



Site Address:
 165 Netherstowe Lane
 Lichfield
 Staffordshire
 WS14 9RW

Assessor's Information:
 David Greaves
 01543 523440
 07734107524
 david@hsg274.co.uk

Description of the property and water systems:

Demo site address is a 4 bedroom detached residential property in Lichfield. The water systems in the house are as follows; - The mains water main stop valve is located under a cover on the right side of the path at the end of the drive as you look at the front of the house. There is a further stop valve located within the property under the kitchen sink. The mains water system supplies cold water the cold water storage tank located in the loft space, the heating boiler located in the utility room and all cold water outlets in the property with the exception of the bath and the mixer shower. The cold water storage tank supplies cold water to the calorifier located in the fourth bedroom airing cupboard, which in turn supplies all cold water outlets as identified on the asset register and the tank supplies cold water to the bath and mixer shower. The heating boiler supplies low temperature hot water to all radiators within the building and the primary coil in the calorifier.

| Floor | Location | Asset | Comments |
|-------------------|--------------|----------------------------------|---|
| Above First Floor | Loft | Cold water Storage tank | |
| Above First Floor | Loft Area | F & E Tank | Fit the pipe work to the F & E Tank with suitable back flow protection. |
| First Floor | Bathroom | Bath Mixer Spray Outlet | |
| First Floor | Bathroom | Sentinel WHB Mixer Spray Outlet | Cold 17C Hot 56C |
| First Floor | Bathroom | WC | |
| First Floor | Cupboard | Water heater | Copper cylinder |
| First Floor | En-Suite | Electric Shower | Scale noted on head |
| First Floor | En-Suite | WC | |
| First Floor | En-Suite | WHB Mixer Spray Outlet | |
| Ground Floor | Garage | Bib Tap | Infrequently used outlet - Regular flushing required. |
| Ground Floor | Garage | Tap | Infrequently used outlet - Regular flushing required. |
| Ground Floor | Kitchen | Dishwasher | |
| Ground Floor | Kitchen | Fridge (ice machine) | Ice tray not often used. |
| Ground Floor | Kitchen | Sentinel Sink Mixer Spray Outlet | |
| Ground Floor | Kitchen | Sink | Cold 17C Hot 56C |
| Ground Floor | Kitchen | WHB Infrequently Used Outlet | |
| Ground Floor | Outside Rear | Bib Tap | Infrequently used outlet - |

| | | | |
|--------------|--------------|------------------------|----------------------------|
| | | | Regular flushing required. |
| Ground Floor | Utility Room | Central Heating Boiler | |
| Ground Floor | Utility Room | Washing Machine | |

Assessment Photo's

Title: Roof Space - Cold Water Storage Tank and F & E Tank

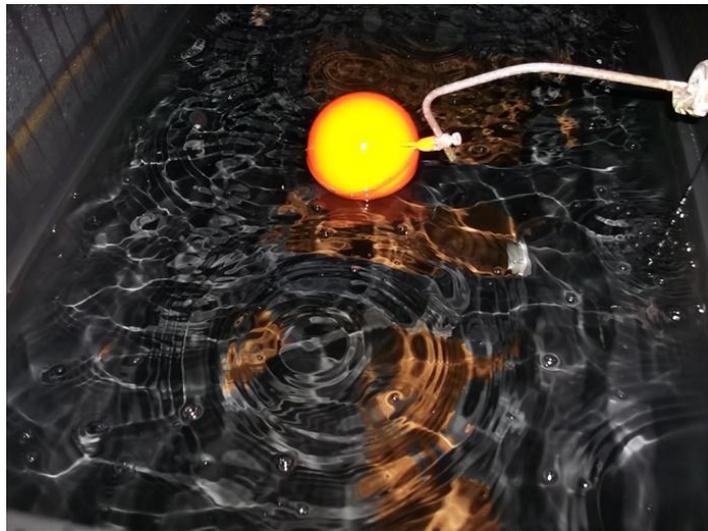


Comments:

LR: 2 GR: 0

The cold water storage tank requires insulating to prevent heat gain from the ambient temperature in the roof space. The pipe work to the F & E Tank requires fitting with suitable back flow protection.

Title: Roof Space - Cold Water Storage Tank.



