



SMS Environmental Ltd

Quad One
Becquerel Avenue
Harwell Campus
Didcot
OX11 0RA

Risk Assessment (UKAS Accredited)


Task Information

| | |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| ID | 1082374 |
| Task Category | Legionella |
| Building | 3CHAR1_Ext_Com_B14 JUBILEE CENTRE (1 - 14), |
| Building Address | CHARLES STREET, SEAHAM |
| Building Code | 3CHAR1_Ext_Com |
| Assigned Users | Ethan Jones (28/10/2024 12:00:00) |
| Finished By | Ethan Jones (30/10/2024 07:58:55) |
| Description | Risk Assessment (UKAS Accredited) |
| Further Information | Legionella risk assessment to be completed in line HSG274 part 2 , all areas of the building are to be included , including any commercial areas |
| PO Number | 1CMP/72836 |

Client Details

| | | | |
|----------------|-------------------------------------------------------------------|----------------|---------------|
| Code | BH001 | Contact | Andrew Graham |
| Name | Believe Housing | Phone | 0300 131 1999 |
| Address | Coast House, Spectrum 4, Spectrum Business Park, County Durham | | |

Client Details

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Site Name | 3CHAR1_Ext_Com_B14 JUBILEE CENTRE (1 - 14) |
| Site Address | CHARLES STREET, SEAHAM |
| Site Contact | Andrew Graham / Sinead Croucamp |
| Site Postcode | SR7 7SG |
| Telephone Number | 07901510712 |
| Client | Believe Housing |
| Client Address | Coast House, Spectrum 4, Spectrum Business Park, County Durham |
| Client Postcode | SR7 7TT |
| Risk Assessor | Ethan Jones |
| Quality Controlled By | Lilian Davies |
| Date of Survey | 28/10/2024 |
| Issue Date | 20/01/2025 |
| Name of the person who receive risk assessment | Emma Jorgenson |
| Site Photograph |  Site |
| Recommended Review Date | 28/10/2026 |
| <p>Risk assessment should also be reviewed whenever there is reason to believe that it is no longer valid. This could be due to change of building usage or installation of new plant and equipment or following a case of Legionnaires Disease. In the event of the outbreak of legionellosis please refer to HSG274 Part 2 Appendix 2.3 http://www.hse.gov.uk/pUbns/priced/hsg274part2.pdf This Risk Assessment has been carried out in accordance with HSE ACoP L8, BS 8580-1:2019, ISO 17020, HTM 04-01 (Healthcare Site Only) and HSG274 Part 2</p> | |
| <p>Note: A separate assessment is required for each building or site.</p> | |
| Template Version: 10072024 | |
| Document Version Control: | Version 3 - Correction to TMV number in asset list |
| Overall Legionella Risk Rating | Medium |

Overall Scalding Risk Rating

Medium

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Risk Assessment Methodology

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| Scope Of The Risk Assessment | To complete a UKAS-accredited legionella risk assessment of the domestic water system |
| Any health and safety risks noted as part of this risk assessment are done so for guidance only and fall outside the scope of our UKAS accreditation. | No health and safety risks noted |
| Risk Assessment Methodology | |
| Step 1: Identify The Hazards | |
| Step 2: Decide Who Might Be Harmed And How | |
| Step 3: Evaluate The Risks | |
| Step 4: Decide On Precautions Or Controls | |
| Step 5: Record Findings And Implement Them | |
| Step 6: Review Your Findings And Update If Necessary | |
| Site Description | The site is a 2-storey, sheltered housing property. It contains 14 flats and communal areas. The water system consists of an incoming mains which feeds all the cold water services and calorifier 01. The Calorifier feeds all the domestic hot water outlets in the property. There are showers, thermostatic mixing valves and an expansion vessel located on the water system. |
| Limitations Of The Risk Assessment | Due to the layout of the pipework in the building, the assessor is unable to fully trace it throughout the premises. The assessor will need to make assumptions on the layout based on visible pipework and information provided by on-site staff. The assessor is limited by the available information provided by staff and the Legionella logbook. The risk assessment includes a representation of the different configurations and/or make of water assets in the property. Although a representation is present in the assessment, the assessor checks all the water assets that meet the criteria of assessment and if there is anything of interest that would benefit the assessment, they will be added as well. |
| If there are limitations how could they impact on the outcome of the risk assessment? | Where appropriate/necessary, any limitations may have an impact on the overall risk rating of this assessment. |

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Profile of the Building Users and how they may be harmed? | The property has higher-risk individuals in the form of the elderly. There are staff working in the property as well. The health profile of the tenants and staff was not available for review but due to the age of tenants and more likelihood of medical problems, there most definitely will be users of the water system that are more susceptible to legionella bacteria and scald risks. There will be visitors and contractors who use or work on the water system of the property and due to not knowing who these individuals will be, there will be an assumption that some of these individuals will have a higher susceptibility to legionella bacteria. |
| Has this site or area been defined as Augmented Care? | No |
| Has there ever been a case of Legionnaires Disease associated with this site? | None observed |
| Has Legionella bacteria been ever isolated from the water system? | None observed |
| Current method used to control Legionella? | Temperature |
| Notes on control method: | - |
| Does this site have a current Legionella Logbook? | Yes - Digital Logbook |
| Who was interviewed during the assessment? | Andrew Graham |
| Who was your competent escort on site? | Andrew Graham |
| This UKAS Accredited risk assessment is was produced using documented in-house methods based on ACoP L8 and BS 8580-1:2019. Method reference numbers are: MS80 & IMS75. | |
| This Risk Assessment has been carried out in accordance with the requirements of ISO17020 Clause 4 Impartiality and Independence as described in the SMS Environmental IMS76 Impartiality Policy. | No threats to impartiality or independence was observed at the time of the assessment |
| Risk Assessor competence has been checked and established using the procedure detailed SMS HR57 Legionella Risk Assessor Training & Competency Program and UKAS RG9 Accreditation of Bodies Undertaking Legionella Risk Assessment Activities, competency checks form part of the UKAS accreditation process. | |
| I confirm I have the necessary training, skills, experience and knowledge to complete a competent risk assessment of this type of system (INSERT NAME). | Ethan Jones |

Management Personnel

STATUTORY SITE DUTY HOLDER

A senior executive with budgetary control who ensures that the operation complies with the law, by appointing and overseeing a competent Responsible Person. All appointments should be made and accepted in writing.

NOMINATED RESPONSIBLE PERSON

This person would report to the statutory site duty holder and have day-to-day responsibility for ensuring that operational duties are carried out in a timely and effective manner and ensuring the adequate training and competence of themselves, operational staff and any contractors or subcontractors. This person should also be responsible for the accurate audit of the Site Log Book.

OPERATIONAL STAFF

Staff whose duties include inspection, monitoring, implementing, record keeping and carrying out of remedial actions. There should be adequate record keeping of their on-going training and regular assessment of their competence.

SERVICE PROVIDERS

For example: Risk Assessors, monitoring companies, Consultants, and contractors carrying out such duties as water treatment and cleaning and disinfection. Information should also be available to show the competence of individuals and the contact details of all relevant personnel within the service provider company

The Client should satisfy himself that:

- Each of the above can be clearly identified;
- That they are aware of the contact details of others in the chain of command;
- Each role has a competent Deputy identified;
- That each post has been accepted in writing; and
- That there is a separate sheet for each position showing training records and competency assessment.

* It is the responsibility of the Nominated Responsible Person to ensure that Logbooks are kept up to date and that actions are implemented.

Has the risk assessment process been able to successfully identify a formal nominated authorities or Water Safety Group structure?

Yes the management structure is detailed in the Legionella policy

Does review of the current management structure find that all required information is present and correct?

