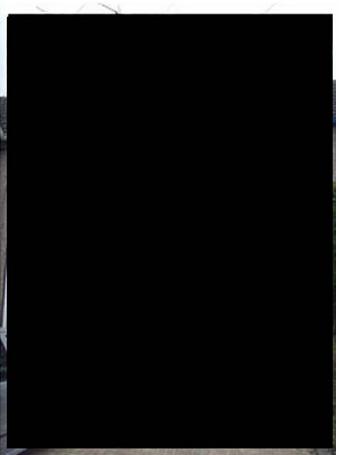




Legionella Risk Assessment

Property address: [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]



Client name: [REDACTED]

Assessor name: [REDACTED]
Reference: [REDACTED]
Assessment date: [REDACTED]
Property type: House

Management responsibilities

Name of Duty holder: Unknown

Name(s) of responsible person(s): Unknown

Existing information

Does a policy exist which clearly lays out individuals' responsibilities? Unknown

Are persons identified within the policy trained/competent? Unknown

Have contractors been approved and are they competent? Unknown

Does a written scheme of control currently exist for the property? Unknown

Has a schematic drawing been supplied by the client? No

Is property currently occupied?* No

* Please note that if the property is not occupied at time of inspection it is not possible to assess the risk of persons who may be vulnerable to Legionnaire's Disease. Therefore, the assessment will require review once the property is occupied. Properties which are unoccupied for periods of 2 weeks or more present a risk due to water stagnation- further details are contained in section 8 of this assessment.

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About Legionella

Legionnaires' disease is a potentially fatal form of pneumonia which is contracted by inhaling small droplets of water containing the Legionella bacteria.

Legionella bacteria are present in low numbers in natural water systems such as rivers and ponds, and can be present in domestic and commercial hot and cold water systems. If conditions are favourable, the bacteria may multiply to dangerous levels in 9-10 days and it is possible to contract Legionnaires' disease, or the less harmful Pontiac Fever as a result of exposure to contaminated water.

Legionnaires' disease mainly affects people in 'high risk' groups including those over the age of 45, new born babies, smokers, heavy drinkers, those with heart disease and anyone who has a weakened immune system.

The Law

The control of Legionella in rented property is a legal requirement, and duties of care are placed on Landlords as 'self-employed persons'. House of Commons Briefing Paper 07307 (October 2015) states that landlords have a responsibility to take measures to ensure that their properties are free from health and safety hazards, this includes taking measures to combat Legionnaires' Disease.

The duties of care placed on Landlords are detailed in the following generic HSE guidance and regulations:

- The Health and Safety at Work etc. Act 1974
- The Control of Substances Hazardous to Health Regulations 2002
- The Management of Health and Safety at Work Regulations 1999

Specific guidance on the control of Legionella bacteria is contained in the following publications:

- Legionnaires' Disease: The Control of Legionella Bacteria in Water Systems- Approved Code of Practice L8 2013 (HSE)
- Legionnaires' Disease: Part 2: The Control of Legionella Bacteria in Hot and Cold Water Systems HSG274 2014 (HSE)
- BS 8580-1:2019 Water quality. Risk assessments for Legionella control. Code of practice

Level of Risk

The level of risk is determined by assessing the likelihood of a hazard occurring and the severity of the effects of the hazard. This Risk Assessment has been produced using a simple 6 level risk system as follows:

Rating	Risk Level	Details
None	No risk	There is no significant present risk and no action is currently required other than to ensure the risk assessment is reviewed at regular intervals.
Minor	Minor risk	There is a low risk but not under normal conditions. A written Scheme of Control is not required but could be implemented.
Low	Low risk	There is a low risk under normal conditions. A written Scheme of Control should be implemented and control measures detailed in this report followed
Medium	Medium risk	There is a significant risk but not under normal conditions. A written Scheme of Control is required and control measures recommended in this report should be followed, which may include changes to the design of the system.
High	High risk	There is a significant risk under normal conditions. A written Scheme of Control is required and control measures recommended in this report should be followed immediately, which may include changes to the design of the system and/or use of chemical disinfectants.
Critical	Critical risk	There is an immediate risk and urgent action is required. This may include isolation of the system and water sampling, and could include disinfection if necessary. A written Scheme of Control is required and control measures recommended in this report should be followed immediately. A further risk assessment is recommended following implementation of control measures.