Comments:

LR: 3 GR: 0

Sediment present in the cold water storage tank. The tank requires cleaning and disinfecting.

Title: Fouled shower



Comments:
Regular cleaning required.

LR: 0 GR: 0

Landlord Responsibilities:

(ACoP L8:2013 Para 48) The statutory duty holder is required to appoint a Competent Person (Responsible person). The appointed competent person or persons should have sufficient authority, competence and knowledge of the installation to ensure that all operational procedures are carried out in a timely and effective manner. The Landlord is the statutory duty holder and would be responsible for the following points detailed below:

The Landlord is the statutory duty holder and is responsible for: -

- Ensuring there is a legionellosis risk assessment of the water systems for the property.
- Maintaining records of corrective actions taken.
- Appointing competent individuals to complete tasks.
- Any subcontractor appointed to clean and disinfect water systems must produce evidence that they are competent to do so.
- Annually (or when the property is re let) consider if any of the following have changed.
 - Changes to the water system or its use.
 - Changes to the use of the building (New high susceptibility tenant).
 - The availability of new information about risks or control measures.
 - The results of checks indicating that control measures are no longer effective.
 - Or if a case of legionellosis is associated with the system.

If they have ensure the risk assessment is up dated.

- Issue the specific guidance below to the tenant on the safe use of the water systems within the property.
- To inform the landlord if hot water & cold water temperatures can't be maintained.
- Cleaning requirements of water fittings such as showers and spray taps etc.
- Ensure outlets are used or flushed at least weekly.
- Void properties
 - Mothballing is a compromise between adequate control of microbial growth and the use of water for flushing (while avoiding waste). Short term voids can be controlled by flushing the entire water system once a week.
 - Longer term voids are often left filled with water for mothballing and not drained down as moisture will remain within the system enabling biofilm to develop where there are pockets of water or high humidity. The systems should be recommissioned as though they were new (ie thoroughly flushed, cleaned and disinfected) before returning to use.
 - If systems are drained they should be recommissioned as though they were new (ie thoroughly flushed, cleaned and disinfected) before returning to use.

Landlords Corrective Actions

| Question | LR | GR |
|--|-----------|-----------|
| 8, Are showers clean and regularly used? | 3 | 0 |
| Answer: No - The shower head was seen to be heavily fouled. | | |
| Recommendation: The tenant should be reminded that monthly (or as indicated by the rate of fouling) showers need to be cleaned and descaled including removable parts, heads, inserts and hoses where fitted. | | |

| Question | LR | GR |
|--|-----------|-----------|
| 16, Is the tank dirty, scaled, corroded, redundant, stagnant, linked or over-sized? | 3 | 0 |
| Answer: Yes – The tank is correctly sized but contains sediment & scale. | | |
| Recommendation: The cistern needs to be cleaned and disinfected in accordance with ACOP L8. | | |

| Question | LR | GR |
|--|-----------|-----------|
| 5, Are water tanks being correctly inspected annually? | 2 | 0 |
| Answer: No - There are no records of tank inspections. | | |
| Recommendation: Storage tanks should be inspected annually for items such as internal condition, the fit of the lid and screens, insulation, and other indicators that the tank is in good order. | | |
| | | |
| Question | LR | GR |
| 11, Is the premises free from dead ends? | 2 | 0 |
| Answer: No – Dead legs identified on the asset register. | | |
| Recommendation: The pipe work to the F & E Tank requires fitting with suitable back flow protection. | | |
| | | |
| Question | LR | GR |
| 2, Is the responsible person competent or do they have access to competent help? | 1 | 1 |
| Answer: No - The responsible person has no experience of legionella control. | | |
| Recommendation: It is recommended that the responsible person should obtain certificated training in Legionella management. Alternatively ensure that the responsible person has access to competent help and advise. | | |
| | | |
| Question | LR | GR |
| 22, Are there details on the internal condition of water heater? | 1 | 0 |
| Answer: No – The heater has not been inspected internally. | | |
| Recommendation: Inspect the water heater internally if it is unable to supply water at the required temperature (60°C). | | |
| | | |
| Question | LR | GR |
| 7, Are TMVs needed, working and serviced as required? | 0 | 2 |
| Answer: No – TMVs are considered necessary but not installed. | | |
| Recommendation: Subject to an assessment of the scalding risk consider TMVs for the bath. Scalding risks are usually low unless submersion occurs and the user can not react to the conditions (small children). | | |