All management structure information provided has been confirmed as present and correct

Is the liaison and communication between the duty holder and the responsible person effective?

No communication between the duty holder and the responsible person was observed at the time of the assessment

In a healthcare setting, is the liaison and communication between the duty holder, the responsible person, and the Water Safety Group effective and robust?

Not applicable

Nominated Authorities

| DESIGNATION | NAME | POSITION | TELEPHONE NO |
|-------------------------------------|-----------------------|-----------------------------|----------------------------|
| STATUTORY DUTY HOLDER | Alan Smith | Chief Executive | 03001311999 |
| NOMINATED RESPONSIBLE PERSON | Emma Jorgenson | Compliance Manager | 0191 8142900 / 07384523636 |
| DEPUTY NOMINATED RESPONSIBLE PERSON | Andrew Graham | Compliance Officer | 0191 8143081 / 07901510712 |
| OPERATIONAL STAFF 1 | - | - | - |
| OPERATIONAL STAFF 2 | - | - | - |
| OPERATIONAL STAFF 3 | - | - | - |
| SERVICE PROVIDERS | SMS Environmental Ltd | Legionella Risk Assessors | 01235 835 835 |
| SERVICE PROVIDERS | HSL Compliance Ltd | Water Monitoring Contractor | 078233499745 / 07909706236 |

Risks of Exposure to Legionella Bacteria Health and Safety Law¹

Duties under the **Health and Safety at Work etc. Act 1974** apply to the risks from exposure to legionella bacteria that may arise from work activities. **The Management of Health and Safety at Work Regulations 1999** provide a broad framework for controlling health and safety at work. As well as requiring risk assessments, they also require employers to have access to competent help in applying the provisions of health and safety law; to establish procedures for workers if there are situations presenting serious, imminent danger; and for co-operation and co-ordination where two or more employers or self-employed people share a workplace. More specifically, COSHH provides a framework of actions designed to control the risk from a range of hazardous substances, including biological agents.

Only the courts can give an authoritative interpretation of law on the application of these Regulations and guidance to people working under another's direction. If people working under the control and direction of others are treated as self-employed for tax and national insurance purposes, they may nevertheless be treated as employees for health and safety purposes. So, it may be necessary to take appropriate action to protect them. If there is any doubt about who is responsible for the health and safety of a worker, clarify this and include it in the terms of a contract. However, a legal duty **under section 3 of the HSW Act** cannot be passed on by means of a contract. You will still have duties towards others under section 3 of the HSW Act. If you employ workers on the understanding that they are responsible for their own health and safety, seek legal advice before doing so.

For section 3 to apply:

- a) there must be a duty holder – either an employer or a self-employed person; and
- b) there must be a risk to the health or safety of a person who is not an employee of the duty holder or the self-employed duty holder themselves; and
- c) that risk must arise from the conduct of the duty holder's undertaking. 'Undertaking' means 'enterprise' or 'business'.

Section 3 does not apply to:

- d) welfare issues (such as the provision of toilets or washing facilities);
- e) nuisance or amenity issues that have no health or safety implications (such as unpleasant smells arising from work activities);
- f) poor workmanship, where trading standards or contractual remedies may exist, unless they have demonstrably compromised health and safety.

Control of substances hazardous to health regulations 2002 (as amended in 2004) (COSHH) provides a framework of actions designed to control the risk from a range of hazardous substances, including biological agents. The essential elements of COSHH are:

- a) risk assessment;
- b) where reasonably practicable, prevention of exposure or substitution with a less hazardous substance, or substitution of a process or method with a less hazardous one;
- c) control of exposure, where prevention or substitution is not reasonably practicable;
- d) maintenance, examination and testing of control measures;
- e) provision of information, instruction and training for employees;
- f) health surveillance of employees (where appropriate, and if there are valid techniques for detecting indications of disease) where exposure may result in an identifiable disease or adverse health effect.

¹HSE (2013) Legionnaires' disease: The control of legionella bacteria in water systems Approved Code of Practice and guidance on regulations L8 4th Edition Available From <http://www.hse.gov.uk/pubns/priced/l8.pdf>

The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) require employers and others, e.g. someone who has control of work premises, to report to HSE, accidents and some diseases that arise out of or in connection with work. Cases of legionellosis are reportable under RIDDOR if: a) a doctor notifies the employer; and b) the employee's current job involves work on or near cooling systems which are located in the workplace and use water; or work on water service systems located in the workplace which are likely to be a source of contamination. For more guidance on RIDDOR, see the HSE Website. Those who have, to any extent, control of premises, have a duty under the **Notification of Cooling Towers and Evaporative Condensers Regulations 1992** to notify the local authority in writing with details of 'notifiable devices'. These are cooling towers and evaporative condensers, except when they contain water that is not exposed to the air and the water and electricity supply are not connected. If a tower becomes redundant and decommissioned or dismantled, it should also be notified. Although the requirement is to notify the local authority, the relevant authority (i.e. HSE or the local authority) for the premises concerned enforces the Regulations. Notification forms are available from the local authority or local environmental health department. The main purpose of these Regulations is to help investigate outbreaks.

The Safety Representatives and Safety Committees Regulations 1977 and the **Health and Safety (Consultation with Employees) Regulations 1996** require employers to consult trade union safety representatives, other employee representatives, or employees where there are no representatives, about health and safety matters. This includes changes to work that may affect their health and safety at work, arrangements for getting competent help, information on the risks and controls, and planning of health and safety training. Similar legislation applies in Northern Ireland, Isle of Man and the Channel Islands.

You can find more on the control of legionella bacteria in water systems at the HSE's website <http://www.hse.gov.uk/legionnaires/index.htm>

Executive Risk Summary

| Risk Criteria | Commentary | Risk Rating |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Management: An assessment of Legionella control on site, it is important that those people involved in assessing risk and applying precautions are competent, trained and aware of their responsibilities | The nominated authorities and previous assessment was provided by Believe Housing before the assessment was carried out. The written scheme was observed in one of the digital logbooks. The water hygiene records were available in the digital logbook. Training records are available on request. | 2 |
| Contamination. An assessment of the risk at source, including assessment of the quality, temperature and integrity of the water supply. | The incoming mains is supplied by mains water. Mains water has a low contamination risk due to legionella entering the building through it in small quantities. The boiler room bib tap was observed with its hose still attached. There was a dead leg located on the water system. EV01 was observed to promote lower water turnover and contain warm water due to the installation of the calorifiers return pipework onto the inlet mains. Quick fill was observed to still be connected and without cat 4 backflow protection. | 2 |
| Amplification. An assessment of the conditions and whether they are likely to support any Legionella growth, including temperature, water change rate, nutrients, materials of construction and areas where water is not replaced with fresh. | The overall temperatures in the property were satisfactory and previous monitoring records were also mostly satisfactory. EV01 was observed to promote lower water turnover and contain warm water due to the installation of the calorifiers return pipework onto the inlet mains. There was a dead leg observed on the water system. Infrequently used outlets are flushed daily. | 2 |
| Transmission. An assessment of whether droplets or aerosols are likely to form and spread. | The showers on site would create an aerosol when in use but would be limited to the room it is in. Water outlets create a small aerosol and splash back when in use, this will affect the area of the outlet. | 3 |
| Exposure. An assessment of the risk that droplets or aerosols will be inhaled (or contaminated water aspirated). | The users of the showers will be affected by the aerosols formed and anyone in the room with them. The users of the outlets may breathe in aerosols but depends on the outlets spray pattern and the design of the basin. | 4 |
| Susceptibility of individuals exposed. An assessment of the nature of the exposed population, taking account of their vulnerability to Legionella Infection. | The property has higher-risk individuals in the form of the elderly. There are staff working in the property as well. The health profile of the tenants and staff was not available for review but due to the age of tenants and more likelihood of medical problems, there most definitely will be users of the water system that are more susceptible to legionella bacteria and scald risks. There will be visitors and contractors who use or work on the water system of the property and due to not knowing who these individuals will be, there will be an assumption that some of these individuals will have a higher susceptibility to legionella bacteria. | 6 |
| Overall Site Risk Summary | The overall risk is medium. This is mainly due to the susceptibility of the users of the water system and the overall aerosol-producing outlets in the form of showers. The water system is well managed and the overall temperatures were observed to be satisfactory. There are a few issues and risks that need to be rectified. | 3 |

