Health Technical Memorandum 04-01** (2016) Safe water in healthcare premises: Part A: Design, installation and commissioning
- 5.2. **Health Technical Memorandum 04-01** (2016) Safe water in healthcare premises: Part B: Operational management
- 5.3. **Health Technical Memorandum 04-01** (2016) Safe water in healthcare premises: Part C: Pseudomonas aeruginosa – advice for augmented care units
- 5.4. **Health Technical Memorandum 04-01 Supplement** (2017) Safe water in healthcare premises: Performance specification D 08: thermostatic mixing valves (healthcare premises)



- 5.5. **L8 Legionnaires Disease (4th Edition – 2013)**. The control of legionella bacteria in water systems. Approved code of practice
- 5.6. **HSG 274 Legionnaires' disease: Technical guidance (2013)**
Part1: The control of legionella bacteria in evaporative cooling systems
- 5.7. **HSG 274 Legionnaires' disease: Technical guidance (2014)**
Part2: The control of legionella bacteria in hot and cold water systems
- 5.8. **HSG 274 Legionnaires' disease: Technical guidance (2013)**
Part3: The control of legionella bacteria in other risk systems
- 5.9. Minimising the risk of Legionnaires disease CIBSE TM13 2013
- 5.10. Water Supply (Water Fittings) Regulations 1999
- 5.11. BS8558:2015 Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages – Complementary guidance to BS EN 806
- 5.12. BS8580:2010 Water quality – Risk assessments for *Legionella* control – Code of practice
- 5.13. Control of Substances Hazardous to Health Regulations 2002 (COSHH)



Appendix A – Monitoring the Temperature Control Regime

Frequency	Check	Standard to Meet		Notes
		Cold Water	Hot Water	
Monthly	Sentinel taps as identified in the risk assessment	Temp must be below 20°C after 2 minutes of running the tap	Temp must be at 50-60°C within 1 minute of running the tap	All taps should also be tested on a rotational basis to ensure whole system is compliant over the year
	Thermostatic Mixer Valves (TMVs)	Temp must be below 20°C after 2 minutes of running the tap	Temp must be between 38°C & 41°C (shower & Wash hand basin)	Surface Temps must be taken as close to the outlet as possible (make adjustments as per below)
	Hot Water Systems - Calorifiers	N/A	Flow temperature must be at least 60°C & return at least 50°C	When taking surface temps add +2°C for copper and +5°C for steel pipework
	Point of use water heaters	N/A	Temperature range must be 50-60°C	15ltrs volume or less
Six Monthly	Incoming Water Mains (Winter & Summer)	Temp must be below 20°C after running the water for 2 minutes (when taking surface temps add +2°C for copper and +5°C for steel pipework)	N/A	The location of testing should be identified on the risk assessment



Appendix B – Inspection Frequencies for Water Systems

System / Service	Frequency	Task	Notes
Hot Water Services	Monthly	Check flow/return temperatures from Calorifiers	
		Check temps in sentinel taps – ensure above 50°C after 1 minute	
	Annually	Thermostatic Mixer Valves to be serviced	
		Samples to be taken from Calorifiers	Note condition of drained water – if not satisfactory, drain quarterly & investigate
		Visual check on Calorifiers for sludge & scale.	
	Check all taps for temps on rotational basis	Above 50°C	
Cold Water Services	Monthly	Check temps in sentinel taps is below 20°C after 2 minutes	
	Six monthly	Check water mains temp is below 20°C after running water for 2 minutes	
	Annually	Inspect cold water storage tank	Repair/clean as required
		Check all taps for temps on rotational basis	Below 20°C
Showers	Weekly	Flush through both Hot & Cold water supplies separately for 3 minutes	Must be recorded and carried out by the Trust's FM Contractor