Each risk factor is assessed individually and then an overall rating is given in the Assessment Summary section.

Details of Water System(s)

Scope of assessment

The assessment covered the entire property, including all water systems and outlets. This comprehensive evaluation aimed to assess potential Legionella risks across all areas where water is used, ensuring the safety and compliance of the property's water supply system. The assessment included a visual inspection of all visible pipework, taps, showerheads, and other water outlets, along with temperature testing and a review of the overall condition of the water system throughout the property.

**Please note that inaccessible sections of pipework such as those situated under floors or recessed in walls have not been inspected as part of this risk assessment.*

This Legionella Competency Scheme only covers assessments of hot and cold water systems, not water bodies or water associated within HVAC(heating, ventilation, air conditioning) services.

Limitations

None

Type of hot and cold water system

Gravity-fed without re-circulation

Initial questions

Is water from a wholesome supply? Yes

Are all visible materials and fittings used suitable for application? No

If no, please detail

The cold water storage tank and the external tap and associated pipework are considered unsuitable for their intended applications. For full details and supporting observations, please refer to the relevant sections within this report.

Brief overview of system including boiler/water heater, rooms served and outlets

The water system at the premises consists of a cold water supply that feeds a gravity-fed header tank located above the hot water cylinder. The cylinder is a vented direct type, which receives water from the header tank and supplies hot water to the outlets throughout the building. In addition, the incoming mains cold water supply, which is pressurised, feeds the cold water outlets directly. This configuration results in a combination of gravity-fed hot water and mains-fed cold water throughout the system.

Description of current control strategy, if any

Water temperature at outlets

1. Water temperature at outlets

Is cold water temperature below 20°C? Yes

Highest recorded temperature (°C) 19

Is hot water temperature above 50°C at outlets? Yes

Lowest recorded temperature(°C) 61

Are TMV's present? No

Is hot water temperature from TMVs (if fitted) 39-43°C at outlet(s)? N/A

Issue(s) identified/comments

The cold water temperature was recorded at 19°C, which remains within the acceptable range (below the 20°C threshold) according to HSE guidance. However, it is close to the upper limit, likely due to the recent hot weather increasing ambient temperatures. While no immediate action is necessary, it would be sensible to keep an eye on temperatures during warmer periods to ensure they continue to stay within safe limits and minimise any risk of Legionella growth.

Risk rating

Risk level 1 - Minor

Recommendation(s)

Photo of water outlet





Water temperature- control measures:

Ensure boiler/water heater is set to 60°C so that water reaches outlets at above 50°C. Ensure cold water does not exceed 20°C by making sure pipes and storage tanks are insulated. Ensure water temperature at outlets is 39-43°C where TMVs are fitted, or above 50°C at the hot pipe feeding the TMV if it is accessible. TMVs should be tested at least annually.

Cold water Storage

2. Cold water storage

Is a cold water storage tank present? Yes

Is its location suitable? No

Does it have a close-fitting lid and is it compliant with HSE guidance? No

Is it insulated? No

Is water in the tank free from rust, biofilms, scale and debris? No

Issue(s) identified/comments

The cold water storage tank located above the hot water cylinder is a gravity-fed steel tank that is currently in poor condition. It contains limescale and debris, lacks a secure lid, and has uninsulated surfaces, which allows heat from the cylinder below to raise water temperatures above 0 °C. The tank is made of steel and is not insulated for cold water storage due to its susceptibility to corrosion. These factors, combined with stagnant areas and difficulty in cleaning, render the tank unsuitable for its intended application.

Risk rating

Risk level 4 - High

Recommendation(s)

The existing cold water tank must be thoroughly cleaned and descaled before it is used; however, due to its material, condition, and design, our recommendation is to replace it entirely. The preferred solution would be to install a modern corrosion-resistant tank (plastic with a tight fitting lid) or, ideally, upgrade the system to an unvented direct encapsulated cylinder, removing the need for a separate cold water storage tank and providing mains-pressure hot and cold water. Any new installation should be insulated, and maintained with regular inspections and temperature checks.

Photo of cold water storage









Cold water storage- control measures:

If rust is present on the tank it may require replacement. If debris, scale or biofilms are present in the tank it will require draining and cleaning out. A cold water tank should be constructed of a suitable material which is not prone to corrosion, have a close-fitting lid and comply with all other guidance given in document HSG 274, including being sufficiently insulated.

