

LEGIONELLA RISK ASSESSMENT

SITE: Fernwood Village Hall, Ruby's Avenue, Fernwood, Newark,
NG24 3RS

PREPARED FOR: Fernwood Parish Council



DATE OF SURVEY: 12th July 2022

REPORT ISSUE DATE: 15th July 2022

UNDERTAKEN BY: Guardian Hygiene Services Ltd

RISK ASSESSOR: Jamie Norton

RISK ASSESSOR SIGNATURE: 

REPORT CHECKED & APPROVED BY: Hannah Lord

REASSESSMENT DATE: 12th July 2024 (2 Years) or before

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The water system was identified overall as a **Medium Risk** system with regards to Legionellosis, due to the potential for contamination and the proliferation of Legionella bacteria within the system and the creation and dissemination of aerosols.

Considering the inherent and residual risks, Guardian has appraised any risk gap between residual risk and as low as reasonably practicable (ALARP) risk. Based on this risk assessment findings only, the recommendations, its current risk score and if all the recommendation are actioned, completed and signed off, the risk assessment rating could be reduced down to medium to low risk due to the complexity/size of the water system and/or the risk of the population susceptibility.

The level risk is affected by some of the following issues identified during this assessment of this site:

- The site are completing monthly temperature checks, but the documents being used are not adequate. E.g. The temperatures are generally the same result at each point which is unlikely. Please ensure the monthly temperature checks are completed correctly. The Calorifier monthly flow and return temperature are not correct but no actions put in place to resolve the issue. Please see picture below of water monitoring records.
- Just for reference: All Legionella records should be held for 5 years.
- Just for reference: Little used outlet is any outlet not being used at least weekly. Please ensure all little used outlets (hot & cold water) are flushed at least weekly until the outlet stabilises and is comparable to supply water or for a minimum 2 minutes (without creating aerosols). Flushing at a lower flowrate but for longer periods of time can also help reduce aerosols being created. This action should be recorded in your Legionella log book. This will include the outside bib tap, which is being flushed weekly and recorded in the Legionella log book.
- It is recommended that Legionella samples are taken from appropriate points in the water systems on at least an annual basis to confirm the effectiveness of the Legionella control scheme and due to issues in the system including high cold water temperatures and the Calorifier not at the correct flow/return temperatures. Samples should taken from the appropriate points in the system to ensure they are representative of the water flowing around the system in accordance of HSG274 part 2. Analysis of water samples for Legionella should be performed in UKAS-accredited laboratories, which Guardian use.
- Marion Fox Goddard and Malcolm Dickinson have completed Legionella awareness training by Ames in 2018. All members of onsite staff with responsibilities for the control of Legionella should complete formal training on Legionella due to the last course being 4 years old. It is recommended that all persons documented on the lines of communication and onsite with the responsibility for the control of Legionella on site receive formal Legionella training.