The overall site risk rating is calculated thus. The highest individual risk rating per criterion is entered against the risk rating column, any criteria that had no hazards loaded against them must therefore be given a low risk rating. The arithmetic mean is then calculated using the following formula:

$$\bar{x} = \frac{1}{n} \left(\sum_{i=1}^n a_i \right)$$

Where:

- \bar{x} = Arithmetic Mean
- n = Number of terms
- a_i = the value of each individual term

The overall site risk rating is reported numerically from 1 to 9 as detailed in table 1 and using the same priority action time frame recommendations derived from table 2.

Risk Assessment

Risk Rating System

Definitions

- Hazard identification:** process of recognizing that a hazard (3.8) exists and defining its characteristics;
 - Hazard:** hazard source, situation, or act with a potential for harm in terms of human injury or ill health or a combination of these;
 - Risk:** combination of the likelihood of an occurrence of a hazardous event or exposure(s) and the severity of injury or ill health that can be caused by the event or exposure(s)
- This risk scoring system covers;
- Risk assessment:** process of evaluating the risk(s) arising from a hazard(s), taking into account the adequacy of any existing controls, and deciding whether or not the risk(s) is acceptable

Risk Assessment

This risk scoring system is informed by 'BS 8580-1:2019 Water quality – Risk assessments for Legionella control – Code of practice', and HSE Guidance on Risk Management available from their website. During a risk assessment hazard identification will take place and each hazard risk rated evaluating the following parameters:

1. **Contamination.** An assessment of the risk at source, including assessment of the quality, temperature and integrity of the water supply.
2. **Amplification.** An assessment of the conditions and whether they are likely to support any Legionella growth, including temperature, water change rate, nutrients, materials of construction and areas where water is not replaced with fresh.
3. **Transmission.** An assessment of whether droplets or aerosols are likely to form and spread.
4. **Exposure.** An assessment of the risk that droplets or aerosols will be inhaled (or contaminated water aspirated).
5. **Susceptibility of individuals exposed.** An assessment of the nature of the exposed population, taking account of their vulnerability to Legionella Infection.

An Explanation of the Risk Rating System

During the risk assessment, individual hazards will be identified and risk rated using the scoring matrix derived from BS 18004 and the HSE website (See Figure 1) this will evaluate per type (contamination, amplification, transmission, exposure and host susceptibility) for individual hazards.

| Likelihood of Harm Occurring | Potential Severity of the Harm | | |
|------------------------------|--------------------------------|------------------|-------------------|
| | Slightly Harmful 1 | Harmful 2 | Very Harmful 3 |
| Highly Unlikely 1 | Trivial 1 | Tolerable 2 | Moderate 3 |
| Unlikely 2 | Tolerable 2 | Moderate 4 | Substantial 6 |
| Likely 3 | Moderate 3 | Substantial 6 | Intolerable 9 |

² HSE (No Date) Frequently asked questions. "What are risk matrices?" Available from: <http://www.hse.gov.uk/risk/faq.htm>

| Rating | Risk | Priority Action Time Frame |
|--------|-------------------------|----------------------------|
| 1 | Trivial (Very Low) | Within 5 Years |
| 2 | Tolerable (Low) | Within 1 year |
| 3 - 4 | Moderate (Medium) | Within 6 Months |
| 5 to 6 | Substantial (High) | Within 1 Month |
| 7 to 9 | Intolerable (Very High) | Immediately |



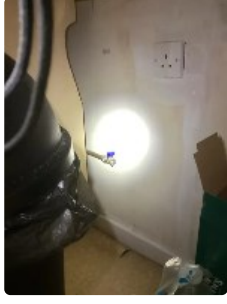
Table 2 Priority Action Time Frame

Individual hazards have received a risk score should be managed within that time period. The overall risk rating for the site will be an evaluation of all recorded risks and is communicated in the Risk Summary Page

| | |
|----------------------------------------------------------------------------------------------------|-------------------------------|
| Are there any known periods of time that this site or parts of this site may become vacant? | Yes due to changes in tenancy |
| Is there an adequate programme of control in place during periods of little use? | Flushing procedures in place |

* Timescale that controls should be implemented based on risk and cost or difficulty of corrective action

| Potential Hazards | Risk | Control to Mitigate Assessed Risk? | Residual Risk if Control is Implemented? | Timescale* | Image |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>ID:627677</p> <p>Flexi hoses present on the water system. They were observed to be WRAS approved but should be removed when not required due to the amplification risk they pose on the water system</p> | Low (2) | Recommend removing flexi hoses when not required, due to their risk on the water system | Very Low (1) | Within 1 Year |  <p>Flexi hoses present on water system</p> |
| <p>ID:627678</p> <p>Beverage boiler was observed out of order. This branch of pipework will have low to no turnover.</p> | Low (2) | Recommend fixing the beverage boiler or removing from water system | Very Low (1) | Within 1 Year |  <p>Beverage boiler out of order - Communal Kitchen</p> |
| <p>ID:627679</p> <p>Hose left connected to bibtap. Hoses should be disconnected from bibtaps due to the potential of stagnant water in the hose itself. This can cause a contamination and amplification risk</p> | Low (2) | Recommend to disconnect hose when not in use | Very Low (1) | Within 1 Year |  <p>Boiler house bibtap hose left attached</p> |
| <p>ID:627680</p> <p>Quick fill loop pipework does not have category 4 backflow protection. There is a chance that the heating system pressure can surpass the pressure from the incoming water due to unforeseen circumstances. Resulting in the water from the heating system to backflow into the incoming cold water, resulting in contamination of the water system. Quick fill for heating system left connected also</p> | Medium (3) | Recommend installing appropriate backflow protection for the quick fill loop. The heating system is classed as a category 4 fluid, due to the property not being a house. Disconnect the quick fill when not in use | Very Low (1) | Within 6 Months |  <p>Quick fill left connected and cat 4 contamination risk</p> |
| <p>ID:627682</p> <p>The inlet mains and return pipework for cal 01 are connected together. This has resulted in warm water being observed in the pipework for EV01. Due to the design of the expansion vessel pipework, the risk is higher.</p> | Medium (3) | Recommend reconfiguring pipework to reduce the risk of warm water in low turnover pipework. | Very Low (1) | Within 6 Months |  <p>Return pipework joining onto mains to Cal01</p> |

