

# Water Treatment Policy (Housing)

Last reviewed October 2019



# 1.0 Water treatment policy overview

This policy is managed and adhered to by the housing service. This policy will be reviewed regularly to ensure compliance with government legislation, guidance and good practice.

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## 1.1 Introduction

Legionnaire's disease is a potentially fatal pneumonia caused by legionella bacteria which can contaminate water systems such as cooling towers and hot / cold water services.

Under health and safety law, Dacorum Borough Council (DBC) must consider the risks from legionella bacteria that may affect our staff, residents and other members of the public and take suitable precautions.

This policy covers properties owned and managed by the housing service and which DBC are the duty holder for (see appendix 1) and all properties which become empty homes.

# 1.2 Aim(s) of the policy:

The aims of this policy are to;

- Ensure our compliance with Health and Safety Guidance (HSG) 274 and L8 approved code of practice;
- Prevent water contamination in our domestic properties (specifically from Legionnaires disease);
- Clarify the housing service approach to managing the risk of water contamination;
- Ensure that effective checks are in place to prevent the outbreak of legionella in properties that we are duty holder for.

# 1.3 Links to Council's corporate aims:

This policy supports council's corporate priority of providing a "clean, safe and enjoyable environment" which is set out in 'Delivering for Dacorum – Corporate Plan 2015-2020'.

# 1.4 Equality and diversity

The council is committed to promoting equality of opportunity in housing services and has procedures in place to ensure that all Applicants, Tenants and Leaseholders are treated fairly and without unlawful discrimination.

# 1.5 Policy Statement(s)

We will identify, assess and monitor sources of legionella risk (see 2.1).

We will take action to prevent the contamination of our water systems (see 2.2).

We will carry out regular auditing to ensure that records are kept and checks are undertaken in an effective manner (see 2.1).

We will make building managers aware of legionella risk and ensure they are efficiently trained to prevent it (see 2.2).

We will deal with outbreaks of legionella appropriately and efficiently (see 2.3).

# 2.0 Water treatment policy detail

## 2.0 Water Treatment Policy Detail

#### 2.1) Identifying and monitoring sources of risk

As a housing service, we will carry out a suitable, sufficient and up to date UKAS accredited risk assessment in all properties where we are duty holder (see Appendix 1). Where we are the freeholder, it is made clear in the given lease who has responsibility as duty holder.

We will undertake regular audits to ensure appropriate records are maintained and checks are carried out as required to prevent legionella outbreak. Documents that we retain include;

- Schematic diagrams of water systems
- Risk assessments and results (including corrective actions)
- Monitoring records (who did the work and when)
- Training records

Legionella risk assessments will be reviewed every two years by a competent person, or when material changes to the building/water systems are made. Any amendments or reasoning for no amendments will be documented.

#### 2.2) Prevention

If a risk of legionella outbreak is identified, this will be prevented or controlled appropriately. We employ a specialist contractor to effectively manage and avoid risk.

Through our procurement process and contract monitoring, we ensure that contractors are competent to carry out the works needed. As part of their contract with us, they are expected to comply with legislation and guidance as referred to in 4.0. Details regarding the actions that our contractor should undertake are set out in Appendix 2.

The Compliance Team is responsible for ensuring that records are maintained, kept safe and are accessible for inspection. The Compliance Team will review risk assessments and implement planned preventative measures (PPMs) to be undertaken by a competent contractor. Any hazards that are identified through PPMs are reported to the Compliance Team who manage the risk accordingly.

In addition, we will inform building managers (e.g. supported housing officers) of any actions they need to carry out to ensure building compliance. Specific duties of the building manager are identified within each site-specific risk assessment. These duties include, but are not limited to, regular flushing of toilets and taps in communal areas/infrequently used outlets.

We ensure that building managers receive appropriate legionella awareness training annually to make sure that effective risk management takes place.

#### 2.3) Outbreak

If an outbreak of legionella occurs, environmental health will be informed and they will enact the Hertfordshire and Bedfordshire Legionella Outbreak Plan. As DBC is enforced by the Health & Safety Executive, they may also be involved in the investigating compliance with health and safety legislation. If anyone is alleged to be suffering from a legionella related illness, we will recommend that they contact their GP.

