1 Objective and Scope

1.1 It is the objective of the Trust to comply with its legal duty to prevent or control legionellosis by ensuring that a thorough and detailed preventative maintenance programme is identified and initiated and that suitable and sufficient records are maintained.

2 Responsibility

2.1 It is the responsibility of the General Manager to ensure that all of their nominated deputies provide the correct level of support to staff to comply with the contractors designated to provide the relevant tests.

2.2 It is also the responsibility of the Managers or nominated competent person to ensure that the correct procedures are in place and that the relevant completed documentation is available at all times.

2.3 Managers will be responsible for the implementation, via their nominated competent person(s), for all of the required temperature checks and disinfection of showerheads as per the programmed maintenance schedule and recorded in the Water Services Log Book.

2.4 It is the responsibility of the nominated contractor to carry out all works, as per the agreement, in a safe and professional manner and within the legislation laid down in the Health and Safety at Work Act 1974 and in conjunction with relevant risk assessments being carried out by the contractor.

3 Reference Documentation

- Water Services Log Book
- Maintenance Programme
- Cold Water Temperature Checks
- Hot Water Temperature Checks
- Quarterly Shower Head Cleaning Record
- Annual Cold Water Storage Tank – Survey Sheet
- Defect / Action Log
- Risk Assessment and Water Hygiene Survey Report
- Method Statement for Showerhead Cleaning and Disinfection
- Method Statement for Annual Inspection of Cold Water Storage Tanks
- Dipslide Test Results
- Weekly Flushing Record
- SLLC Escalation Pathway
- Management Pathway
Visit Log
Chlorine Dioxide Test Records
Breakdown In Process (BIPs) form
Certificate of calibration for thermometer
Swimming Pool Water - Treatment & Quality Standards for Pools & Spas

4 Procedure

4.1 Background

4.1.1 Legionnaires disease is a potentially fatal form of pneumonia which can affect anybody, but which principally affects those who are susceptible because of age, illness immuno-suppression, smoking etc. It is caused by the bacterium legionella pneumophila and related bacteria. Legionella bacteria can also cause less serious illnesses which are not fatal or permanently debilitating.

4.1.2 A number of factors are required to create a risk of acquiring legionellosis, such as:

(a) the presence of legionella bacteria;

(b) conditions suitable for multiplication of the organisms, e.g. suitable temperature (20ºC - 45ºC) and a source of nutrients, e.g. sludge, scale, rust, algae and other organic matter.

(c) a means of creating and disseminating breathable droplets, e.g. the aerosol generated by a shower or cooling tower; and

(d) the presence (and numbers) of people who may be exposed, especially in premises where occupants are particularly vulnerable, e.g. the elderly or immuno-suppressant.

4.1.3 While there will inevitably be common factors associated with the many and varied types of premises being assessed, the individual nature of each site should be taken into account. In complex systems or premises, a site survey of all the water systems should be carried out and should include an asset register of all associated plant, pumps, strainers and other relevant items.

4.1.4 The following list contains some of the factors which should be considered, as appropriate, when carrying out the risk assessment:

(a) the source of system supply water, for example, whether from a mains supply or not;

(b) possible sources of contamination of the supply water within the premises before it reaches the cold water storage cistern, calorifier, cooling tower or any other system using water that may present a risk of exposure to legionella bacteria;
(c) the normal plant operating characteristics; and
(d) unusual, but reasonably foreseeable operating conditions, for example breakdowns.

4.2 Safe System of Work

4.2.1 A risk assessment will be conducted to determine the risk of exposure to legionella. A competent specialist contractor will be engaged in any premises except where the system is identified as very simple and straightforward.

4.2.2 The risk assessment is conducted by the nominated contractor. This risk assessment should also contain a Management Pathway which, in the event of a suspected outbreak of Legionella, has the relevant contact information.

4.2.3 Results of the risk assessment, including schematic diagrams, are kept in the water services log book and should be relayed to staff.

4.2.4 Any risk reduction and control measures are identified and forwarded to the board for consideration.

4.2.5 Implementation of suitable risk reduction measures is conducted and the nominated competent person monitors to ensure that the action is taken in an appropriate timescale.