| Potential Hazards | Risk | Control to Mitigate Assessed Risk? | Residual Risk if Control is Implemented? | Timescale* | Image |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>ID:627683</p> <p>Shower heads noted in the assessment to be able to reach the drains, enabling the chance of backflow into the water system and a contamination risk to occur.</p> | Low (2) | Recommend using a retention loop to ensure the shower heads cannot reach the drain. If a retention loop is not optional or not enough then a shorter hose will need to be fitted | Very Low (1) | Within 1 Year |  <p>Ground floor bathroom shower can reach drain - No retention loop present</p> |
| <p>ID:627684</p> <p>Temperatures recorded for the TMV was higher than 44°C. This higher temperature increases the scalding risk associated with the TMV. Flat 14 bathroom TMV 49.8C</p> | Medium (3) | Recommend adjusting TMV to deliver water between 38°C to 44°C. This is to ensure the user of the TMV doesn't get scalded | Very Low (1) | Within 6 Months | No Image |
| <p>ID:627686</p> <p>Shower design was observed to be inadequate due to backflow risks. The shower head can be submerged in the bath and can reach the toilet bowl.</p> | Medium (3) | Recommend installing an appropriate shower that addresses the backflow risks and is purpose built | Very Low (1) | Within 6 Months |  <p>Flat 11 shower design</p> |
| <p>ID:627687</p> <p>A scald risk assessment was not observed at the time of the assessment. This should be performed to ensure that any at risk individuals are identified and safe guarded from scalding risks</p> | Medium (4) | Recommend performing a scald risk assessment and adding it to the legionella logbook. Any at risk individuals should be safeguarded from scald risks and any outlets that at risk individuals do not have access to, shouldn't have a thermostatic mixing valve installed. | Very Low (1) | Within 6 Months | No Image |
| <p>ID:627688</p> <p>Deadleg present on the water system. Deadlegs should be removed to source branch or added to the flushing regime. Deadlegs tend to have trapped sediment, ideal temperatures and stagnant water which are ideal conditions for legionella bacteria proliferation.</p> | Medium (4) | Recommend removing deadleg to source branch, leaving no capped pipework behind. Unless there will be a future plan for this pipework, in this case a flushing regime will be satisfactory | Very Low (1) | Within 6 Months |  <p>MCWS deadleg in flat 1 kitchen</p> |
| <p>ID:627689</p> <p>Temperatures recorded for the TMV was higher than 44°C. This higher temperature increases the scalding risk associated with the TMV. Flat 5 TMV 56.4C</p> | Medium (4) | Recommend adjusting TMV to deliver water between 38°C to 44°C. This is to ensure the user of the TMV doesn't get scalded | Very Low (1) | Within 6 Months | No Image |
| <p>ID:627690</p> <p>A review of the current TMVs should be made. TMVs should only be used when an individual who has a more susceptibility to scalding, has access to hot water outlets. The TMVs should be on the outlets that these individuals have access to. The TMVs should also only feed 1 outlet and be installed as close to the outlet as possible, while still being accessible.</p> | Medium (3) | Recommend changing TMVs that feed multiple outlets to only feed 1 outlet and installing additional TMVs on the affected outlets. TMVs should be removed from outlets that do not affect higher susceptibility individuals. | Very Low (1) | Within 6 Months | No Image |

| Potential Hazards | Risk | Control to Mitigate Assessed Risk? | Residual Risk if Control is Implemented? | Timescale* | Image |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------------|-----------------|
| <p>ID:627691 Property 15 refused access at the time of the assessment. The tenant was convinced that the water system was no supplied from the building and was independent. Although the DRP suspects that in fact the water system is supplying property 15.</p> | <p>Medium (3)</p> | <p>Recommend investigating if the water system is feeding the property. If it is, then it should be added to the water hygiene regime and included as apart of the water system</p> | <p>Very Low (1)</p> | <p>Within 6 Months</p> | <p>No Image</p> |

Documentation and Records

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Period of Time Reviewed for This Assessment? | 12 months |
| Is there an Up-to-date logbook and schematic diagram(s) of the water system(s) to be evaluated? | Yes - Present on digital logbook |
| Is an asset list available, an asset register that includes all associated plant, pumps, strainers and other relevant items? | In previous assessment |
| Is the previous risk assessment available for review? | Yes - Present in digital logbook |
| Date of Previous Assessment? | 31st October 2022 |
| Is there evidence that the findings and required corrective actions from previous risk assessments have been addressed? | No remedial worksheets were available |
| Where findings and their corrective actions identified by previous Legionella risk assessments have found to be outstanding are there any root causes which may constitute a deficiency within the current written scheme of control? | No |
| Are records of any logbook checks or audits available? | Shown by Duty Responsible person while on site |
| Evaluation of the current written scheme of control, including: | |
| Does the scheme have a clearly described management scheme, such as a diagram of management structure showing lines of responsibility, task allocation and communication? | Provided by Believe Housing prior to assessment |
| Are deputies identified to cover for staff sickness/holidays, etc.? | Provided by Believe Housing prior to assessment |
| Are there details of the maintenance history of the water system(s) to be assessed in the logbook? | Present in digital logbook |
| Are there training records, and records of competency checks, for on-site personnel? | Available on request |
| Has the health and safety provision for those undertaking the written scheme of control considered both site staff and contractors? And, are appropriate risk assessments and method statements available for inspection? If not raise a hazard. | SMS have method statements and risk assessments available for undertaking works. Site has method statements and risk assessments, that can be obtained on request |
| Are there monitoring and inspection records for all tasks completed? Tank inspections, temperatures, TMV checks, flushing records etc | Yes - Present on Digital logbook |
| Do monitoring and inspection records indicate any deviations from acceptable operating conditions? | Non-compliant issues are raised in job sheets and corrective actions are carried out |
| If applicable are water treatment and service reports available? | Not applicable |
| Are cleaning and disinfection records available? | Yes - On digital logbook |

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| Are legionella and other microbial analysis results available? | Yes - Present on Digital logbook |
| Do microbial analysis results indicate that the current Legionella control measures are effective? | Yes |
| Where past issues have been caused by positive identification of Legionella bacteria, have the correct actions been taken within a reasonable time? | N/A |
| Where past issues have been caused by positive identification of Legionella bacteria, have re-samples been collected to ensure control has been regained? | N/A |
| Are thermometers and other site test equipment calibrated regularly, or calibration checked? | Unable to review contractor thermometer calibration checks |
| Are records kept for five years? | Yes |

General Asset Register

| | |
|-----------------------------------------------|----|
| Incoming Mains Water | 1 |
| Private Water Supply | - |
| Ion Exchange Water Softeners | - |
| Electromagnetic Water Conditioners | - |
| Source Water Filter | - |
| Type of Domestic Water System? | |
| Open Vented:Gravity Fed with Recirculation | - |
| Open Vented:Gravity Fed without Recirculation | - |
| Unvented | 1 |
| Boosted Water Supply | - |
| Cold Water Storage | - |
| Domestic Hot Water Services | |
| Calorifiers | 1 |
| Water Heaters (more than 15 litres) | - |
| POU Water Heaters (15 litres and less) | - |
| Combination Water Heater | - |
| Combination Boiler | - |
| Plate Heat Exchangers | - |
| Hot Water Buffer Store/Tank | - |
| Expansion Vessels | 1 |
| Hydraulic Accumulators | - |
| Showers | 13 |
| Air Humidification | - |
| Closed System (Heating) | 1 |
| Closed System (Chilled) | - |

| | |
|---------------------|---|
| Swimming Pool | - |
| Spa Pool | - |
| Other System Assets | - |
| Miscellaneous | - |

Incoming Mains Water - 1

Incoming Water Supply



Incoming mains

Additional Area Photo for Context (Optional)



Boiler house

Source

Mains Water

Location

Boiler house

Diameter

54mm

Is there an isolation valve?

Yes

Does the isolation valve work?

Unknown

Is there some form of Backflow Protection on the Incoming Mains?

None observed

Is there a water meter fitted? If so, please note the consumption figure at the time of the RA.