Hot water Storage

3. Hot water storage

Is a hot water cylinder present? Yes

Is the cylinder insulated? Yes

Is a cylinder thermostat present? No

Is the temperature on the cylinder thermostat set to 60°C or above? N/A

Is the temperature of the flow pipe 60°C or above? No

Is the temperature of the return pipe 50°C or above?(recirculating systems only) N/A

Does the overflow from the calorifier go to a tundish or drain? Unknown

Does the storage vessel comply with relevant HSE guidance? Yes

Issue(s) identified/comments

The hot water system comprises a vented direct cylinder supplied by the gravity-fed cold water header tank. During inspection, the temperature reading at the cylinder outlet did not exceed 50°C due to the presence of metal interfering with the measurement. Observations at the hot water outlets indicate temperatures consistently above 60°C demonstrating that the system is functioning correctly and achieving the required hot water temperatures for its intended use.

Risk rating

Risk level 1 - Minor

Recommendation(s)

Photo of hot water storage





Hot water storage- control measures:

Ensure hot water is stored at 60°C. The cylinder should be insulated to help maintain the correct temperature and to prevent heat loss. If a cylinder thermostat is fitted it should be set at the correct temperature and not adjusted. The overflow from a cylinder should go directly to a tundish or drain, not back into the cold water tank.

Little used/unused Outlets

4. Little used/unused outlets

Are there any outlets which are used less than once per week? No

Issue(s) identified/comments

Risk rating

Risk level 0 - None

Recommendation(s)

Photo of little used/unused outlets

Little used/unused outlets control measures:

Any little used outlets should be flushed through weekly by running the outlet for at least two minutes. Spray/aerosol production should be minimised when carrying this out. Consideration should also be given to removing little used outlets and dead legs (pipes leading to an outlet through which water flows but the outlet is unused/rarely used) where possible.

Shower heads, taps and other spray outlets

5. Shower heads, taps and other spray outlets

Are there any showers present? Yes

Are there any spray taps present? No

Is there a hose pipe present? No

Issue(s) identified/comments

There is some minor scaling on the taps.

The hot water pressure is low, and this is due to the system being gravity-fed from the cold water header tank, with pressure dependent on the height of the tank above the cylinder and outlets.

It is unclear whether the external tap is fitted with a one-way (non-return) valve; if one is not present, there is a risk of backflow contamination into the cold water supply.

The external pipework is uninsulated, increasing the risk of freezing in winter and higher water temperatures in summer, which can promote bacterial growth.

Risk rating

Risk level 2 - Low

Recommendation(s)

Clean and descale taps.

It is recommended that the low hot water pressure be reviewed, and consideration given to upgrading the system to a pressurised (unvented) cylinder if higher pressure is required at the outlets. Any such work should be carried out or advised on by a correctly qualified contractor.

A plumber is recommended to check whether a suitable one way valve is installed and, if necessary, fits one to ensure compliance with water regulations.

It is recommended that the external pipework be insulated to prevent freezing and help control water temperatures.

Photo of Shower heads, taps and other spray outlets





Shower heads and other spray outlets- control measures:

Any showers/spray/taps/hose pipes should be flushed through weekly. Shower heads and other outlets should be de-scaled at least every 3-6 months. Consideration should be given to replacing spray taps with normal taps.

Blind ends in pipework

6. Blind ends in pipework

Are there any blind ends (lengths of redundant pipework which have been capped off) present? No

Issue(s) identified/comments

Risk rating

Risk level 0 - None

Recommendation(s)

Photo of Blind ends in pipework

Blind ends in pipework- control measures:

Any blind ends in pipework should be removed to ensure water cannot stagnate in the water system.

Spa pools/hot tubs/whirlpool baths

7. Spa pools/hot tubs/whirlpool baths

Is a spa pool/hot tub present? No

Is a whirlpool bath present? No

Issue(s) identified/comments

Risk rating

Risk level 0 - None

Recommendation(s)

Photo of Spa pools/hot tubs/whirlpool baths

Spa pools/hot tubs/whirlpool baths- control measures:

Spa pools/hot tubs and whirlpool baths should be cleaned and disinfected in accordance with manufacturers' guidelines, along with regular visual inspection.