- Thermometer used for temperature testing needs to be fit for purpose and accurate. To ensure the equipment continues to give reliable and accurate results throughout its life it needs to be regularly checked and calibrated. You should have a management procedure that ensures the thermometer equipment is suitably calibrated and all checks/results of Calibration stored in the Legionella log book.
- By reviewing the data from your onsite log book including the monthly legionella results and by temperature profiling, the mains water at this site is normally below 20°C. The incoming mains water temperature should be below 20°C. The recent long run of hot weather with temperatures outside being near 25-30°C has caused the cold mains water temperature to rise above 20°C. In an exceptionally hot summer, it may be necessary to review the risk assessment and take appropriate action to mitigate the risk to ensure regular water flow through the system.
It's important to keep the cold water moving in the system to prevent bacteria from developing, so the system should have a high turnover of cold water. Please ensure all the cold outlets are flushed at least twice a week for a minimum of 2 minutes (without creating aerosols). This action should be recorded in your Legionella log book. Please continue this until the weather gets cooler or when the mains is below 20°C at all outlets.
- Flexi pipe fitted and used as a filling loop for the central heating system in the boiler room. Filling loops should be a temporary connection and should be disconnected after filling the system to avoid cross flow contamination from the heating system to mains cold water.
- The site are completing monthly temperature checks, but the Calorifier monthly flow and return temperature are not correct with no actions put in place to resolve the issue. Where the temperatures are not correct, it should be documented and remedial action put into place. The Calorifiers flow temperatures was too low on my visit, currently flowing out at 55.9°C and returning at 51.6°C. The Calorifier should be set to at least 60°C returning at 50°C or more and reaching the outlets at 50°C or more to prevent bacteria from developing in the water. Please arrange for the Calorifier to be turned up to achieve the correct temperatures. Legionella bacteria multiply where temperatures are between 20-45°C and nutrients are available. Legionella bacteria remains dormant below 20°C and do not survive above 60°C.
- Expansion vessel on Calorifier 1 in the boiler room: Expansion vessels in systems operating at steady temperature and pressure may have long periods without exchanging any significant amount of water and therefore can be at risk of aiding microbial growth. There is no isolation and drain valve fitted to allow flushing of the water within the vessels. HSG 274 part 2 recommends that expansion vessels, where practicable, are to be flushed and purged to drain on a monthly – six monthly basis, I recommend flushing every 3 months or install a flow through vessel so flushing wouldn't be required. Another option would be to install an Anti-Legionella valve to the expansion vessel which basically convert the vessels to 'flow through' vessels so flushing is not required.
- The Calorifier has a temperature gauge on the flow pipework which is about 30cm long. The length of pipework from the main pipe to the temperature gauge is too long and could cause the hot water to stagnate in the pipe. The temperature gauges should be removed and the pipework cut back to the main pipe. Inline temperature gauges should be fitted.
- Just for reference: Any showers which are not used on a weekly basis, should be flushed through with hot and cold water supplies for a minimum of 5 minutes each week, without the creation of aerosols.

Shower head cleaning and flushing should be recorded in your Legionella log book. Showers are a high risk due to the amount of aerosols created when used.

- Shower 11 in the disabled WC changing room was not threaded through a restrainer and no backflow protection was seen. Showers where the shower head can drop in the shower tray may result in back siphonage/backflow of water into the hot & cold water system. To provide backflow protection, the following is recommended; Robust factory applied retaining rings of the design which do not allow the shower hose to be removed are a recognised method of maintaining an AUK3 air gap acceptable in all types of premises. This might not be possible due to the shower being in a disabled WC. Where this is not possible the position of the shower and shower fittings must provide a minimum gap of 25 mm between the showerhead and the spill over level of the shower. If the shower head can't be restrained or the minimum air gap cannot be achieved, then other forms of backflow devices would be required depending on the fluid category. An example of this could be an Arrow Valves shower double check valve is intended to provide backflow protection from shower flexible hose and is fitted between the shower valve and a hose. Double Check Valves (type ED) are suitable for Fluid Category 3 risks, such as domestic bath / shower hoses. The valve is WRAS approved.
- The majority of the outlets have scale and debris which should be removed as this is a nutrient for bacterial growth.
- Where TMV's are employed to control hot water to outlets temperatures in order to prevent scalding, they should be set to 41°C for wash hand basins. The TMV in the visiting team WC requires adjusting as its currently at 46.6°C.
- Flexi pipes present in the building. There is a risk of microbial colonisation on the inner liners so as a recommendation, please consider replacing them (unless WRAS approved) with hard pipe, soft bendable metal pipe or plastic pipes. All replacement pipework should be WRAS approved. Flexi pipes might be required where vibration can occur.
- The Caleffi Multibloc Inlet Control Valve in the boiler room has a pipe coming from the bottom of the valve which has been capped off (about 10cm long) creating a deadend in the system. The deadend should be removed which might mean replacing the valve so no deadend is present. Deadends provide an environment for bacterial growth due to water stagnation.
- Deadend hot pipe in the kitchen behind the fridge and left of the cooker. The pipe used to feed a sink or wash hand basin which has been removed. The deadend is about 20cm long 15mm near the return pipe. Ideally, the pipework should be cut off in the roof space and the pipework removed to prevent water stagnation. Deadends provide an environment for bacterial growth due to water stagnation.
- Deadend cold pipe in the kitchen behind the fridge and left of the cooker. The pipe used to feed a sink or wash hand basin which has been removed. The deadend is about 20cm long 15mm pipework. The pipework should be cut off in the roof space and the pipework removed to prevent water stagnation. Deadends provide an environment for bacterial growth due to water stagnation.
- The Hobart dishwasher in the bar should be maintained and serviced as per manufacturer's instructions including any filters.

