Rossendale Borough Council Legionellosis Risk Management Statement

A1.1. The Policy of Council is to adopt a comprehensive and workable approach to managing the risk from exposure to Legionella bacteria in all the premises that it owns or occupies. The Council recognises its duties in law and under its **own within Health and Safety Policy and our Health and Safety Manual** to safeguard the health and safety of its employees and of others affected by its undertaking. This statement, associated code of practice and task checklist has been drawn up to set out clearly the policies, systems and procedures, which will be implemented to manage the risk from exposure to Legionella. It therefore:

a) puts procedures in place to control and minimise these risks; and

b) ensures work is to higher standards than the minimum required by law, where reasonably practicable; and

c) provides information, guidance and training for managers responsible for premises and other key managers to ensure they are aware of their role with regard to this policy; and

d) promotes good system design to reduce the risk of Legionella bacteria multiplying; and

e) promotes good maintenance procedures to reduce the risk of Legionella bacteria multiplying.

A1.2 The Responsibilities and Duties of the Chief Executive are defined in the Council's Health and Safety Policy and within our Health and Safety Manual.

This includes the ultimate responsibility for the Council's Legionellosis Risk Management procedures and ensuring their implementation and full and proper compliance through the **Executive Director of Resources** who is also responsible for health and safety issues relating to the Council's property stock. The **Executive Director of Resources** has delegated the formulation and implementation of policies for management of the building stock to the **Property Services Manager**, who will be the "responsible person" for ensuring adequate systems are in place to control the risks from Legionellosis in Council premises. The **Property Services Managers** nominated deputy is the **Facilities Officer**. The **Heads of Service** will ensure that sufficient time and resources are provided to implement the Legionellosis Risk Management Procedures within their **Service Areas**, through their services' management systems. They are responsible for ensuring full compliance with the procedures through their managers and staff.

A1.3 The Health & Safety Commission Approved Code of Practice & Guidance, document L8 "The Control of Legionella Bacteria in Water

Systems", is taken as the primary source of guidance on Legionellosis risk management.

A1.4. **Written guidance** on implementing the Council's Legionellosis Policy and advice on general matters relating to Legionella is detailed in the Council's Code of Practice for the Control of Legionella Bacteria in Water Systems, available on the intranet or from:

- **The Property Services Manager**
- **The Council's Health and Safety Adviser**

See the **Appendix 1** of this Code of Practice, for contact details.

A1.5. Monitoring and review of this statement, ongoing assessments and control precautions will be reviewed at intervals as appropriate, and at least annually. Revisions will be made as necessary to reflect organisational, technical or legislative changes.

Signed

Executive Director of Resources

B1: **Council Legionellosis Risk Management Code of Practice**

B1.1 Design Standards for all building services systems containing water must comply with the requirements specified in:

a) the Water Supply (Water Fittings) Regulations 1999, SI 1999 No 1148 and incorporating amendment SI 1999 No 1506;

b) the Health and Safety Commission Approved Code of Practice and Guidance L8: “Legionnaires disease. The control of Legionella bacteria in water systems”;

c) BS 6700: 1987 or as amended “Specification for design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages".

B1.2 Eliminating the risk must be the first consideration in any design or alteration proposal. If the risk cannot be eliminated and alternative options are available and can be provided, then a thorough assessment must be undertaken to ensure that the appropriate solution is used. Evaporative condensers and water-cooling towers must not be permitted on any of the Council’s premises. Where these exist, they will be replaced, on a phased basis, with suitable alternatives that eliminate the risk. At April 2006 there is no knowledge of their existence on any Council premises.

B1.3 Reducing the risk and controlling the risk in hot and cold water services will be the secondary consideration and must include best practice, in particular the following.

a Temperature regime shall be the main method employed, in any new or refurbished system, to control bacteria in water systems.