Landlords Control Scheme

Stored water tank

Annually (summer) - Visual inspection of the cold water storage tank to check the condition of the inside of the tank and the water within it. The lid should be in good condition and fit closely. The insect screen on the water overflow pipe should be intact and in good condition. The thermal insulation on the cold water storage tank should be in good condition so that it protects it from extremes of temperature. The water surface should be clean and shiny and the water should not contain any debris or contamination. The cold water storage tank should be cleaned, disinfected and faults rectified, if considered necessary.

- 1 x F & E Tank - Located Above First Floor Loft Area
- 1 x Cold water Storage tank - Located Above First Floor Loft

Water Heater

Annually - In domestic premises it is unlikely to be reasonable to conduct annual internal water heater inspections. However external conditions and confirming that the unit can reach design temperatures is recommended. Failure to achieve temperatures may require internal inspection or replacement.

- 1 x Water heater - Located First Floor Cupboard

Management/Letting Agent Responsibilities

- Ensure there is a signed Service Agreement / Contract to cover all points above.
- The Service Agreement / Landlord Contract should confirm responsibilities and formal lines of communication.
- Hold a current copy of the risk assessment and corrective actions.
- Have a system to ensure the Landlord has actioned the significant corrective actions detailed in the risk assessment.
- Annually (or when the property is re let) consider if any of the following have changed.
- Changes to the water system or its use.
- Changes to the use of the building (New high susceptibility tenant).
- The availability of new information about risks or control measures.
- The results of checks indicating that control measures are no longer effective.
- Or if a case of legionellosis is associated with the system.

If they have ensure the risk assessment is up dated.

- Ensure the tenant has been issued with the site specific requirements for the safe use of the water systems within the property.

Tenant Responsibilities

The control scheme below has been designed to ensure the water system is safe for you the tenant to use and it is in your own best interest to follow the guidance detailed below where applicable to the water systems within the building.

- Ensure that all water outlets are used at least weekly.
- If not flush for at least 2 minutes before use (care should be taken to avoid the creation of aerosols).
- Outside bib taps should also be flushed when not in use.
- Dishwashers and washing machines should also be considered.
- If the property has been left empty for any reason including holidays flush all outlets for at least 2 minutes.
- Water stored in water butts should not be used for spraying or as a supply for a water jet washer.
- Report to the Landlord/Management/Letting Agent any defects in the water system within the property.

Tenants Control Scheme

Infrequently Used Outlets

Weekly - If the outlet is due to be left unused for more than a seven day period then flush the outlet weekly for at least 2 minutes.

1 x WHB Infrequently Used Outlet - Located Ground Floor Kitchen

Bib taps

Weekly - Need to be used or flushed for at least 2 minutes.

1 x Bib Tap - Located Ground Floor Outside Rear

1 x Bib Tap - Located Ground Floor Garage

Dishwasher

Weekly - Ideally these items should be used regularly to prevent stagnation in the supply pipe.

1 x Dishwasher - Located Ground Floor Kitchen

Washing Machine

- Ideally these items should be used regularly to prevent stagnation in the supply pipe.

1 x Washing Machine - Located Ground Floor Utility Room

Showers

Monthly - Showers should be cleaned monthly or when there is evidence of visual contamination. Most well-known supermarkets have propriety branded cleaning products to carry out this task (follow the instructions on the label carefully). Dismantle, clean and descale all removable parts.

1 x Electric Shower - Located First Floor En-Suite

Spray Taps

Monthly - Spray Taps should be cleaned monthly or when there is evidence of visual contamination. Most well-known supermarkets have propriety branded cleaning products to carry out this task (follow the instructions on the label carefully). Dismantle, clean and descale all removable parts.

