WRITTEN MANAGEMENT SCHEME FOR THE CONTROL OF LEGIONELLA BACTERIA WITHIN THORNBURY TOWN HALL PROPERTIES

Scope:

The following written scheme is issued in accordance with HSE Approved Code of Practice (ACoP) L8 'Legionnaires' disease – The control of legionella bacteria in water systems' and contains information of how the risk of legionella bacteria is controlled within the Thornbury Town Council estate located at the above named address.

Site Management and Lines of Communication:

Role	Name/ Position	Contact Details
Duty Holder:	Hannah Bowden, Town Clerk	01454 412103
Responsible Person:	Jonathan Brain, Facilities Officer	01454 412103
Deputy Responsible Person:	Wendy Sydenham, Deputy Clerk	01454 412103
Water Hygiene Contractor:	Dantek Environmental	01454 417920

Schematic Diagrams

Basic schematic drawings have been produced alongside the legionella risk assessment and are contained within the Water Services Logbook, located at the premises.

A further copy is held in the Town Clerks and Facilities Officers office located in Thornbury Town Hall and a digital copy is stored on the Thornbury Town Council network.

Description of the correct & safe operation of the systems:

The water services systems at the premises operate under the following conditions of Temperature as recommended within HSG274 Part 2:

- Cold water storage cisterns: below 20°C
- Hot water storage: 60–65°C
- Hot water distribution: 60–65°C
- Hot water service return: 50°C or above
- Hot water to be heated to 60–65°C before first draw-off takes place
- All outlets to be flushed weekly unless used more frequently
- Hot water outlets with blending valves set to 41-46°C as appropriate

Precautions to be taken:

Design and construction of new systems and alterations to be in accordance with,

- HSE ACOP L8, Legionnaires disease, the control of legionella in water systems,
- BS6700, Design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages.

New and modified pipework to be disinfected and sampled as per BS8554:2015 'Code of practice for the sampling and monitoring of hot and cold-water services in buildings.

Hot water outlets which pose a scalding risk to be fitted with thermostatic mixing valves within 2 metres of point of draw-off or mechanical mixing valves with high temperature limit stops, depending on the risk assessment for the outlet and persons at risk.

Showers and outlets shall be flushed in a manner that removes the possibility of creating. an aerosol.

With flexible shower hoses, the spray head should be lowered temporarily into a bucket placed on a stool, and the water run to drain that way without creating an aerosol. In the case of fixed high-level shower heads, the most simple and practical way of achieving safe flushing is to fabricate a length of rigid plastic piping, of the required length to suit the shower, fitted with a tundish at the upper end. The tundish is positioned underneath the shower head and the discharged water is conveyed safely into the shower tray/outlet without generating an aerosol. With careful selection of the length of the pipe, the system can be made self-supporting.

Checks to carry out to ensure written scheme effective:

Frequency	Action	Remedial Action	Responsibility
1. Weekly	Flush little-used outlets to drain without release of aerosols. Record	No reporting appropriate	Occupier
2. Weekly	Check and record blended water temperatures from thermostatic mixing valves where fitted. Confirm that stable temperature is attained within one minute	Temperature at blended outlets should be nominally 43°C but specifically in the range 39°C for bidets, 41-43°C for showers, washbasins and unattended baths, and 46°C for attended baths. Record discrepancies, report to the Facilities Officer at Thornbury Town Council and arrange for a Maintenance Contractor to attend and request adjustment or replacement.	Occupier (2)
3. Monthly	Check water temperatures at sentinel taps. Hot water >50°C after 1 minute, cold water 50°C. Record	Temperatures at sentinel taps should be within range and times stated in Table 1. Record discrepancies and report to the Thornbury Town Council Facilities Officer, for investigation and remedial action	Occupier (3)
4. Monthly	Check calorifier temperatures. Flow 60°C, return >50°C. Record.	Temperatures at calorifiers should be within range stated in Table 1. Record discrepancies and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Occupier (3)
5. Quarterly or as necessary	Dismantle, clean and descale shower heads and hoses. Record	If shower roses and hoses cannot be cleaned or descaled effectively, arrange for a Maintenance Contractor to attend site and replace	Occupier (1)