Design Considerations

b Direct cold mains water systems must be considered in all new designs in preference to providing cold stored water, however, if required for backflow prevention or if the design assessment requires cold-water storage to be available, it must be sized to hold the minimum amount of water possible and no more than 8 hours use, and the temperature must be maintained and distributed at low temperature not exceeding 20^{o}C. It is crucial that the inlet of the cold water supply and outlet from the cold-water tank are at opposite sides of the tank to ensure that there is no stagnation. All tanks must comply with the Water Supply (Water Fittings) Regulations 1999 and must be easily and readily accessible for both maintenance and monitoring.

c All cold-water pipework must be appropriately insulated and isolated from heat sources.

d Preference shall be given to using instantaneous direct-fired gas water heaters, or direct–fired gas water heaters with water stored at a minimum of 60^{o}C. All stored hot water in main calorifiers shall be maintained at a minimum temperature of 60^{o}C, which must be matched to demand. All calorifiers must be fitted with a drain valve, temperature gauge on the inlet and outlet pipework, and an access panel for cleaning dimensioned and located in such a position as to be easily accessible for maintenance.

e The system design must ensure that the entire contents of the calorifier can achieve a temperature of 60^{o}C for at least one hour before the building users draw off any water at the start of each day and for one hour after the last user has drawn off water at the end of each day. An additional, time controlled, shunt pump must be fitted on all new calorifiers to aid circulation throughout the calorifier. When upgrading or reutilising existing calorifiers, shunt pumps shall only be fitted following an assessment of the internal condition of the calorifier. Where there is any doubt the calorifier should be replaced.

f For new installations, where possible, a minimum distribution temperature of 55^{o}C should be available at the outlet or any point of use mixer valve within 30 seconds of opening the tap. For existing installations and/or where a risk assessment supports a lower temperature, a minimum temperature of 50^{o}C must be achieved within one minute of opening the tap.

g On circulation systems, the return temperature to the calorifier must be greater than 50^{o}C.

h Where the water temperature is reduced at the point of use from 55^{o}C, by the use of a thermostatic mixing valve, the pipework length must be kept to a minimum. The leg from the distribution circuit must not exceed 3.0 metres and the leg from the blender must not exceed 2.0 metres.

i Where hot water is to be provided by electric point of use (POU) heaters, a blending valve must be fitted so that the stored water can be maintained at 60^{o}C. If the POU heater is in regular use and less than 15 litres volume then this may be set at about 43C. However, in exceptional circumstances, where this is not practicable due to insufficient water pressure a thermostatically controlled unit may be considered, the temperature must be set to suit the outlet requirements and a thermal disinfection regime must then be put in place as appropriate.

j All materials and fittings used in any water system must be low corrosion and in compliance with the Water Supply (Water Fittings) Regulations and WRAS Approved.

k For cold water services, where possible, lower use outlets must be installed upstream of higher use outlets.

l Generally, all hot and cold outlet pipes must be of minimum length, and any pipework that is removed must be cut back to the main pipe work runs to ensure no dead legs or blind ends remain.

m If standby equipment is installed, e.g. pumps, these must operate automatically and at least once a week to avoid stagnation.

n All new and refurbished hot water systems and any systems that have been out of use without regular flushing on at least a weekly basis must be cleaned and disinfected in accordance with BS 6700:1987, section three clauses 13.9 or as amended.

o Calorifier vent pipes are to be directed into a separate tundish

p Spray taps should not be used with a thermostatic mixer valve (TMV)where there is a vulnerable population

B1.4 Competent help, advice and management support is provided by. Tweeds, York House, 20, York Street, Manchester M2 3BB and Kenneth Ashley Consultancy Ltd, Firs on Hill, Hill Road North, Helsby, Frodsham, Cheshire, WA6 9AQ

B1.5 A risk assessment must be carried out by a competent person prior to the occupation of any new premises, or occupation of any extension to an existing premises, where there is a foreseeable risk of exposure to Legionella bacteria. This must include premises where any of the following exist:

- Hot water services
- Cold water services
- Shower heads
- Ultrasonic humidifiers/foggers & water misting systems
- Spray humidifiers, air washers & wet scrubbers
- Water softeners
- Emergency showers & eye wash stations
- Lathe & machine tool coolant systems
- Swimming Pools
- Hydrotherapy pools
- Spa baths
- Horticultural misting systems

- Vehicle washing facilities [lance or drive through]
- Indoor fountains & water features
- Any water system not listed above which is between a temperature of 20^{o}C to 45^{o}C and where an aerosol may be produced

B1.5.1 For new construction, building use changes and/or refurbishment a risk assessment must be undertaken with the significant findings recorded for inclusion in the Health and Safety File. C D M Regulations require a Legionella risk assessment on handover to RBC of all new builds.

B1.5.2 For all existing premises, the Council will review current assessments and/or undertake new assessments on a rolling programme as detailed in clause B.1.13.

B1.6 The significant findings of the risk assessment must be recorded at the premises. If the assessment has shown that there is a reasonably foreseeable risk of exposure to Legionella bacteria, there must be a written scheme in place to control that risk. The written scheme for controlling the exposure must be implemented and properly managed. The scheme must include instructions on the operation of the system and details of the precautions to be taken to control the risk of exposure to Legionella bacteria, including checks and their frequency. The recommended inspection frequencies must be based on Appendix 1 of the Health and Safety Commission Approved Code of Practice and Guidance L8: “Legionnaires disease - The control of Legionella bacteria in water systems”. In the absence of premises-specific procedures, Appendix 2 of this policy specifies typical tasks, with their associated frequencies, that must be undertaken.

B1.6.1 All records must be kept at the premises and preferably as an electronic copy. They must be maintained and managed under the control of the **Property Services Manager,** and retained for a period of at least 5 years following expiry.

B1.7 Consultation with employees must be undertaken at regular team meetings and briefing sessions. All employees must be aware that the two primary objectives of this policy are to avoid:

- conditions that allow the proliferation of Legionella; and
- avoid the creation of sprays or mists that give rise to respirable water droplets.

Where this is impractical, the risk should be controlled so as to minimise the release of water droplets and prevent water conditions that permit the growth of Legionella. It is possible to have very low concentrations of Legionella in many water systems and by careful control prevent them from multiplying. Generally, proliferation of Legionella may be avoided by:-

a) keeping water temperatures outside the range 20-45 degrees Celsius;
b) minimising water stagnation;
c) not using materials that provide nutrients for the bacteria or other organisms;

d) keeping systems clean;
e) ensuring effective water treatment programmes are in place, e.g. Spa Baths;
f) operating systems safely and keeping them correctly maintained.

This is achieved by: -

a) identifying and ensuring the proper application of maintenance, repair, cleaning and treatment regimes for all water services and ancillary equipment. This is necessary to maintain satisfactory water quality with respect to potential health hazards;
b) maintaining an up-to-date premises record containing details of a risk assessment, Written Scheme of Control for minimising the risk, and reports of periodic water quality checks and reviews by an independent competent assessor. These records must be kept on the premises and made available to any person with the authority to inspect them. Such persons would include the competent assessor, inspectors of the Health & Safety Executive, officers of the Borough Council, and maintenance and repair personnel.

B1.8 Risk assessments must be reviewed at least every 24 months and when:

a) significant changes have been made to a system, e.g. following maintenance or alteration ;
b) significant changes have occurred in the way a system is being used, e.g. a formerly fully occupied building is now only partially occupied;
c) changes to the occupancy of the building e.g. higher risk users;
d) changes have been made to the management and/or maintenance of the system, e.g. 6 months after a new maintenance company has been appointed;
e) the results of checks indicate that control measures are no longer effective;
f) a case of Legionnaires‘ disease or Legionellosis is associated with the; system;.
g) there is new relevant information about risks or control measures;

If there is doubt as to what changes should trigger a risk assessment, a programme of annual reviews or audits should be considered.

B1.8.1 If it is considered that microbiological testing is required, samples should only be taken by a competent person and analysed by a United Kingdom Accreditation Service (UKAS) approved laboratory. Advice must be sought from Kenneth Ashley Consultancy Ltd (see B1.4).