None observed

Calorifier and Hot Water Storage - 1




| | |
|---------------------------------------------------------------------|--------------------------|
| Asset No. | Cal 01 |
| Asset Make & Model | ECOCHARGER ECH 52-370 CE |
| System type? Open vented or unvented | Unvented |
| Asset Location | Cylinder cupboard |
| Area Served | DHWS throughout building |
| Construction Material | Stainless Steel |
| Size(m): Diameter | - |
| Size (m): Radius | - |
| Size (m): Height | - |
| Capacity (L) | 374 |
| Flow pipework size in mm? | 42mm |
| Return pipework size in mm? | 22mm |
| Period Of Operation | Constant |
| Heating Method | Direct Gas |
| Drain Valve | Yes |
| Drain Operation | Not tested |
| Inspection Hatch | No |
| Does the domestic hot water flow have a circulation pump installed? | No |
| Is this domestic hot water system circulated? | Yes |
| Calorifier Insulation | Good |
| Pipework Labels | None |
| Set Temperature (C) | 62 |
| Stored Temperature (C) | 67 |
| Are there temperature gauges on flow and return pipework? | Yes |
| Flow Temperature (C) | 67 |

| | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Return Temperature (C) | 54.2 |
| Floor Drain | No |
| Nearest Power Point | <5m |
| Is there a solar pre-heat coil at the base of the vessel? | No |
| Times where there is little heat gain from the solar panels, is the entirety of the vessel heated to 60 Deg C for at least 1 hour a day? | Not applicable |
| Is stratification risk present? | Not likely due to heating source |
| If installed, what are the anti-stratification system operation settings? | None present |
| If installed, is the anti-stratification system operating as designed? | Not applicable |
| Fed from (MCWS/BCWS/CWST) | MCWS |
| Extra Information | - |
| HWS Vessel Photograph |  <p>Cal01</p> |
| Return Pump |  <p>Return</p> |

Hydraulic Accumulators and Expansion Vessels - 1




| | |
|------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Asset No. (EV) | EV01 |
| Asset Make | Boss |
| Asset Model | AFE CE |
| Asset Location | Cylinder cupboard |
| Expansion Vessel Type | Bladder |
| External Condition | Good |
| Fed from (MCWS/BCWS/CWST) | MCWS |
| Pipework Diameter | 28mm |
| Volume (L) | 60 |
| Is the vessel pressurised? | Yes |
| Is it practical to flush the expansion vessel? | Yes |
| Is the vessel installed correctly? | Yes |
| Is the vessel the correct size and type? | Unknown |
| Appearance of drain water | Not tested |
| Are Documented Maintenance Records Available? | Yes |
| Extra Information | - |
| Expansion Vessel Photograph |  <p>EV01</p> |

Showers and Spray Producing Outlets - 1

| | |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Location of Shower(s) | 1st floor bathroom |
| Is this an individual shower or bank of showers? | Individual shower |
| How many individual shower heads in this system? | 1 |
| Fixed Shower-head or Shower Head and Hose? | Head and hose |
| Shower Mixing (Blending) Valve Type | Electric Shower |
| Shower Valve Make & Model | Mira Advance |
| If there is an associated TMV is it accessible and subject to routine maintenance? | Not applicable |
| Condition of the Shower head(s) | Good |
| Photo Shower System |  <p>System</p> |
| Photo of Shower Head |  <p>Head</p> |
| Photo of Shower Valve Type |  <p>Valve</p> |
| Other Spray Producing Outlet? | - |




| | |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Other Spray Producing Outlet Photo | No Image |
| Other Spray Producing Outlet Spray Head Photo | No Image |
| Do showers or spray producing outlets present a foreseeable Legionella risk? | Yes - Due to producible aerosol |
| Does the length of the shower hose allow submersion of the shower head or contact between the shower head and the floor/drain? | A shower hose retaining loop/ring is being used to prevent submersion of the shower head or contact with the drain |
| Have any associated risks been detailed in the risk assessment? | Yes |

Showers and Spray Producing Outlets - 2

| | |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Location of Shower(s) | Ground floor bathroom |
| Is this an individual shower or bank of showers? | Individual shower |
| How many individual shower heads in this system? | 1 |
| Fixed Shower-head or Shower Head and Hose? | Head and hose |
| Shower Mixing (Blending) Valve Type | Electric Shower |
| Shower Valve Make & Model | Mira Advance |
| If there is an associated TMV is it accessible and subject to routine maintenance? | Not applicable |
| Condition of the Shower head(s) | Good |
| Photo Shower System |  <p>System</p> |
| Photo of Shower Head |  <p>Head</p> |
| Photo of Shower Valve Type |  <p>Valve</p> |
| Other Spray Producing Outlet? | - |




| | |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Other Spray Producing Outlet Photo | No Image |
| Other Spray Producing Outlet Spray Head Photo | No Image |
| Do showers or spray producing outlets present a foreseeable Legionella risk? | Yes - Due to producible aerosol |
| Does the length of the shower hose allow submersion of the shower head or contact between the shower head and the floor/drain? | The length of the shower hose allows the shower head to reach the shower tray drain |
| Have any associated risks been detailed in the risk assessment? | Yes |

Showers and Spray Producing Outlets - 3

| | |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Location of Shower(s) | Flat 14 bathroom |
| Is this an individual shower or bank of showers? | 1 |
| How many individual shower heads in this system? | Individual shower |
| Fixed Shower-head or Shower Head and Hose? | Head and hose |
| Shower Mixing (Blending) Valve Type | Electric Shower |
| Shower Valve Make & Model | Selectronic Redring |
| If there is an associated TMV is it accessible and subject to routine maintenance? | Not applicable |
| Condition of the Shower head(s) | Good |
| Photo Shower System |  <p>System</p> |
| Photo of Shower Head |  <p>Head</p> |
| Photo of Shower Valve Type |  <p>Shower</p> |
| Other Spray Producing Outlet? | - |




| | |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Other Spray Producing Outlet Photo | No Image |
| Other Spray Producing Outlet Spray Head Photo | No Image |
| Do showers or spray producing outlets present a foreseeable Legionella risk? | Yes - Due to producible aerosol |
| Does the length of the shower hose allow submersion of the shower head or contact between the shower head and the floor/drain? | A shower hose retaining loop/ring is being used to prevent submersion of the shower head or contact with the drain |
| Have any associated risks been detailed in the risk assessment? | Yes |

Showers and Spray Producing Outlets - 4

| | |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Location of Shower(s) | Flat 12 bathroom |
| Is this an individual shower or bank of showers? | 1 |
| How many individual shower heads in this system? | Individual shower |
| Fixed Shower-head or Shower Head and Hose? | Head and hose |
| Shower Mixing (Blending) Valve Type | Thermostatic Mixing Valve |
| Shower Valve Make & Model | Unknown |
| If there is an associated TMV is it accessible and subject to routine maintenance? | Yes |
| Condition of the Shower head(s) | Good |
| Photo Shower System |  <p>System</p> |
| Photo of Shower Head |  <p>Head</p> |
| Photo of Shower Valve Type |  <p>Shower</p> |
| Other Spray Producing Outlet? | - |


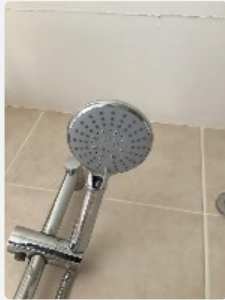

| | |
|--------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Other Spray Producing Outlet Photo | No Image |
| Other Spray Producing Outlet Spray Head Photo | No Image |
| Do showers or spray producing outlets present a foreseeable Legionella risk? | Yes - Due to producible aerosol |
| Does the length of the shower hose allow submersion of the shower head or contact between the shower head and the floor/drain? | The length of the shower hose allows the shower head to be submerged in the basin |
| Have any associated risks been detailed in the risk assessment? | Yes |