Frequency	Action	Remedial Action	Responsibility
6. Six monthly	Measure incoming water temperature to cold water cisterns and water temperature remote from float valve. Record	Temperatures at incoming main and storage tanks should be below 20°C in all cases. Record discrepancies and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Maintenance Contractor
7. Six monthly (January and July)	Measure cold water temperature rise between incoming main and most distant outlet. Should be less than 2-3°C. Record	Cold water temperature rise should be less than 2-3°C under constant flow conditions. Record discrepancies and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Occupier (4)
8. Annually	Take sample and record condition of water from HWS calorifier drains	Water from calorifier drains should be clean and free from visible debris. Record discrepancies and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Maintenance Contractor
9. Annually	Open and inspect internal surfaces of HWS calorifiers for scale and sludge and clean or descale as necessary. Record	Calorifiers should be clean internally and free from sludge or heavy scaling. Record discrepancies and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Maintenance Contractor
10. Annually	Check and record temperatures at a representative number of taps throughout the system, on a rotational basis.	Compare temperature of water from taps checked with original values measured at Risk Assessment. If any differ by more than 5 degrees or fall outside the control parameters in Table 1 (3) above, record discrepancies and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Occupier (2)

Frequency	Action	Remedial Action	Responsibility
11. Annually	Inspect cold water cisterns and carry out remedial work as necessary. Record work done and report outstanding defects.	Cold water storage cisterns should be serviced in accordance with the requirements of the Mechanical Maintenance Service Contract. Record work done and discrepancies, and report to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Maintenance Contractor
12. Annually	Physically inspect the hot and cold-water systems and check accuracy of schematic drawings. Note changes. Check for under-used fittings and report recommendations.	Report any discrepancies between the schematic drawing and the physical arrangements of water services found on site to the Facilities Officer at Thornbury Town Council, for investigation and remedial action	Scientific Services and/or Specialist Contractors

Notes

1) May be undertaken by competent officer or outside operative using proprietary domestic kettle descaler (COSHH Regulations apply to use of chemicals at work), or by a Maintenance Contractor. However, the person responsible must be clearly defined by the Occupier.

2) Shall be done using calibrated digital thermometer with immersion probe.

3) Readings to either be taken from fitted temperature gauges or using a calibrated digital thermometer with immersion probe, surface probe or pipe clamps.

4) Should be done using digital thermometer as in (3).

5) Water samples for analysis, where appropriate, are to be taken at the same time as the visual survey is undertaken.

Remedial actions to be taken:

The expected results of the checks set out in the table indicating the control regime, and the actions to be taken in the event of non-compliance, are listed below under the reference number for each check.

(1) If an outlet is no longer required remove it along with all redundant pipe work.

(2) Temperatures at sentinel taps should be within range and times stated in the Table. Record discrepancies and report to site Responsible Person or Deputy Responsible Person for investigation and remedial action.

(3) Temperatures at calorifiers should be within range stated in the Table. Record discrepancies and report to site Responsible Person or Deputy Responsible Person for investigation and remedial action.

(4) If shower roses and hoses cannot be cleaned or descaled effectively or are broken, call in Maintenance Contractor and request replacement.

(5) Cold water cisterns should be suitably insulated (to keep temperature below 20°C), be enclosed with suitably screened vents, have correct rotational flow, turnover within 24 hours and be clean. Any issues found should be reported to the site Responsible Person or their Deputy who should then arrange corrective actions as advised.

(6) Calorifiers should be clean internally and free from sludge or heavy scaling. Record discrepancies and report to site Responsible Person or Deputy Responsible Person for investigation and remedial action.

(7) Header tank should be clean and free from stagnation. Ideally water should be stored at below 20°C. Tank should be enclosed with a suitably fitted lid with screened air vent. Any issues found should be reported to the site Responsible Person or their Deputy who should then arrange corrective actions as advised.

(8) If a valve fails the failsafe test or cannot be calibrated to hold a temperature between 38 to 46°C then it should be reported to the site Responsible Person or Deputy Responsible Person and replaced with a new valve.

(9) Review results and issues recorded over the year to compare trends to establish if control is effective. If not, then the system needs to be reviewed to evaluate different methods. Review the schematics and correct if discrepancies are noted due to changes of the system.

Document Control

Version	Date of Review	Amendments / Comments	Updated by
1	25/11/21	Document Created	HC
1.1	31/01/24	Changed logo, updated responsible persons and included additional checks to ensure compliance	JB