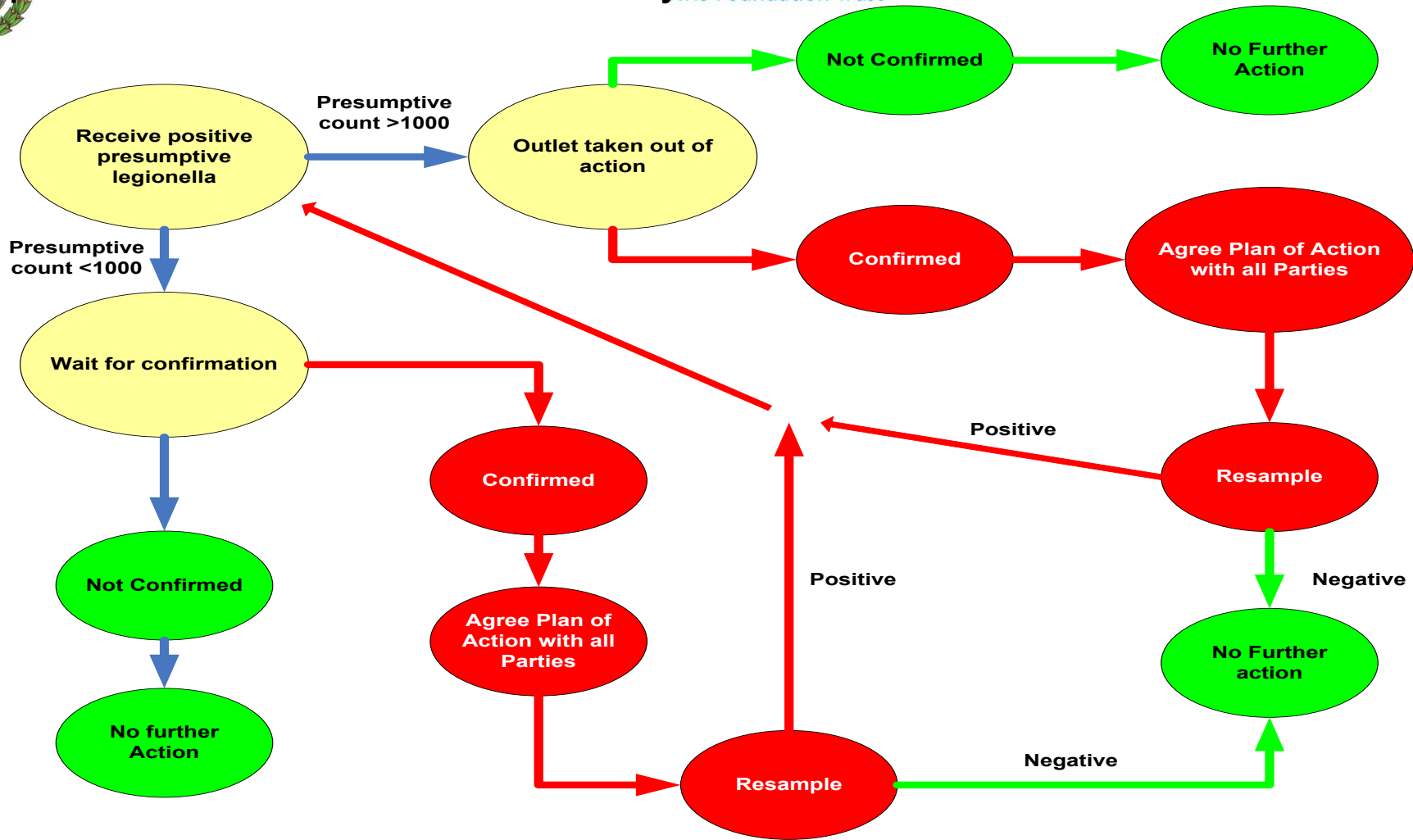
	Quarterly	Dismantle, clean and de-scale shower heads and hoses	Must be recorded and carried out by the Trust's FM Contractor
Emergency Eye Wash Sprays	Weekly	Flush through	Must be recorded and carried out by the Trust's FM Contractor
	Six Monthly	Flush through and purge to drain	Must be recorded and carried out by the Trust's FM Contractor
Tap Outlets	Weekly	Clean and disinfect with appropriate products	To be carried out by Trust cleaners
Low use outlets (including outside/garage outlets & internal outlets/taps)	Weekly	Flush through and purge to drain	Must be recorded and carried out by the Trust's FM Contractor
Water Softeners	As per Manufacturers recommendations	Clean and disinfect resin and brine tank	As identified in the risk assessment
Vehicle Wash Systems	Quarterly	Clean and check filtration systems, interceptor tanks and treatment system	A biocide system should be in place and monitored/controlled. Water quality sampling will be undertaken at the intervals specified by the risk assessment.
Expansion Vessels	Six Monthly (more frequently if indicated by the risk assessment)	Flush through and purge to drain. Bladders (where removable) should be changed according to manufacturer's guidelines	Must be recorded and carried out by the Trust's FM Contractor



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Appendix C – Action in the case of Water Quality Issue





ANNEX D: Description of staff responsibilities – Water Quality Management

Chief Executive Officer:

