# LCA STANDARD FOR THE DELIVERY OF HOT AND COLD WATER MONITORING AND INSPECTION SERVICES

# A) WHAT DOES THIS STANDARD COVER?

**1** This service standard is for those providing services in the control of Legionella bacteria growth within hot and cold water systems and the associated control and monitoring measures that need to be put in place such as:

- **a.** Design and application of monitoring and inspection services for hot and cold water including temperature, disinfectant residual, water quality monitoring, sampling (for water quality), inspection and condition assessment, etc.
- **b.** Monitoring of water temperature
- c. Monitoring of online treatment residual in hot and cold water
- d. Monitoring of hot water circulation in principal and subordinate loops
- e. Flushing and purging of little used outlets, dead legs, calorifier drains, expansion vessels, etc.
- f. Inspection of tanks and calorifiers
- g. Inspection of insulation
- h. Inspection and temperature testing of TMVs
- 2 This standard excludes:
  - **a.** Offline chemical or thermal disinfection and/or cleaning (covered under the LCA Service Standard for Cleaning and Disinfection)
  - **b.** Application of chemicals for continuous water treatment (covered under the LCA Service Standard for Water Treatment services)
  - c. Mechanical servicing

# **B) COMPETENCE OF STAFF (INCLUDING SUB-CONTRACTORS)**

- 3 There are six main areas of competence necessary in the delivery of these services:
  - **a.** Obtaining the required information to design the monitoring and inspection programme (The Surveyor)
  - **b.** Designing and costing the monitoring and inspection programme and defining the scope of service (The Designer)
  - c. Planning and initiation of the programme (The Planner)
  - **d.** Carrying out the monitoring and inspection tasks and interpreting results (The Technician)
  - e. Reporting and communicating the findings, significance of results and recommendations (The Reporter)
  - f. Ensuring the service has been delivered according to the LCA Member's company procedures (The Auditor)

4 These different job aspects require different knowledge, skills and experience to be competent. The LCA Member should identify the skills required for the relevant task and provide appropriate training and assess the competence of the operative to carry out their assigned tasks.

# **C) SERVICE DELIVERY**

5 To enable you to deliver hot and cold water monitoring and inspection services in an appropriate and safe manner you must have in place documented procedures to manage the following:

#### Section 1: Survey/Information Gathering

**6** Before agreeing a scope of works it is essential to gather sufficient information to appropriately plan the work. A survey, discussion or review of a specification may be appropriate to gather information.

- 7 Obtain the necessary information, for example:
  - a. Copies of system schematic diagrams to identify location of components
  - **b.** Existing Legionella risk assessment and written scheme of control (or access to same)
  - c. Monitoring and inspection points
  - **d.** Relevant site-specific requirements, for example:
    - *i.* Preliminary task risk assessment

- *ii.* Safe access to complete the work
- iii. Induction procedures
- *iv.* Access permits and permits to work
- *v.* Reporting any emergencies during the work
- vi. Security and safety restrictions
- *vii.* Requirement to avoid cross contamination of services from the monitoring activity

#### Section 2: Design of the Monitoring and Control Programme

8 In some cases an existing written scheme of control may be in place which should include a programme of monitoring and control. This programme must be reviewed for suitability and amended if required.

**9** If there is no suitable written scheme of control in place, then based on the information gathered in section 1, an appropriate scheme of monitoring and control must be designed to address identified risks.

**10** The guidance on design of a suitable monitoring regime detailed in HSG274 part 2 and for healthcare premises, in HTM 04-01 must be considered.

11 Where the work is routine, you should have standard method statements/procedures for the monitoring and inspection tasks within the programme.

#### Section 3: Agreeing the Scope of Work

- **12** This must include:
  - a. The premises and/or buildings to be included
  - **b.** The identification of the water systems
  - c. Identification of monitoring and inspection points
  - d. Frequency of monitoring and inspection
  - e. Identify those tasks covered by the LCA Member and those which should be provided by the service user to follow the guidance in HSG274 part 2 and (for healthcare premises), in HTM 04-01 on monitoring and inspection of hot and cold water services
  - f. Agreement of lines of communication and reporting
  - g. Reporting format and delivery method
  - h. Access arrangements and times

#### **Section 4: Preparation**

- **13** Prior to attending site you must:
  - a. Ensure the staff/subcontractor has the appropriate assessed competence/capability to carry out the task
  - **b.** Provide appropriate resources to your staff including, where appropriate:
    - *i.* Appropriate method statement/work instruction
    - *ii.* Task risk assessment
    - *iii.* Emergency procedures (e.g. first aid, accident reporting, incident reporting, chemical handling/safety procedures, etc.)
    - *iv.* Emergency equipment, required PPE/RPE and other safety/access equipment
    - v. Calibrated monitoring and inspection equipment (keep testing records for audit)
    - *vi.* Job reporting system (e.g. a paper or electronic record of the work when completed)

#### Section 5: Carrying out the Work

- 14 Immediately prior to commencing work the operatives must:
  - **a.** Complete a pre-work task risk assessment or review and, if necessary, amend the preliminary task risk assessment
  - **b.** Check PPE/RPE and equipment required by pre-work task risk assessment
  - c. Check method statement/work instruction is valid
- **15** During the work the operatives should:
  - **a.** Carry out LCA Member allocated tasks detailed in the method statement including required tests, observations, etc.
  - **b.** Complete report of work outcomes e.g. test results, observations, condition reports, non-conformances, etc. for the site records and a copy to be maintained by the LCA Member including all details
  - c. Bring to the attention of the client any non-conformance or other areas of concern identified

#### **Section 6. Verification and Quality Control**

- **16** The LCA Member must have procedures and records in place to ensure that:
  - **a.** All required visits are done to schedule (missed visit control)
  - **b.** Required monitoring and inspection tasks are completed
  - **c.** The correct control limits are employed
  - **d.** Results are interpreted correctly
  - e. Appropriate corrective actions are advised to the agreed contacts
  - f. Significant non-conformances are recorded and tracked to conclusion
- 17 A representative proportion of output must be monitored to ensure compliance with the above.

# D) WHAT YOU NEED TO TELL YOUR CUSTOMER

- **18** It is the responsibility of the dutyholder/responsible person to:
  - **a.** Have a risk assessment and written scheme of control in place, which includes a programme of monitoring and inspection and to make this available to the service provider.
  - **b.** Make systems available for monitoring and inspection to enable the service provider to plan and execute the service.
  - c. Ensure safe access for monitoring and inspection is provided.
  - **d.** Ensure that tasks allocated to them are completed.
  - e. Adhere to the agreement regarding definition of scope and any responsibility implied.

# FOR AND ON BEHALF OF THE LEGIONELLA CONTROL ASSOCIATION