Confirmation is to be sought from the machine manufacturer and / or the installer to ensure that machine is provided with the appropriate level of backflow protection as this can be built into the machine.

- The Bosch dishwasher in the kitchen should be maintained and serviced as per manufacturer's instructions including any filters. Confirmation is to be sought from the machine manufacturer and / or the installer to ensure that machine is provided with the appropriate level of backflow protection as this can be built into the machine.
- The bib tap in the bar has backflow protection built in but has a hose pipe attached for cleaning the beer lines. When the hose pipe is not in use it should be disconnected and fully drained down to prevent any stagnant water inside the hose. Stagnant water creates a risk of bacteria developing.

2. RECOMMENDATIONS REPORT

Site Name: Fernwood Village Hall, Ruby's Avenue, Fernwood, Newark, NG24 3RS

Written Control Scheme, Training and Record Keeping	Risk Level	Timescale	Date Completed	Signed
2.09, 2.11 & 2.12 The site are completing monthly temperature checks, but the documents being used are not adequate. E.g. The temperatures are generally the same result at each point which is unlikely. Please ensure the monthly temperature checks are completed correctly. The Calorifier monthly flow and return temperature are not correct but no actions put in place to resolve the issue. Please see picture below of water monitoring records.	High	Immediately		
2.09 Just for reference: All Legionella records should be held for 5 years.	Low	Continue		
2.14 Just for reference: Little used outlet is any outlet not being used at least weekly. Please ensure all little used outlets (hot & cold water) are flushed at least weekly until the outlet stabilises and is comparable to supply water or for a minimum 2 minutes (without creating aerosols). Flushing at a lower flowrate but for longer periods of time can also help reduce aerosols being created. This action should be recorded in your Legionella log book. This will include the outside bib tap, which is being flushed weekly and recorded in the Legionella log book.	Medium	Continue		
2.15 It is recommended that Legionella samples are taken from appropriate points in the water systems on at least an annual basis to confirm the effectiveness of the Legionella control scheme and due to issues in the system including high cold water temperatures and the Calorifier not at the correct flow/return temperatures. Samples should taken from the appropriate points in the system to ensure they are representative of the water flowing around the system in accordance of HSG274 part 2. Analysis of water samples for Legionella should be performed in UKAS-accredited laboratories, which Guardian use.	Medium	Within 4 weeks		
2.17 & 2.18 Marion Fox Goddard and Malcolm Dickinson have completed Legionella awareness training by Ames in 2018. All members of onsite staff with responsibilities for the control of Legionella should complete formal training on Legionella due to the last course being 4 years old. It is recommended that all persons documented on the lines of communication and onsite with the responsibility for the control of Legionella on site receive formal Legionella training.	Medium	Within 8 weeks		
Thermometer used for temperature testing needs to be fit for purpose and accurate. To ensure the equipment continues to give reliable and accurate results throughout its life it needs to be regularly checked and calibrated. You should have a management procedure that ensures the thermometer equipment is suitably calibrated and all checks/results of Calibration stored in the Legionella log book.	Medium	Within 2 weeks		

Mains / Water Source Distribution System	Risk Level	Timescale	Date Completed	Signed
3.04 & 3.05 By reviewing the data from your onsite log book including the monthly legionella results and by temperature profiling, the mains water at this site is normally below 20°C. The incoming mains water temperature should be below 20°C. The recent long run of hot weather with temperatures outside being near 25-30°C has caused the cold mains water temperature to rise above 20°C.	Medium	Within 1 week		

In an exceptionally hot summer, it may be necessary to review the risk assessment and take appropriate action to mitigate the risk to ensure regular water flow through the system. It's important to keep the cold water moving in the system to prevent bacteria from developing, so the system should have a high turnover of cold water. Please ensure all the cold outlets are flushed at least twice a week for a minimum of 2 minutes (without creating aerosols). This action should be recorded in your Legionella log book. Please continue this until the weather gets cooler or when the mains is below 20°C at all outlets.				
Flexi pipe fitted and used as a filling loop for the central heating system in the boiler room. Filling loops should be a temporary connection and should be disconnected after filling the system to avoid cross flow contamination from the heating system to mains cold water.	Medium	Within 1 week		