The Chief Executive Officer has overall accountability for all aspects of the quality and safety of the water supplies and systems throughout the Trust. They will nominate in writing the following responsible officers, to take day to day responsibility for controlling the identified risk from legionella bacteria as well as for the prevention and control of legionella:

- The Responsible Person
- The Appointed Person
- The Chief Executive Officer has overall responsibility for all aspects of legionella, water hygiene and scald risk within ALL the Trust properties.
- The Chief Executive Officer shall ensure that adequate resources are made available to ensure that this policy is fully implemented.
- The Chief Executive Officer will be designated as the Duty Holder

Responsible Person:

The Responsible Person will accept management responsibility for Legionella control. The Responsible Person will provide the resource and support to allow the Appointed Person to fulfil their designated role this will include:

- Monitoring and regularly reviewing action plans/strategies for eliminating /minimising risk.
- Ensuring budgetary provision is made for the control of legionella and general water safety risk.
- Providing additional resource when identified by the Appointed Person.
- Ensure lines of communication are maintained with all relevant trust staff, agencies and authorities.
- Ensure that this policy, via the Executive Directors, is being implemented, monitored and reviewed efficiently.
- Ensure staff training requirements are identified across the Trust, regularly reviewed and managed through the Trust's annual training programmes eg OUM's or their representatives, nominated PiCs and selected estates staff.
- Liaise with the Infection Control Team, Environmental Legionella Specialist Consultants, the Health and Safety Manager and other specialist advisors.
- Ensure arrangements are put in place for the reporting of an outbreak or suspected outbreak of Legionella.
- All written records and computer records must be kept for a minimum of 5 years.

Appointed Person:

In the absence of the Responsible Person, must have deputised management responsibility of all the tasks listed under the Responsible Person section

The Appointed Person is responsible for advising on and devising and managing the necessary procedures for the prevention and control of legionnaire's disease, water hygiene and the control of safe hot water and surface temperatures. In addition, the Appointed Person will:

- Provide technical advice to all levels of management, staff and specialist advisors.



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Assist and co-ordinate the support for the Estates response team in carrying out an investigation of an outbreak or suspected outbreak of legionnaire's disease.

- Maintain technical knowledge in respect of current good practice and statutory requirements.
- Liaise with the Infection Control Team, Environmental Legionella Specialist Consultants, the Health and Safety Manager and other specialist advisors.
- Ensure that risk assessments are carried out and regularly updated by the Estates Department. Prioritise remedial works required and put forward for funding within the Small Works / Capital Works programmes.
- Develop, monitor and regularly review action plans / strategies for eliminating & minimising the risk.
- Investigate and or assist with investigations into all incidents / accidents concerning safe water.
- Ensure that the legionella temperature and any identified remedial monitoring requirements are maintained, monitored and regularly reviewed by the Estates Department.
- Ensure Estates Department staff involved in the design, refurbishment, and maintenance and monitoring of the services are given appropriate training and information covering statutory and technical legislation and guidance.
- Provide suitable and sufficient information and training to all Estates staff to ensure that the water quality is fully understood and adhered to.
- Ensure that training requirements for estates staff is annually reviewed and monitored.
- Ensure that the records of all monitoring, inspections, testing, risk assessments and remedial actions taken are retained for at least 5 years.
- The Appointed Person is accountable and responsible to the Strategic Head of Estates for any areas of legionella risk and is available for the provision of professional and technical advice on matters concerned with the Health & Safety at Work Act 1974 etc. As well as all other relevant statutory matters.
- Implement maintenance and inspection routines, as described in the Risk Assessment (or Written Scheme) for the control of Legionella as required in L8 (Legionnaires' disease. The control of legionella bacteria in water systems, Approved Code of Practice and guidance)
- Prepare and implement an Operational Logbook for each trust site for controlling legionella
- To carry out precautions on the Control of Legionella and audit processes.
- Ensure that remedial works highlighted in risk assessments and routine monitoring visits are carried out in a timely manner.
- Keep maintenance and monitoring records and make available for inspection.

Estates Team

The Estates Team are accountable and responsible to the Responsible Person and Appointed Person on legionella and any associated water maintenance matters. In addition, they will:

- Ensure that the Appointed Person has necessary information for maintaining the monitoring requirements; these will include all service and maintenance records
- Ensure all reported defects are responded to effectively and efficiently.
- Ensure an effective line of communication is maintained within the Estates team for all matters relating to legionella and any associated water maintenance matters.