# 3.0 Links to other corporate documents

4.0 Legislation

5.0 Appendices

This policy links to and should be read in conjunction with the following policies and strategies:

- Corporate Health & Safety Policy
- Corporate Legionella Management Plan
- DBC Tenancy Agreement
- DBC Tenants Handbook
- Legionella Risk Assessment Procedure
- Legionella Hazard Management Procedure
- Legionella Non-conforming Temperatures Procedure
- Hertfordshire and Bedfordshire Legionella Outbreak Plan

The legislation listed below will be taken into consideration when implementing this policy:

- HSG 274 Legionnaires' disease Part 2: The control of legionella bacteria in hot and cold water systems and where necessary HSG 274 Part 1 and Part 3
- Legionnaires' disease, The control of legionella bacteria in water systems, L8 (Fourth edition) Published 2013
- Health and Safety at Work etc. Act 1974
- The Management of Health and Safety at Work Regulations 1999
- The Control of Substances Hazardous to Health Regulations 2002
- Landlord & Tenant Act 1985
- Housing Act 1988

- 5.1 Properties DBC owns/manages/is duty holder for
- 5.2: Checklist for hot and cold water systems

# Appendix I: Properties DBC owns/manages/is duty holder for

Address	Duty Holder	Responsible Person/Entity	Location of Records	Building Manager	Ref
Betty Patterson House Christopher Court Compass Point Cranford Douglas Gardens Dudley House Elizabeth House Emma Rothschild's Court Evelyn Sharp House Florence Longman House Gade Towers (tank inspection only) Gilbert Burnet House Hilltop (tank inspection only) Langley House Leys Road Laundry 2-4 Leys Road Longlands (tank inspection only) Mayflower Avenue Oak lawns Old House Road Park wood Drive Pheasant Close (tank inspection only) Phyliss Courtnage House Pond Close Pelham Court Rice Close Saturn Way Southernwood Close Two Beeches William Crook House Willow Edge The Elms 51 Woolmer Drive Rosebery Way St Peters Court Summer Court Kylna Court Cornmill Court	Dacorum Borough Council	Group Manager Property and Place /Team Leader Mechanical and Electrical /Mechanical Electrical Project Surveyor	Electronically on shared computer system with contractor (Opuz)	Supported Housing Officers where applicable	

# **Appendix II: Checklist for hot and cold water systems**

Unless contrary identified by the legionella risk assessment and agreed by DBC, the contractor should undertake the following as a minimum;

Service	Action to take	Frequency
Calorifiers	Inspect calorifier internally by removing the inspection hatch or using a boroscope and clean by draining the vessel. The frequency of inspection and cleaning should be subject to the findings and increased or decreased based on conditions recorded.	Annually, or as indicated by the rate of fouling
	Where there is no inspection hatch, purge any debris in the base of the calorifier to a suitable drain Collect the initial flush from the base of hot water heaters to inspect clarity, quantity of debris, and temperature.	Annually, but may be increased as indicated by the risk assessment or result of inspection findings.
	Check calorifier flow temperatures (thermostat settings should modulate as close to 60 °C as practicable without going below 60 °C) Check calorifier return temperatures (not below 50 °C).	Monthly
Hot water services	For non-circulating systems: take temperatures at sentinel points (nearest outlet, furthest outlet and long branches to outlets) to confirm they are at a minimum of 50 °C within one minute (55 °C in healthcare premises)	Monthly
	For circulating systems: take temperatures at return legs of principal loops (sentinel points) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises). Temperature measurements may be taken on the surface of metallic pipework	Monthly
	For circulating systems: take temperatures at return legs of subordinate loops, temperature measurements can be taken on the surface of pipes, but where this is not practicable, the temperature of water from the last outlet on each loop may be measured and this should be greater than 50 °C within one minute of running (55 °C in healthcare premises). If the temperature rise is slow, it should be confirmed that the outlet is on a long leg and not that the flow and return has failed in that local area	Quarterly (ideally on a rolling monthly rota)
	All HWS systems: take temperatures at a representative selection of other points (intermediate outlets of single pipe systems and tertiary loops in circulating systems) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises) to create a temperature profile of the whole system over a defined time period	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control