Calorifiers / Hot Water Storage Vessels & Hot Water Distribution	Risk Level	Timescale	Date Completed	Signed
5.1 The site are completing monthly temperature checks, but the Calorifier monthly flow and return temperature are not correct with no actions put in place to resolve the issue. Where the temperatures are not correct, it should be documented and remedial action put into place. The Calorifiers flow temperatures was too low on my visit, currently flowing out at 55.9°C and returning at 51.6°C. The Calorifier should be set to at least 60°C returning at 50°C or more and reaching the outlets at 50°C or more to prevent bacteria from developing in the water. Please arrange for the Calorifier to be turned up to achieve the correct temperatures. Legionella bacteria multiply where temperatures are between 20-45°C and nutrients are available. Legionella bacteria remains dormant below 20°C and do not survive above 60°C.	Medium	Within 1 week		
5.17 Expansion vessel on Calorifier 1 in the boiler room: Expansion vessels in systems operating at steady temperature and pressure may have long periods without exchanging any significant amount of water and therefore can be at risk of aiding microbial growth. There is no isolation and drain valve fitted to allow flushing of the water within the vessels. HSG 274 part 2 recommends that expansion vessels, where practicable, are to be flushed and purged to drain on a monthly – six monthly basis, I recommend flushing every 3 months or install a flow through vessel so flushing wouldn't be required. Another option would be to install an Anti-Legionella valve to the expansion vessel which basically convert the vessels to 'flow through' vessels so flushing is not required.	Medium	Within 8 weeks		
5.18 The Calorifier has a temperature gauge on the flow pipework which is about 30cm long. The length of pipework from the main pipe to the temperature gauge is too long and could cause the hot water to stagnate in the pipe. The temperature gauges should be removed and the pipework cut back to the main pipe. Inline temperature gauges should be fitted.	Medium	Within 8 weeks		

Showers / Spray Hoses / Spray Taps	Risk Level	Timescale	Date Completed	Signed
Just for reference: Any showers which are not used on a weekly basis, should be flushed through with hot and cold water supplies for a minimum of 5 minutes each week, without the creation of aerosols. Shower head cleaning and flushing should be recorded in your Legionella log book. Showers are a high risk due to the amount of aerosols created when used.	Medium	Continue		
8.05 & 8.09 Shower 11 in the disabled WC changing room was not threaded through a restrainer and no backflow protection was seen.	Medium	Within 8 weeks		

<p>Showers where the shower head can drop in the shower tray may result in back siphonage/backflow of water into the hot & cold water system. To provide backflow protection, the following is recommended;</p> <p>Robust factory applied retaining rings of the design which do not allow the shower hose to be removed are a recognised method of maintaining an AUK3 air gap acceptable in all types of premises. This might not be possible due to the shower being in a disabled WC. Where this is not possible the position of the shower and shower fittings must provide a minimum gap of 25 mm between the showerhead and the spill over level of the shower. If the shower head can't be restrained or the minimum air gap cannot be achieved, then other forms of backflow devices would be required depending on the fluid category. An example of this could be an Arrow Valves shower double check valve is intended to provide backflow protection from shower flexible hose and is fitted between the shower valve and a hose. Double Check Valves (type ED) are suitable for Fluid Category 3 risks, such as domestic bath / shower hoses. The valve is WRAS approved.</p>				
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General Risk Factors	Risk Level	Timescale	Date Completed	Signed
9.01 The majority of the outlets have scale and debris which should be removed as this is a nutrient for bacterial growth.	Medium	Within 2 weeks		
9.05 Where TMV's are employed to control hot water to outlets temperatures in order to prevent scalding, they should be set to 41°C for wash hand basins. The TMV in the visiting team WC requires adjusting as its currently at 46.6°C.	Medium	Within 2 weeks		
<p>9.06 Flexi pipes present in the building. There is a risk of microbial colonisation on the inner liners so as a recommendation, please consider replacing them (unless WRAS approved) with hard pipe, soft bendable metal pipe or plastic pipes. All replacement pipework should be WRAS approved. Flexi pipes might be required where vibration can occur. Flexi pipes noted in the following locations, but not limited to:</p> <ul style="list-style-type: none"> • 1x Flexi pipe in the home team WC on toilet • 1x Flexi pipe in the visiting team WC on toilet • 2x Flexi pipes in the disabled WC changing rooms • 2x Flexi pipes in the kitchen (WRAS approved) • 2x Flexi pipes in the disabled WC entrance (WRAS approved) 	Medium	Within 8 week if not WRAS approved		