Report to the Appointed Person all potential and actual incidents / defects, which may affect the health, safety and welfare of clients, visitors and staff.

- Ensure that, within temporary closed areas / departments, control procedures are implemented, monitored and all records kept.
- Keep maintenance and monitoring records and make available for inspection.
- Ensure that the written and computer records of all monitoring, inspections, testing, risk assessments and remedial actions taken are retained for at least 5 years.

Persons in Charge – Operational Unit Managers, Make Ready Centre Managers, all Site Managers, 111, Fleet & HQ Managers:

PiCs are accountable and responsible for their areas. In so being, they are jointly responsible for the health & safety of contractors, visitors, staff and others who may be affected by the use of the water systems and associated services in their premises. They have a responsibility to demonstrate they are providing care in a safe environment and must ensure the adherence of this Policy for all employees within their area of authority. In addition, they will:

- Ensure that any change of PiC is notified to the Estates Team, so that the records can be updated and issued to ensure compliance
- Ensure that local procedures for safe systems of work and codes of practice comply with this policy, meet the needs of their particular area of responsibility and that they are implemented, monitored and reviewed.
- Assist and liaise with the Appointed Person in carrying out risk assessments relating to the water.
- Ensure that all weekly flushing requirements of sentinel hot & cold water outlets as identified in the site Legionella management file are carried out and evidenced in the log book.
- Ensure that there is an identified member of their staff team (for example an OTL, Fleet / 111 Manager) at each premise the building manager is responsible for. The identified member will have specific responsibility for maintaining the monitoring and keeping of the weekly flushing records, the control procedures and temperatures of the hot & cold water outlets accessible to staff and visitors. (These records will be in addition to any of those kept by the Estates Department).
- Where SECAmb has a presence in other organizations properties, all legionella issues in these properties, will be managed by the respective estates / maintenance department. Maintain communication links with the Appointed Person and the Estates Department.
- Provide the Appointed Person with all relevant details prior to the closure or reinstatement and / or change of use, either temporary or otherwise of areas/departments.
- Report all defects / faults to the Estates Department and through the IWR1 incident reporting process and put in place temporary control measures i.e. take out of use, restrict / supervise access, post warning notices etc. to protect patients, clients, visitors and staff until such time as the defect / fault has been rectified.
- Ensure that the records of all monitoring, inspections, testing, risk assessments and remedial actions taken are retained for at least 5 years in the Site Legionella file.



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Ensure that infrequently used showers are run a minimum of once weekly for a minimum of 3 minutes full flow on hot and cold water supply to shower. Also when flushing showers make sure adjustable shower head spray patterns are adjusted at same time, each spray pattern position should be run for a minimum of 20 seconds. Sign and date time of flushing on appropriate records sheet.

- Notify Estates Department of any showers not in use who will then isolate, disconnected and remove from hot and cold water system.
- Ensure that infrequently used hot and cold water tap outlets including garage hose pipes and taps are run a minimum of once weekly for a minimum of 3 minutes full flow on hot and cold water supply. Sign and date time of flushing on appropriate records sheet.
- Notify Estates Department of any tap outlets not in use who will then isolate, disconnected and remove from hot / cold water system.
- Provide access to legionella contractors to enable monthly hot / cold water temperatures to be tested and monitored.
- Ensure access to site Legionella risk assessment log book at all times, so all monitoring, inspections, testing and remedial works actions / results can be logged and written down in the appropriate section in log book.

All Trust Employees / Contractors

All employees must be aware that they have a duty of care for health & safety towards themselves and others. Every employee within the Trust must:

- Ensure that they take reasonable care for their health & safety and that of other employees, clients, contractors, visitors and members of the general public who may be affected by their actions, with the use of the premises water systems and associated services.
- Not interfere with, or misuse anything provided in the interest of health & safety.
- Report to their line manager and through the IWR1 incident reporting process any infrequent or underused hot and cold water outlets.
- Report any doubt about water quality or temperature to their line manager and through the IWR1 incident reporting process.
- Report to their line manager and through the IWR1 incident reporting process any defective equipment (ensuring warning notices are displayed), hazards, accidents/incidents, unsafe systems of work and/or unsafe environment and equipment.
- Prevent waste, undue consumption or misuse of water supplies. (NB: Unless agreed with the Estates Department, water run for more than a few minutes before drinking is wasteful)
- A general "Good House Keeping" approach to the use of water is recommended.
- Prevent contamination of water supplies.
- Attend any training that is provided by their managers.
- Adhere to the Water Quality Management policy and procedure.



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