B1.9 In the event of an emergency the responsible person or his deputy must be advised, their contact details are in Appendix 1.

B1.9.1 In the event of an outbreak the Council will follow the guidance presented in Appendix 2 of the Health and Safety Commission Approved Code of Practice and Guidance L8:“Legionnaires disease - The control of Legionella bacteria in water systems”.

B.1.10 Medical Advice is available if exposure to Legionella bacteria has occurred.

The Council's employees who may be affected or involved will be offered an appointment with the Council's Occupational Health Service provider. The purpose of this appointment is to:

a) establish an Occupational Health Record. This must be retained for 50 years, preferably by the Council's OHS;

b) document the type and level of exposure for each employee exposed. A written summary should be provided for the OHS to attach to the records;

c) establish a baseline medical record of health;

d) provide an opportunity for employees to discuss risks and concerns in confidence;

e) ensure that employees' general practitioner (GP) services are informed, via the OHS, so that GPs can monitor the individuals concerned.

SECTION B.1.11 BELOW NEEDS REVISING BY RBC

B.1.11 The responsibilities of staff involved in the control regime are as follows:

1. **The Executive Director of Resources will** have overall responsibility for ensuring arrangements are in place in their Directorates/areas of control for the effective management of Legionella. In particular they are responsible for ensuring that this Code of Practice is implemented and that appropriate training is provided for those with local responsibility for compliance.
2. **The Council's Health and Safety Adviser (CHSA)** are responsible for providing advice to managers on how to deal with health and safety issues, advice on more specific risks, such as Legionella, will be provided ,or access to other competent sources will be utilised.
3. **Heads of Service Co-ordinators** are senior managers responsible for monitoring the implementation of the Council's Health and Safety Policy in their Services. They are responsible for:

    a) ensuring that a person is identified for each premises and there is an identified manager responsible for carrying out the duties and they are aware of their responsibilities;

    b) distributing this policy throughout each Service ;

    c) arranging, in conjunction with the Property Services Manager, appropriate training;

    d) responding appropriately with respect to emergency procedures;

e) ensuring systems are in place for monitoring the implementation of this Code of Practice.

4.0 **The Property Services Manager** is responsible for implementing this policy and Code of Practice in Council "Corporate Office Accommodation" and for the delivery of the initial risk assessments in relating to such.

Also responsible for instructing the Council's Maintenance Consultant to undertake any structural works necessary following a risk assessment, for properties where the Council holds the central building maintenance budget. He responsible for promoting good design practice to reduce the risk of Legionella multiplying in the water systems.

5.0 **Managers responsible for premises** are responsible for advising the **Property Services Manager** on any issues relating to their premises that may affect the risk assessment in premises under their control and must:

a) have available, and keep up to date, all information supplied for the operation and management of their premises, including a copy of all the relevant records, schematic diagrams and risk assessments for the premises under their control;

b) inform staff of the potential health risks of exposure to Legionella bacteria, for which they will receive appropriate training, and their responsibilities in the implementation of the Code of Practice on "Managing Legionella in Buildings";

c) monitor, or arrange for the monitoring of, water systems as detailed in the Written Scheme produced following a risk assessment.

d) establish and implement appropriate controls for any maintenance or modification work to be done by contractors, service engineers, volunteers and own staff (e.g. Site maintenance staff) so that they;

e) develop an agreed safe system of work;

f) understand the implications of modifying or maintaining the water systems and the characteristics which govern the risk and control of the susceptibility to colonisation by Legionella;

g) understand the risks of exposure to Legionella bacteria; and

h) know what action to take if a case of Legionnaires disease is found or suspected;

i) ensure, where there is no information known about the water system, that this is drawn to the attention to the **Property Services Manager** and those who have to do maintenance work etc. before they commence work. Close consultation and co-operation with Atkins Asset Management will assist managers in meeting this obligation;

j) update the premises' records and schematic diagrams where they have ordered any changes to the water systems in their premises, which can be found in the premises' building safety file;

k) review the risk assessment as detailed in B1.8

l) co-operate and co-ordinate with other managers on shared premises.