15 illes)		POU heaters greater 15 litres)	(no than	Check water temperatures to confirm the heater operates at 50–60 °C (55 °C in healthcare premises) or check the installation has a high turnover	3 ,
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Service	Action to take	Frequency
Combination water heaters	Inspect the integral cold water header tanks as part of the cold water storage tank inspection regime, clean and disinfect as necessary. If evidence shows that the unit regularly overflows hot water into the integral cold water header tank, instigate a temperature monitoring regime to determine the frequency and take precautionary measures as determined by the findings of this monitoring regime	Annually
	Check water temperatures at an outlet to confirm the heater operates at 50-60 °C	Monthly
Cold water tanks	Inspect cold water storage tanks and carry out remedial work where necessary	Annually
	Check the tank water temperature remote from the ball valve and the incoming mains temperature. Record the maximum temperatures of the stored and supply water recorded by fixed maximum/minimum thermometers where fitted	Annually (Summer) or as indicated by the temperature profiling
Cold water services	Check temperatures at sentinel taps (typically those nearest to and furthest from the cold tank, but may also include other key locations on long branches to zones or floor levels). These outlets should be below 20 °C within two minutes of running the cold tap. To identify any local heat gain, which might not be apparent after one minute, observe the thermometer reading during flushing	Monthly
	Take temperatures at a representative selection of other points to confirm they are below 20 °C to create a temperature profile of the whole system over a defined time period. Peak temperatures or any temperatures that are slow to fall should be an indicator of a localised problem	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control
	Check thermal insulation to ensure it is intact and consider weatherproofing where components are exposed to the outdoor environment	Annually
Showers and spray taps	Dismantle, clean and descale removable parts, heads, inserts and hoses where fitted	Quarterly or as indicated by the rate of fouling or other risk factors, e.g. areas with high risk patients
Point of Use (POU) filters	Record the service start date and lifespan or end date and replace filters as recommended by the manufacturer (0.2 µm membrane POU filters should be used primarily as a temporary control measure while a permanent safe engineering solution is developed, although long-term use of such filters may be needed in some healthcare situations)	According to manufacturer's guidelines
Base exchange softeners	Visually check the salt levels and top up salt, if required. Undertake a hardness check to confirm operation of the softener	Weekly, but depends on the size of the vessel and the rate of salt consumption

	Service and disinfect	Annually, or according to manufacturer's guidelines
Multiple use filters	Backwash and regenerate as specified by the manufacturer	According to manufacturer's guidelines
Service	Action to take	Frequency
Infrequently used outlets	Consideration should be given to removing infrequently used showers, taps and any associated equipment that uses water. If removed, any redundant supply pipework should be cut back as far as possible to a common supply (e.g. to the recirculating pipework or the pipework supplying a more frequently used upstream fitting) but preferably by removing the feeding 'T' Infrequently used equipment within a water system (i.e. not used for a period equal to or greater than seven days) should be included on the flushing regime Flush the outlets until the temperature at the outlet stabilises and is comparable to supply water and purge to drain Regularly use the outlets to minimise the risk from microbial growth in the peripheral parts of the water system, sustain and log this procedure once started For high risk populations, e.g. healthcare and care homes, more frequent flushing may be required as indicated by the risk assessment	Weekly, or as indicated by the risk assessment
Thermostatic Mixing	Risk assess whether the TMV fitting is required, and if not, remove Where needed, inspect, clean, descale and disinfect any	Annually or on a frequency defined by the risk assessment, taking
Valves (TMVs)	strainers or filters associated with TMVs  To maintain protection against scald risk, TMVs require regular routine maintenance carried out by competent persons in accordance with the manufacturer's instructions.	account of any manufacturer's recommendations
Expansion vessels	Where practical, flush through and purge to drain. Bladders should be changed according to the manufacturer's guidelines or as indicated by the risk assessment	Monthly–six monthly, as indicated by the risk assessment