Showers and Spray Producing Outlets - 5

| | |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Location of Shower(s) | Flat 11 bathroom |
| Is this an individual shower or bank of showers? | Individual shower |
| How many individual shower heads in this system? | 1 |
| Fixed Shower-head or Shower Head and Hose? | Head and hose |
| Shower Mixing (Blending) Valve Type | Thermostatic Mixing Valve |
| Shower Valve Make & Model | Unknown |
| If there is an associated TMV is it accessible and subject to routine maintenance? | Yes |
| Condition of the Shower head(s) | Good |
| Photo Shower System |  <p>System</p> |
| Photo of Shower Head |  <p>Head</p> |
| Photo of Shower Valve Type |  <p>Valve</p> |
| Other Spray Producing Outlet? | - |


| | |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Other Spray Producing Outlet Photo | No Image |
| Other Spray Producing Outlet Spray Head Photo | No Image |
| Do showers or spray producing outlets present a foreseeable Legionella risk? | Yes - Due to producible aerosol and design |
| Does the length of the shower hose allow submersion of the shower head or contact between the shower head and the floor/drain? | The length of the shower hose allows the shower head to be submerged in the toilet |
| Have any associated risks been detailed in the risk assessment? | Yes |

Showers and Spray Producing Outlets - 6

| | |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Location of Shower(s) | Flat 8 bathroom |
| Is this an individual shower or bank of showers? | Individual shower |
| How many individual shower heads in this system? | 1 |
| Fixed Shower-head or Shower Head and Hose? | Head and hose |
| Shower Mixing (Blending) Valve Type | Thermostatic Mixing Valve |
| Shower Valve Make & Model | Bristan |
| If there is an associated TMV is it accessible and subject to routine maintenance? | Yes - Yes |
| Condition of the Shower head(s) | Good |
| Photo Shower System |  <p>System</p> |
| Photo of Shower Head |  <p>Head</p> |
| Photo of Shower Valve Type |  <p>Valve</p> |
| Other Spray Producing Outlet? | - |

| | |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Other Spray Producing Outlet Photo | No Image |
| Other Spray Producing Outlet Spray Head Photo | No Image |
| Do showers or spray producing outlets present a foreseeable Legionella risk? | Yes - Due to producible aerosol and design |
| Does the length of the shower hose allow submersion of the shower head or contact between the shower head and the floor/drain? | The length of the shower hose allows the shower head to be submerged in the toilet |
| Have any associated risks been detailed in the risk assessment? | Yes |

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 1


| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| Location? | Male toilet |
| Location Image: |  <p>Male toilet</p> |
| Number of TMVs in this Location? | 1 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | Yes |
| Could the TMV(s) be removed without increasing the scald risk? | No |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 1 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | 0.55m |
| TMV Pipework Size | 15mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | Yes |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMV

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 2

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Location? | 1st floor bathroom |
| Location Image: |  <p>1st floor bathroom</p> |
| Number of TMVs in this Location? | 1 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | Yes |
| Could the TMV(s) be removed without increasing the scald risk? | No |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 1 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | 0.6m |
| TMV Pipework Size | 15mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | Yes |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMV

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 3


| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Location? | Flat 12 bathroom |
| Location Image: |  <p>Flat 12 bathroom</p> |
| Number of TMVs in this Location? | 1 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | Yes |
| Could the TMV(s) be removed without increasing the scald risk? | No |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 1 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | 1m |
| TMV Pipework Size | 15mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | No |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes - Shower |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMS

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 4


| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Location? | Flat 3 bathroom |
| Location Image: |  <p>Flat 3 bathroom</p> |
| Number of TMVs in this Location? | 2 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | Yes |
| Could the TMV(s) be removed without increasing the scald risk? | No |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 1 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | 1.7m |
| TMV Pipework Size | 15mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | Yes |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMV

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 5


| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Location? | Flat 8 bathroom |
| Location Image: |  <p>Flat 8 bathroom</p> |
| Number of TMVs in this Location? | 1 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | Yes |
| Could the TMV(s) be removed without increasing the scald risk? | No |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 1 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | 1m |
| TMV Pipework Size | 15mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | No |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes - Shower |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMS

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 6


| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Location? | Flat 4 bathroom |
| Location Image: |  <p>Flat 4 bathroom</p> |
| Number of TMVs in this Location? | 2 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | Yes |
| Could the TMV(s) be removed without increasing the scald risk? | No |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 3 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | >2m |
| TMV Pipework Size | 28mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | Yes |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMV

Thermostatic Mixing Valves And Thermostatic Mixing Taps - 7

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Location? | Flat 10 kitchen |
| Location Image: |  <p>Flat 10 kitchen</p> |
| Number of TMVs in this Location? | 1 |
| Has the installation of the TMV been informed by a comparative assessment of scalding risk versus the risk of infection from legionella? | None observed |
| In terms of scalding is the area used by a recognised and identified risk group in terms of scalding? (very young, very elderly, infirm or significantly mentally or physically disabled people or those with sensory loss) | No |
| Could the TMV(s) be removed without increasing the scald risk? | Yes |
| Type of TMV? | TMV3 |
| How many outlets does the TMV serve? | 1 |
| Is the TMV incorporated into the outlet (TMT)? | No |
| What length of pipework is there post TMV? | 0.2m |
| TMV Pipework Size | 15mm |
| Is there both a hot and a cold water outlet post-TMV, rendering the cold outlet as a little-used-outlet? | Yes |
| Do the outlet(s) served house a flow restrictor, flow straightener, aerator or similar device? | Yes |
| Is/are the TMV(s) accessible for routine maintenance? | Yes |
| Is there a documented maintenance regime in place? | Yes |
| Are isolation valves installed on the CWS and HWS to the TMV? | On HWS & CWS |

Thermostatic Mixing Valve:



TMV

Outlet Asset Register

| | |
|---------------------------------------------|----|
| Shower Heads/Spray Outlets | |
| Electric Showers | 5 |
| Emergency Showers | - |
| Plate Wash Heads | - |
| Spray Outlets (Excl. Showers) | - |
| Thermostatic Mixing Valves / Mixing Devices | |
| TMV Type 2 | - |
| TMV Type 3 | 20 |
| Thermostatic Shower Mixers | 7 |
| Non-Thermostatic Shower Mixers | - |
| Mixer Taps (Thermostatic) | - |
| Mixer Taps (Non-Thermostatic) | 10 |
| Bath/Shower Mixer (Thermostatic) | 1 |
| Bath/Shower Mixer (Non-Thermostatic) | - |
| TMVs Not Accessible | 1 |
| Water Outlets | |
| Domestic Hot Water Outlets | 44 |
| Domestic Cold Water Outlets | 30 |
| Drinking Water Outlets | 15 |
| Miscellaneous | |
| Drinking Water Chillers | - |
| Washing Machines | 2 |
| Dishwashers | - |
| Beverage Boilers | 1 |
| Steam Ovens | - |

| | |
|--------------------------------------|---|
| Potato Peelers | - |
| In-line Cartridge Water Filters | - |
| In-line Cartridge Water Conditioners | - |
| Outside taps and services | - |
| Others | - |

Thermometer Used to Complete RA

| | |
|-----------------------------------------------------------------------------|-------------|
| Thermometer SMSE Asset ID No. | SMSE02489/4 |
| Date Last Calibrated | 16/08/2024 |
| Is there a sticker indicating the next calibration date on the thermometer? | Yes |
| Next calibration due on | 16/02/2025 |
| Unique ID of the Timing Device during the assessment? | iPad timer |

Temperatures - 1

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Male toilet | TMV | 15.4 | 50.2 | 40.8 | MCWS | - | - | Yes |

Temperatures - 2

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Kitchen | No | 14.3 | 53.8 | - | MCWS | Both | - | Yes |

Temperatures - 11

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 11 kitchen | No | 13.2 | 60.5 | - | MCWS | - | - | Yes |