4.2.6 The risk assessment is reviewed as a minimum every two years, sooner if;
   a) facility circumstances change,
   b) is found to be no longer valid,
   c) there is a problem,
   d) changes have been made to the pipe work
   e) an outbreak of legionella occurs.

4.3 Inspections

4.3.1 A programme of works and temperature checks are all detailed on the maintenance programme.

4.3.2 The nominated competent person shall ensure that all works are completed, as outlined in the maintenance programme and completed in conjunction with the Work Method Statement.

4.3.3 All faults should be recorded on the Defect/Action log sheet, within the water services log book and a BIPs form completed.

Prepared: Paul Warnock
Approved: Valerie Kemp
4.4 Other Risk Systems

<table>
<thead>
<tr>
<th>Emergency showers and eye wash sprays</th>
<th>Flush through and purge to drain</th>
<th>Six monthly or more frequently if recommended by manufacturers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sprinkler and hose reel systems</td>
<td>When witnessing tests of sprinkler blow-down and hose reels ensure that there is minimum risk of exposure to aerosols</td>
<td>As directed</td>
</tr>
<tr>
<td>Spa baths</td>
<td>Check filters – sand filters should be backwashed as per industry guidelines (Pool Water Treatment Advisory Group)</td>
<td>Industry Guidelines</td>
</tr>
<tr>
<td></td>
<td>Check water treatment – pools should be continuously treated with an oxidising biocide</td>
<td>Three times daily</td>
</tr>
<tr>
<td></td>
<td>Clean and disinfect entire system</td>
<td>Weekly</td>
</tr>
</tbody>
</table>

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

(a) if routine inspection shows it to be necessary;

(b) if the system or part of it has been substantially altered or entered for maintenance purposes in a manner which may lead to contamination; or

(c) during or following an outbreak or suspected outbreak of legionellosis.

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

(a) by the use of suitable chemical disinfectants, e.g. by chlorination when it is necessary to disinfect the whole system, including storage tanks; or

(b) by thermal disinfection, i.e. by raising water temperature to a level at which legionella will not survive.

4.5 Record Keeping

4.5.1 Records shall be maintained of all inspection and maintenance conducted.
4.5.2 The water services log book is a primary file for maintenance of information.

4.5.3 Details are maintained of:

(a) Persons responsible for conducting the risk assessment, managing and implementing the written requirements of this health and safety manual;

(b) Significant findings with a risk assessment;

(c) Schematic plan of the water system;

(d) Results of monitoring, inspection and tests carried out, including dates.

4.6 **Specific Site Risk Precautions**

Following the completion of the site risk assessment the Nominated Contractor should prepare a list of site specific risk precautions.

4.7 **Suspected / Confirmed Legionella Outbreak**

4.7.1 In the event of a suspected / confirmed outbreak of Legionella an emergency shut down or facility closure should be incorporated in the Site Specific Emergency Action Plan.

4.7.2 The following procedure should be followed:

- All admissions to facility to be stopped immediately.
- The Line Manager to be contacted.
- The Management Pathway, contained within the contractors’ manual, should be followed as this has the relevant contact details for relevant responsible persons.
- Await further information
- All external enquiries (i.e. Press, T.V. etc) to be directed to South Lanarkshire Council Public Relations Department.

5 **Amendment Details**

**July 2008**

The procedure was amended to reflect an update in documentation and to re-reference the procedure in line with new system therefore remains as issue one.

**August 2008**

Issue two has been amended to include the Management Pathway within the Water Services Log also the reference the completion of the risk assessment by the Recreation Supervisor has been removed and replaced with that of the nominated contractor. Reference has been made to the communication of risks and controls to staff.
September 2011
Issue Three has been amended to reflect the inclusion of Culture as part of the new Trust, South Lanarkshire Leisure and Culture and remove "Duty Officer" and replace with "Manager" and also insert "nominated competent person".

Also included is "Certificate of calibration for thermometer" (3.0) and Breakdown in Process (BIPs) form (4.3.3).

May 2013
Issue Four has been produced to show the change to 4.4 "Other Risk Systems" in line with industry guidelines and also to reflect the new approver of the documentation. "Maureen Macfarlane" has been removed and replaced with "Valerie Kemp".