Deadends & Deadlegs in the water system	Risk Level	Timescale	Date Completed	Signed
The Caleffi Multibloc Inlet Control Valve in the boiler room has a pipe coming from the bottom of the valve which has been capped off (about 10cm long) creating a deadend in the system. The deadend should be removed which might mean replacing the valve so no deadend is present. Deadends provide an environment for bacterial growth due to water stagnation.	Medium	Within 8 weeks		
Deadend hot pipe in the kitchen behind the fridge and left of the cooker. The pipe used to feed a sink or wash hand basin which has been removed. The deadend is about 20cm long 15mm near the return pipe. Ideally, the pipework should be cut off in the roof space and the pipework removed to prevent water stagnation. Deadends provide an environment for bacterial growth due to water stagnation.	Medium	Within 8 weeks		
Deadend cold pipe in the kitchen behind the fridge and left of the cooker.	Medium	Within 8 weeks		

<p>The pipe used to feed a sink or wash hand basin which has been removed. The deadend is about 20cm long 15mm pipework. The pipework should be cut off in the roof space and the pipework removed to prevent water stagnation. Deadends provide an environment for bacterial growth due to water stagnation.</p>				
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Other Risk Outlets	Risk Level	Timescale	Date Completed	Signed
<p>The Hobart dishwasher in the bar should be maintained and serviced as per manufacturer's instructions including any filters. Confirmation is to be sought from the machine manufacturer and / or the installer to ensure that machine is provided with the appropriate level of backflow protection as this can be built into the machine.</p>	Low	Within 12 weeks		
<p>The Bosch dishwasher in the kitchen should be maintained and serviced as per manufacturer's instructions including any filters. Confirmation is to be sought from the machine manufacturer and / or the installer to ensure that machine is provided with the appropriate level of backflow protection as this can be built into the machine.</p>	Low	Within 12 weeks		
<p>The bib tap in the bar has backflow protection built in but has a hose pipe attached for cleaning the beer lines. When the hose pipe is not in use it should be disconnected and fully drained down to prevent any stagnant water inside the hose. Stagnant water creates a risk of bacteria developing.</p>	Low	Immediately		

Review of the Risk Assessment

In accordance with HSE ACOP and Guidance, L8 (fourth edition) [sic]:

- i. All systems require a risk assessment (paragraph 25)
- ii. **You will need to review this assessment regularly and specifically when there is reason to believe that this risk assessment may no longer be valid (ACOP paragraph 32)**
- iii. This record of the assessment is a living document that must be reviewed to ensure it remains up-to-date (paragraph 47)
- iv. This record of the assessment is to give an indication of when to review the assessment (paragraph 47)

This Legionella risk assessment should be formally reassessed when there are significant changes to ensure that it remains valid, for example, when there are:

- changes to the water system or its use;
- changes to the use of the building or part of the building in which the system is installed;
- The availability of new information about risks or control measures;
- indications that control measures are no longer effective;
- new construction works or system modifications planned; or
- changes to the key personnel, contractors and service providers.
- A case of Legionnaire's Disease / Legionellosis associated with the system

Where a reassessment has not been triggered by the above, there should be a policy of planned reassessment in place.

Water systems with higher inherent risk or complex water services where changes are poorly documented may need to be reassessed frequently, e.g. annually, whereas for water systems with a lower inherent risk, or those where all changes are recorded and where systems are well managed, it may be sufficient for a formal reassessment to be performed every 2 to 5 years.

It is unlikely that circumstances will be so stable that a risk assessment will not need reassessing within this period, in particular, due to staff and management changes. In reality, so many changes occur with time that it is difficult to keep track of them all, for example, general ageing and deterioration of the system and its equipment.

The risk assessor will determine a reassessment frequency based on the current and expected future risk and will be based on the following:

- **High risk:** 1 or 2 years depending on site conditions and risk
- **Medium risk:** 2 or 3 years
- **Low risk:** 3 to 5 years

Your recommended reassessment date is: 12th July 2024 (2 Years) or before

Jamie Norton of Guardian Hygiene Services Ltd completed the survey for this risk assessment and the content of the final report has been checked for accuracy in accordance with the requirements of the Guardian Legionella Management System by Hannah Lord and is duly authorised for issue.