Temperatures - 12

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 1 bathroom | TMV | 13.2 | - | 40.9 | MCWS | - | - | Yes |

Temperatures - 13

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 1 kitchen | No | 14.2 | 64.4 | - | MCWS | - | - | Yes |

Temperatures - 14

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 2 bathroom | TMV | 13.4 | - | 40.9 | MCWS | - | - | Yes |

Temperatures - 15

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 8 kitchen | MT | 12.2 | 66.8 | - | MCWS | Both | Flexi Hose | Yes |

Temperatures - 16

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 7 bathroom | TMV | 12.1 | - | 42.7 | MCWS | - | - | Yes |

Temperatures - 17

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 5 bathroom | TMV | 15.8 | 60.9 | 56.4 | MCWS | - | - | No |

Temperatures - 18

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 4 kitchen | TMV | 135.8 | 60.1 | 39.9 | MCWS | - | - | Yes |

Temperatures - 19

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|------------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 10 bathroom | TMV | 14.9 | - | 43.7 | MCWS | - | - | Yes |

Temperatures - 20

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 6 bathroom | TMV | 14.7 | 59.5 | 43.2 | MCWS | - | Flexi Hose | Yes |

Temperatures - 3

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|--------------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| 1st floor bathroom | TMV | 16.5 | 56.4 | 39.8 | MCWS | - | Flexi Hose | Yes |

Temperatures - 4

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Guest room | TMV | 14.3 | - | 43.9 | MCWS | - | - | Yes |

Temperatures - 5

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Laundry room | MT | 12.4 | 56.4 | - | MCWS | Both | - | Yes |

Temperatures - 6

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|------------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 14 bathroom | TMV | 12.1 | - | 49.8 | MCWS | - | - | No |

Temperatures - 7

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 14 kitchen | No | 12.5 | 56.8 | - | MCWS | Both | - | Yes |

Temperatures - 8

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|-----------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 13 kitchen | No | 13.2 | 60.6 | - | MCWS | - | - | Yes |

Temperatures - 9

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|------------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 12 bathroom | No | 13.2 | 60.5 | - | MCWS | - | - | Yes |

Temperatures - 10

| Outlet Location | Mixed? | Cold Temp | Hot Temp | Mix Temp | MCWS/ CWST Fed | Sentinel Outlet? | Spray Tap? Flexi Hose | Compliant? |
|------------------|--------|-----------|----------|----------|----------------|------------------|-----------------------|------------|
| Flat 11 bathroom | TMV | 13.2 | - | 40.8 | MCWS | - | - | Yes |

*TMVs are installed to prevent scalding to users on Health & Safety grounds. Due to the blended hot water temperatures they produce they are non compliant in respect of Legionella control. Where TMVs have a comprehensive maintenance programme in place the potential risk is lowered but not removed.

Hot Water: Stored water 60°C. Distribution >50°C within 1 minute of running

Healthcare Hot Water: Stored water 60°C. Distribution >50°C within 30 seconds and >55°C within 1 minute of running

Cold Water: Stored water <20°C. Distribution <20°C within 2 minutes of running

Blind Ends and Dead Legs - 1

Blind End/Dead Leg Photograph



Deadleg

Is this a Blind End or Dead Leg?

Dead Leg

Location

Flat 1 kitchen

Which supply pipework is the dead/blind end on?

MCWS

Diameter

15mm

Length (M)

1.4m

Pipework Material

Copper

What further action is required to manage the risk of Legionella amplification this dead/blind end poses?

Remove from the system entirely

Closed Water Systems

| | |
|-------------------------|-------------------------------------------|
| Heating System? | Yes - Non domestic heating system (Cat 4) |
| Heat Reclaim System? | - |
| Chilled Water System? | - |
| Solar Pre-Heat System? | - |
| Other: | - |
| Notes and Observations: | - |

These system listed above are all closed systems and therefore present no risk under normal operation. Some consideration should be given to the risks associated with all parts of the system under all reasonably foreseeable operating conditions. For example, a heating system may operate above the temperature range at which legionella bacteria can survive and is fully enclosed. However: - the feed and expansion cistern could easily contain warm water, as could any part of the system where there is no recirculation, in each case providing conditions suitable for legionella bacteria to multiply and will be detailed in this assessment if applicable; - maintenance work such as draining water for chemical testing or dosing, or even air venting radiators, could create contaminated aerosols and contractors should be made aware of this and complete a work specific risk assessment and provide appropriate controls before undertaking any work Only once these considerations are taken into account should these systems present a negligible risk.

Notes on Water Connections to Outside Services

1. Hose Unions/Bib Taps in Houses or Gardens or Similar Installations – Fluid Category 3: The minimum level of protection required for a HU tap in a house garden is a Double Check Valve. HU taps incorporating two check valves cartridges (now described as HUK1) are no longer acceptable for new exterior installations. This design is prone to frost damage so the regulations now require a Double Check Valve to be provided upstream of the HU tap inside the thermal envelope of the building (where applicable) and protected from freezing;
2. WRAS categorise all non-domestic hose union taps as fluid category 5: The categorisation of non-domestic hose union taps as a fitting that require fluid 5 protection is a recognition that in some non-domestic situations the fluids at risk of being present will be more serious health hazard. Water suppliers do however adopt a risk-based approach to their enforcement of the Water Supply (Water Fittings) Regulations/Byelaws and where a risk assessment indicates that the risks associated with an individual hose union tap are less than fluid category 5 they will accept alternative approaches.
3. The Regulations/byelaws do not define “commercial” or “domestic”. “Domestic” may refer to the type of premises or the use. The term “house” does include a flat and bungalow. Generally, “domestic” means as used in a house. R15.20 states “house garden” includes recreational areas excluding agricultural and horticultural use. Consequently, most water companies (Check with Guernsey Water) consider a hose union tap in a non-house garden situation to be Fluid Category 3 if a hand held hose is to be used - with self-closing nozzle – for uses similar to those used in a house garden – e.g. above ground watering;
4. Where a hose union tap on an allotment garden is used in accordance with the following conditions, it can be considered as being of no greater risk than the equivalent tap in a domestic garden. That is to say that would be categorised as a fluid category 3 risk. If these conditions are not met or do not apply a risk assessment will be required and may result in a higher level of backflow protection due to the increased risk.
 - a. Hoses will be hand-held in use, with “fail-safe” means of flow shut-off (i.e. self-closing trigger mechanism) or, if connected to irrigation systems, will have fixed sprinkler heads or outlets not less than 150 mm above ground and will not use additives (fertilisers, pesticides).
 - b. Hoses are permitted to be used with hand-held sprays containing readily available domestic fertilisers (but NOT insecticides or herbicides etc.);
 - c. Seep hoses in direct contact or less than 150mm above the soil are considered to be a fluid category four backflow risk and must not be connected to a mains-fed hose union tap equipped only with a double check valve. These may be permitted when used with a type DB pipe interrupter (Refer to G15.23 of the Defra Guidance for further information) or other fluid category 4 protection device.
 - d. Garden chemicals: where the formulation and concentration of chemicals used by allotment holders are the same as those available for purchase and use in domestic gardens.
 - e. The use of animal wastes (farmyard manure etc.) is possibly greater on allotments than in domestic gardens, but these materials are used on soils in domestic gardens and the risks from their presence are similar.
 - f. Presence of drains etc. into which hoses could be immersed is considered to be no more likely than in domestic gardens.
5. Any Hose Unions that are used in a non-domestic setting will typically be deemed a fluid category 5 and require appropriate backflow protection.