6.0 **All employees** have a duty not only for their own health and safety but also a duty to co-operate with the Council in the implementation and maintenance of its arrangements to satisfy its statutory duties for health and safety. Employees therefore have a responsibility to:

a) understand the health risks associated with exposure to Legionella bacteria;

b) report any defective equipment or systems;

c) use any water system in a safe manner; and

d) attend training and read briefing documents.

7.0 The Council's Management Consultants Tweeds and Kenneth Ashley Consultancy Limited are contracted to provide advice and management support:

a) advice on compliance with legislation relating to the prevention of Legionnaires disease e.g. Health & Safety Commission Approved Code of Practice and Guidance L8: "Legionnaires Disease - The control of Legionella bacteria in water systems";

b) invite tenders and supervise contracts for the provision of risk assessments to identify the location of any risks that may cause Legionella to develop to unacceptable levels and the production of a premises recording system;

c) provide advice on and interpretation of recommendations made within the specialists risk assessment;

d) programme remedial works in accordance with reported priority;

e) update the site records including schematic diagrams and risk assessments etc, where changes to services have occurred as a result of maintenance works, improvements or alterations to the water systems under their direction;

f) administer and monitor all maintenance contracts for water systems (ensuring there are procedures in place for the management of Legionella in the Council's premises;

g) respond to requests for advice.

Appendix 1

CONTACTS

Responsibilities	**Directorate and Address**	**Person**	**Contact phone number**
Full and proper compliance			
Health and Safety Responsibility (buildings)			
Maintenance, help and advice			
The Responsible Person – Legionella.			
The Deputy Responsible Person – Legionella.			
Maintenance Contract & Quality Assurance			
Health and Safety advice			

Appendix 2

Checklist to be used to develop premises-specific procedures.

Service	Task	Frequency
Hot water Services	Where hot water is generated in a boiler room check that it achieves 60^{O} C one hour before the first draw off and one hour after the last draw off.	Daily
	Where local electric water heaters supply hot water, raise temperature to 60^{O}C and maintain for one hour.	Quarterly
	Check temperatures in flow and return pipework at calorifiers. The return temperature must be greater than 50^{0} C	Monthly

	Check water temperature at a sample of hot water taps reaches 50^{o} C within 30 seconds after opening tap (location of taps to be identified by competent person); where localised thermostatic mixing valves are fitted the temperature should be measured at the valve supply point with a contact thermometer.	Monthly
	Appoint a competent contractor to visually check on internal surfaces of calorifiers for scale and sludge. Check representative taps for temperature as above on rotational basis.	Every 11 Months
	Arrange for samples to be taken from hot water calorifier's drain off point, in order to check condition of water.	Every 11 Months
	Caution. When undertaking any temperature adjustments ensure that a scalding risk is not introduced. If in doubt seek advice from a competent person.	
Cold Water Services	Check that the tank water temperature at the point furthest away from the ball (float) valve and that the water flowing from the valve is below 20^{0} C	Every Five Months
	Check that the water temperature at a sample of cold water taps is below 20^{0} C after running the water for up to two minutes (location of taps to be identified by a competent person)	Monthly
	Visually inspect cold-water tanks and carryout remedial works where necessary. Check representative taps as above on a rotational basis.	Every 11 Months
Shower Outlets	Inspect and flush.	Weekly
Shower Heads	Dismantle, clean and descale showerheads and hoses.	Quarterly or more frequent as required.
Little Used Outlets, e.g. toilets and wash hand basins.	Flush through direct to drain before use and without producing aerosols or water spray.	Weekly
Spa baths	Check filters – sand filters should be back washed daily	Daily
	Check water treatment – pools should be continuously treated with an oxidising biocide	Three times daily
	Clean and disinfect entire system	Weekly

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