Unoccupied properties

8. Unoccupied properties

Is the property unoccupied for periods longer than two weeks? Unknown

Issue(s) identified/comments

The property was vacant on the day of inspection, and it is unclear how long it has been unoccupied. Extended periods of vacancy can lead to water stagnation, temperature fluctuations, and increase the potential for bacterial growth, including Legionella.

Risk rating

Risk level 1 - Minor

Recommendation(s)

Before the property is returned to regular use, the water system should be carefully flushed and cleaned. Regular monitoring of water temperatures and maintenance should be carried out to ensure the system is safe and suitable for its intended application.

Unoccupied properties control measures:

If the property is unoccupied for periods of longer than 2 weeks all hot and cold water outlets systems should be flushed through at least weekly for at least two minutes. For longer periods consideration should be given to draining the system completely. The system should be flushed through before it is re-occupied by running all outlets for at least two minutes. Spray/aerosol production should be minimised during this process.

Tenants

9. Tenants

Are tenants aware of the risks of Legionnaire's Disease? Unknown

Are tenants aware of their responsibilities to minimise this risk? Unknown

Issue(s) identified/comments

Risk rating

Risk level 1 - Minor

Recommendation(s)

Tenants- control measures:

Tenants should be given an advice document informing them of the risks of Legionnaire's Disease from hot and cold water systems, as well as relevant information relating to the system in place. They should be advised not to alter hot water temperatures on boilers/water heaters and/or cylinders.

High Risk groups

10. High risk groups

Is the property occupied by persons vulnerable to Legionellosis? Unknown
Are there any regular visitors to the property who are vulnerable? Unknown

Issue(s) identified/comments

Risk rating

Risk level 1 - Minor

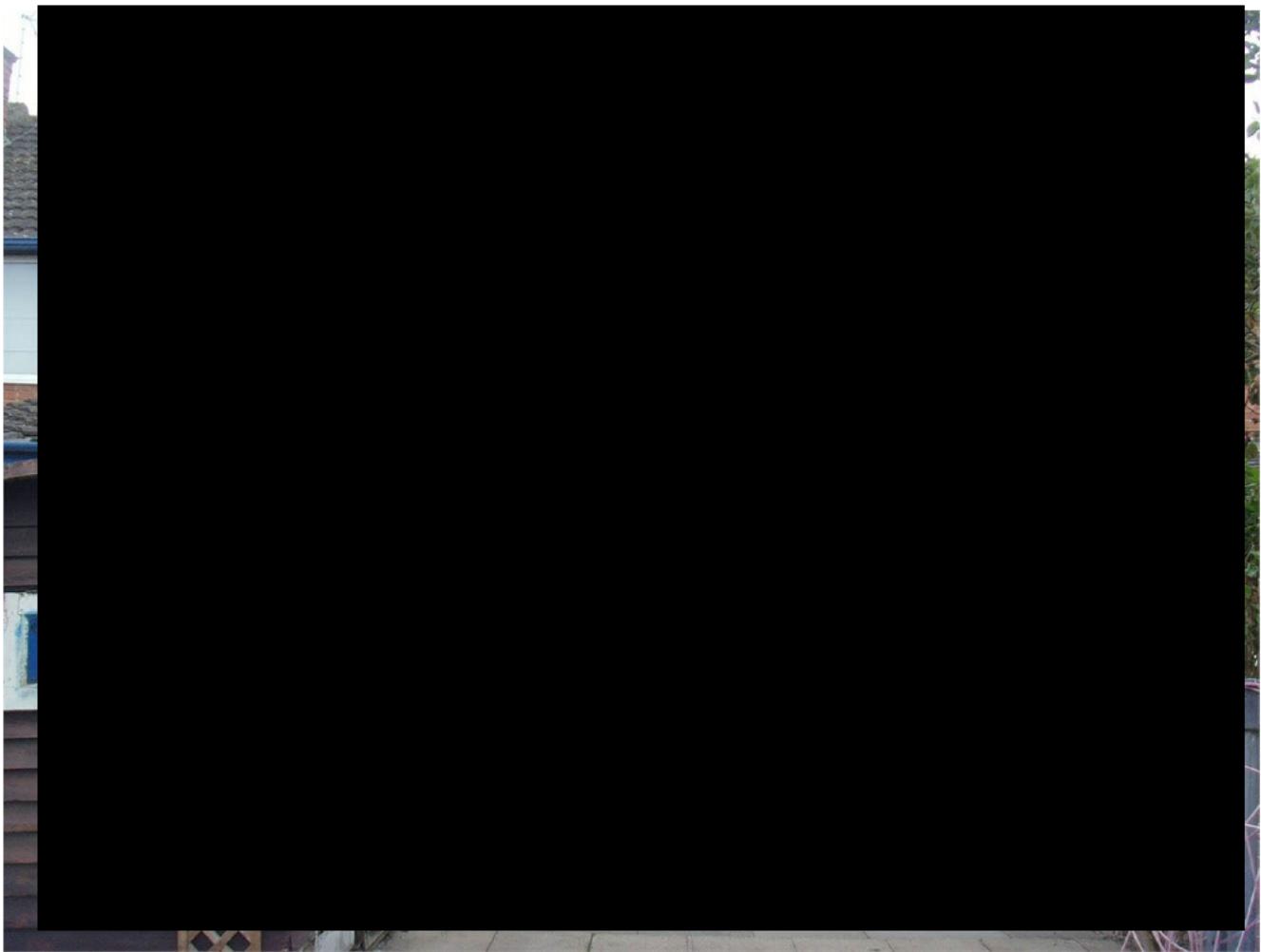
Recommendation(s)