Sampling Requirements

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Is there a Legionella (LP) sampling regime in place on site? | Yes |
| Legionella sampling Visit frequency | Monthly |
| Legionella sampling number per visit | - |
| Details Of Specific Locations | - |
| Is there a Total Viable Count (TVC) sampling regime in place on site? | No |
| TVC sampling Visit frequency | - |
| TVC sampling number (per visit) | - |
| Details Of Specific Locations | - |
| Is there any other form of sampling being carried out on site? | No |
| Other sampling frequency | - |
| Other sampling number | - |
| Details Of Specific Locations | - |
| Is there a need to implement any additional sampling? | No |
| Additional sampling frequency | - |
| Additional sampling numbers | - |
| Details Of Specific Locations | - |
| Justification For Proposed Sampling Regime / Amendments | Sampling scheme is adequate |
| Have You Detailed This Sampling In The Written Scheme Of Control? | NA |
| Reactive sampling specifically for the presence of Legionella bacteria must also be undertaken at any time that the implemented control measures appear to be failing. | |

Review of Written Scheme to Control Legionella Risk

| Control Type | Frequency / Allocation |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| All Systems: Risk Assessment or Risk Review and Reassessment (2-yearly or when there is a reason to suspect it is no longer valid.) | |
| Responsibility Allocation | SMS Environemnal Ltd |
| Current Legionella risk assessment review frequency | 2 yearly |
| Is the current risk assessment review period considered as being adequate for this building/system? | Yes |
| What is the recommended risk based review frequency (if different from the current review period)? | - |
| The recommendation is being made to alter the current risk assessment review period due to the following factors | - |
| Log Book Audit. Complete a check of the log book to ensure that all tasks detailed in the written scheme are being properly completed by competent and trained individual and appropriate records made, either in hard or electronic records. | |
| Responsibility Allocation | Believe Housing |
| Current Frequency | Monthly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Check the training and competence of all individuals who have responsibility for undertaking tasks and delivering the written scheme. | |
| Responsibility Allocation | Believe Housing |
| Current Frequency | Annually |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Calorifier: Inspect calorifier internally by removing the inspection hatch or using a borescope 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) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Annually |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Calorifier: 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) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Annually |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Calorifier: 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) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Monthly |

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| 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 | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Hot water services: For circulating systems: take temperatures at return legs of principal loops (sentinel points) to confirm they are at a minimum of 50 °C. Temperature measurements may be taken on the surface of metallic pipework (Monthly) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Monthly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Hot water services: 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 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) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Monthly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| POU water heaters (no greater than 15 litres): Check water temperatures to confirm the heater operates at 50–60 °C or check the installation has a high turnover (Monthly–six monthly, or as indicated by the risk assessment) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| 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) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Combination water heaters: Check water temperatures at an outlet to confirm the heater operates at 50–60 °C. (Monthly) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Cold water services: Inspect cold water storage tanks and carry out remedial work, including disinfection, where necessary (Annually) | |

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Cold water services: 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) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| 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) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Monthly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Cold water services: 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) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Monthly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Cold water services: Check thermal insulation to ensure it is intact and consider weatherproofing where components are exposed to the outdoor environment (Annually) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| All Domestic hot and cold water services: Check all hot and cold water outlets for scale and biofilm build-up and if found to be contaminated clean, descale and disinfect. | |
| Responsibility Allocation | Believe Housing |
| Current Frequency | Unable To Confirm |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | Quarterly |
| All Domestic hot and cold water services: If flow straighteners or tap inserts are fitted to any water outlet, these should be removed and cleaned descaled and disinfected or replaced as necessary. | |
| Responsibility Allocation | Believe Housing |
| Current Frequency | Unable To Confirm |

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | Quarterly |
| 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.) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Quarterly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Thermometer: Uniquely identify instrument and calibration check against ice-point and boiling point standards in line with a written procedure (6-monthly) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Unable To Confirm |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | 6 Monthly |
| 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) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Chilled Water Dispenser: Change Carbon Filter and disinfect entire unit including supply pipework. (6-Monthly) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Base Exchange Softener: Visually check the salt levels and top up salt, if required. Undertake a hardness check to confirm operation of the softener (Weekly) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Base Exchange Softener: Service and Disinfect (Annually) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Infrequently used equipment within a water system (i.e not used for a period equal to or greater than seven days) should be included in 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. | |

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Responsibility Allocation | Cleaning staff |
| Current Frequency | Daily |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| TMVs: Risk assess whether the TMV fitting is required, and if not, remove. Where needed, inspect, clean, descale and disinfect any 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. (Annually) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Annually |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| 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 (6-Monthly) | |
| Responsibility Allocation | HSL Compliance |
| Current Frequency | Quarterly |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Water Connections to Outside Services: Checking the existence of all water connections to outside services; kitchens, fire hydrants and chemical wash units. Any insulation should be checked to ensure that it remains intact. Any water outlets that are no longer used should be removed (Annually) | |
| Responsibility Allocation | Believe Housing |
| Current Frequency | Unable To Confirm |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | Annually |
| Legionella Sampling: Sample from systems identified in the risk assessment. (As detailed in the risk assessment) | |
| Responsibility Allocation | - |
| Current frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| TVC: Sample from system identified in the risk assessment. (As detailed in the risk assessment) | |
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Closed Water Systems: When testing, maintaining or operating low risk systems, such as fire systems, heating and chilled water systems, etc. Complete a task specific risk assessment and instigate a safe system of work that prevents the generation of a breathable aerosol that will expose operatives to viable legionella bacteria | |
| Responsibility Allocation | Believe Housing |
| Current Frequency | Unable To Confirm |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | Annually |

Chlorine Dioxide Dosing – Check the system operation and chemical stocks in the reservoir. (Weekly)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Chlorine Dioxide Dosing – Test the treated water for both chlorine dioxide and total oxidant/chlorite at an outlet close to the point of injection to verify the dosage rate and conversion yield. (Monthly)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Chlorine Dioxide Dosing – Measure the concentration of chlorine dioxide at sentinel taps – the concentration should be at least 0.1 mg/l; and adjust the chlorine dioxide dosage to establish the required residual at the sentinel sample points. (Monthly)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Chlorine Dioxide Dosing – Test the chlorine dioxide and total oxidant/chlorite concentration at a representative selection of outlets throughout the distribution system - the concentration should be at least 0.1 mg/l chlorine dioxide. (Annually)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Copper & Silver Ionisation – Check rate and release of copper and silver ions in the water supply. (Weekly)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Copper & Silver Ionisation – Check copper and silver ion concentrations at sentinel outlets. (Monthly)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Copper & Silver Ionisation – Check the measurement of copper and silver ion concentrations at representative taps selected on a rotational basis each year. (Annually)

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------|---|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |

Copper & Silver Ionisation – Check the condition and cleanliness of the electrodes and the pH of the water supply. (Annually)

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Responsibility Allocation | - |
| Current Frequency | - |
| Recommended frequency (where the action needs to be newly implemented, or where the current frequency has been appraised as insufficient) | - |
| Notes or Observations | Written scheme was present in Digital logbook |
| <p>BS8580-1:2019 9.3 Control Measures Page 17 states: The Risk assessment should not involve the preparation of the written scheme of control but rather provide information that is critical to its preparation, improvement and review. Note 2 Ensuring that there is a written scheme of control is a legal requirement of the duty holder although they might instruct the risk assessor to advise or prepare the scheme of control on their behalf as a separate commission.</p> | |

Schematic Drawing

Please detail as much information as possible: Sentinel Outlets, Primary and Secondary Flow and Return Loops, Materials, Size, Location, Valves etc

This is a new site and requires a new schematic

Yes

Changes to existing schematic (sent as a separate AutoCad file)

No

No Changes - Insert Job No. of last schematic

-

ENSURE ALL SENTINEL OUTLETS ARE MARKED ON THE SCHEMATIC

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