1 x Sentinel WHB Mixer Spray Outlet - Located First Floor Bathroom

1 x Sentinel Sink Mixer Spray Outlet - Located Ground Floor Kitchen

1 x WHB Mixer Spray Outlet - Located First Floor En-Suite

1 x Bath Mixer Spray Outlet - Located First Floor Bathroom

Ice Machine

Little used - When you have not used the water or Ice dispenser for a while (week), empty the ice container & flush through the water dispenser. Filters must be changed when manufacturer's recommendations state as they will be fouled and can harbour bacteria. If you have a long vacation or business trip and won't use water or ice dispensers, close the water valve (as water leakage may occur). When long out of use periods have occurred flush outlets before re-using (3 ltr).

1 x Fridge (ice machine) - Located Ground Floor Kitchen

Understanding Risk Assessment

"A risk assessment is an important step in protecting your workers and your business, as well as complying with the law. It helps you focus on the risks that really matter in your workplace - the ones with the potential to cause real harm" (Health and Safety Executive INDG163 rev2).

This risk assessment uses basic definitions:

- A hazard is anything that may cause harm, such as chemicals, electricity, or Legionella bacteria;
- A risk is the chance, high to low, that someone could be harmed by Legionella or other hazards noted multiplied by the severity. Since Legionella infections are serious (even fatal) the severity factor is always high.

Risk Assessment Responsibilities

The responsibility for implementing and completing the corrective measures remains with the Statutory Duty Holder or nominated Responsible Person. We would recommend that you read the HSE ACoP L8: 2013 Legionnaires' disease. The control of legionella bacteria in water systems.

[This can be down loaded from <http://www.hse.gov.uk/pubns/priced/l8.pdf>](http://www.hse.gov.uk/pubns/priced/l8.pdf)

Technical guidance is available in HSG274 Parts 1 to 3, please see further guidance section. Failing to action the findings of a risk assessment may result in Legionella bacteria proliferating in the water systems inspected. Legionella is potentially fatal.

The use of L8MS-Risk software does not negate the responsibility of the service provider to ensure the Risk Assessor is competent to undertake legionellosis risk assessments. It is imperative that all operatives using L8MS-Risk are suitable trained. To include:

- Use of the software.
- Principals of risk assessment.
- A sound knowledge of legionella legislation, water system design and control practices.

Risk Assessment Ratings

LR - Legionella Risk Ratings

LR - Legionella Risk Rating has been used to prioritise corrective actions relating directly to legionella control. Our assessment is based on the residual risk with the current design & control systems in place. Failure of the current control system could easily result in the water system reverting to a far higher risk rating - the water systems inherent risk.

| | |
|---------|--|
| Level 0 | <ul style="list-style-type: none"> HAZARD (Legionellosis) x LIKELIHOOD (Very Low) = RISK (Minimal) No additional action required. |
| Level 1 | <ul style="list-style-type: none"> HAZARD (Legionellosis) x LIKELIHOOD (Low) = RISK (Slight risk under abnormal operating conditions) Take actions when other more significant risks have been completed. |
| Level 2 | <ul style="list-style-type: none"> HAZARD (Legionellosis) x LIKELIHOOD (Possible) = RISK (Possible risk with existing operating conditions) Take actions when operationally practicable, time periods often programmed to fit with shutdowns or planned maintenance. |
| Level 3 | <ul style="list-style-type: none"> HAZARD (Legionellosis) x LIKELIHOOD (Present) = RISK (Probable risk with existing operating conditions) Take actions as soon as possible, time periods are typically a few months maximum. |
| Level 4 | <ul style="list-style-type: none"> HAZARD (Legionellosis) x LIKELIHOOD (High) = RISK (Imminent risk of harm or loss) Take immediate action to reduce the risk, this may include taking systems off line. |

GR - General Risk Ratings

GR - General Risk Rating has been used to prioritise corrective actions relating to general safety concerns, such as working at heights, or scalding risks pointed out under our duty of care.

| | |
|---------|---|
| Level 0 | <ul style="list-style-type: none"> No additional action required. |
| Level 1 | <ul style="list-style-type: none"> Take actions when other more significant risks have been completed. |
| Level 2 | <ul style="list-style-type: none"> Take actions when operationally practicable. |
| Level 3 | <ul style="list-style-type: none"> Take actions as soon as possible. |
| Level 4 | <ul style="list-style-type: none"> Take immediate action to reduce risk. |

We as a service provider are unable to define exact time scales for corrective action as this is dependent on any other risks within your organisation and the budget available for corrective actions. A programme of implementation should be devised.