High risk groups- control measures:

The presence of vulnerable tenants and regular visitors to the property should be re-evaluated on change of occupancy. TMVs may need to be installed where vulnerable persons are at risk of scalding. Consideration should also be given to removing unnecessary spray outlets such as spray taps.

Further photos

Further photos





Duties of Care for Legionella Control

Landlord/ Managing Agent responsibilities include the following:

- Ensure hot and cold water systems are maintained as per the guidance contained in the Control Measures sections of this report and detailed in HSE document HSG 274 Part 2
- Ensure stored hot water is heated to 60°C or above and all hot water reaches outlets at 50°C
- Flush through hot and cold water systems prior to letting if a property has been unoccupied for 2 weeks or more (respiratory protection is advised during this process)
- Provide tenants with written information about the risks of Legionella and the correct operation of the hot and cold water system installed in the property

Tenant Responsibilities (if appropriate and detailed in tenancy agreement) include:

- Regular cleaning of shower heads, taps and other spray outlets every 3-6 months
- Flushing through of any little used/unused outlets every 1-2 weeks
- Reporting of any issues identified with the hot and cold water system
- Ensuring heating controls are not altered from their required settings

Assessment Summary

Summary of Risk Assessment

The property presents a high risk for Legionella, primarily due to the condition of the cold water storage tank. The measures for the tank should be followed as outlined in the relevant section. Ongoing maintenance, including cleaning, flushing, insulating pipework, and monitoring temperatures, is essential. Replacement with a modern tank or upgrading to an unvented direct encapsulated cylinder is recommended. All works should be carried out or advised on by a correctly qualified contractor.

Overall Risk Rating

Risk level 4 - High

Assessment review date

Assessment review date 21/08/2026

**This risk assessment should be reviewed on change of occupancy or changes to the water system.*

Disclaimer

This risk assessment has been carried out using information provided by the client and the property's occupants at the time of assessment. It is hereby understood and agreed that the person/s named in this risk assessment shall not be liable in respect of any claim or costs or expenses arising out of the following:

- Any neglect, error or omission occurring or committed prior to the date of this document in respect of Legionella risk assessments
- The collection of water samples for Legionella testing, the cleaning of water systems, Legionella testing and/or putting in place physical Legionella controls.

Further information on Legionella control is available in the following publications, which are available to download free from the HSE website www.hse.gov.uk

- *Legionnaires' Disease: The Control of Legionella Bacteria in Water Systems- Approved Code of Practice L8 (2013) HSE*
- *Legionnaires' Disease: Part 2: The Control of Legionella Bacteria in Hot and Cold Water Systems HSG274 (2014) HSE*

Legionella Risk Assessment For

Assessor's accreditation number: [REDACTED]
Assessor's Name: [REDACTED]
Email: [REDACTED]
Assessment Date: [REDACTED]

This Legionella risk assessment has been produced by a competent assessor in accordance with the requirements of Approved Code of Practice L8, HSG 274 Part 2 and other relevant HSE guidance. If you have any queries with this certificate please contact the assessor that produced it in the first instance, their details are shown above.

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Schematic Drawing of Water System