Please Note: All recommendations which involve changes to the water system and/or any component therein, the Duty Holder is responsible for ensuring the work complies with the Water Supply (Water Fittings) Regulations 1999 and BS 8558: 2010 the Guide to Design, Installation, Testing and Maintenance of Services Supplying Water for Domestic Use within Buildings and Curtilages.

3. DISCLAIMER

This site specific Legionella Risk Assessment is based upon information and records provided at the time of survey and the Risk Assessors' findings and opinions. The Risk Assessor will aim to ensure all areas of the site's water system are accessed (if safe access is provided) and the full extent of the water system is detailed within this report. Although, every care is taken to detect all relevant parts of the hot and cold water system on site, it is possible that some parts may be hidden from inspection. No warranty as to the completeness of the information is given as the Risk Assessment is part-based on information provided by the site such as monitoring records, maintenance schedules and other records of actions and management procedures.

Guardian Hygiene Services Ltd ('Guardian') disclaims all liability and responsibility for the direct or indirect loss or damage that may be suffered through reliance upon the completeness of the information over which Guardian has no control.

Whilst the components of the hot and cold water system on site have been inspected for their suitability, it is often not possible to identify the source of individual parts/fittings. The use of the Water Regulations Advisory Scheme (WRAS) Water Fittings and Materials Directory available on-line www.wras.co.uk/directory will help to ensure that any fittings acquired in future comply with relevant Regulations.

Guardian has provided key recommendations wherever relevant to reduce the risk of Legionella bacteria being present in the water system. However, adherence to Guardian's guidance and recommendations do not guarantee the absence of Legionella bacteria in the water system. Regular and ongoing maintenance and management of the water system is critical to the operation and safety of the systems for the control of Legionella.

Since the supply water, weather conditions and other factors may vary with time, the findings of this assessment should be taken in context of the conditions at the time of the assessment. Future conditions may lead to the establishment of different risk levels.

CONFIDENTIALITY

This report is confidential and should not be copied. Should further copies be required they will be made available upon request.

Please ensure this report is carefully reviewed and the key recommendations and areas of risk are noted and addressed. Should you require any further clarification or advice regarding this Risk Assessment and the interpretation of this report please contact us.

References:

The format of the Risk Assessment is based on the following:

- H.S.E Approved Code of Practice, L8, Legionnaire's Disease – The Control of Legionella Bacteria in Water Systems
- HSG274 Part 2 Legionnaires' Disease: The Control of Legionella Bacteria in Hot and Cold Water Systems (published 2014)
- HSG274 Part 3 Legionnaires' Disease: The Control of Legionella Bacteria in Other Risk Systems
- BS 8580:2019 Water Quality – Risk Assessments for Legionella Control – Code of Practice
- The Water Management Society's Guide to Risk Assessment for Water Services



Contact Us:

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4. LINES OF COMMUNICATION AND MANAGEMENT RESPONSIBILITIES

4.1 Guardian has a responsibility as your chosen Risk Assessment service provider to identify the individuals responsible for the safe management of the water system with respect to Legionella Control on this site. Guardian has detailed below the information provided at the time of the Risk Assessment which identifies the personnel responsible in accordance with the L8 Approved Code of Practice. You should carefully analyse this information and any inaccuracies should be immediately reported to Guardian so it can be amended – it is vital this information is as accurate and up-to-date as possible.

4.2 Management Responsibilities and Lines of Communication as identified at the time of survey:

4.2.1 **STATUTORY DUTY HOLDER:** **Fernwood Parish Council**

(The Duty Holder is ultimately responsible for the water system and the financial control on site i.e. the employer or the person in control of the premises or systems concerned)

4.2.2 **Name of RESPONSIBLE PERSON:** **Marion Fox Goddard**

JOB TITLE: **Parish Clerk**

Contact Telephone Number: **01636 613024**

E-mail Address: **clerk@fernwood.pc.co.uk**

(The Responsible Person is appointed by the Duty Holder to take day-to-day responsibility for controlling any identified risk from Legionella bacteria and to provide supervision for the implementation of control schemes and remedial actions for the control of Legionella. They should be a manager, director or have similar status and have sufficient authority, competence and knowledge of the installation to ensure the timely and efficient implementation of precautions. It is important they have a clear understanding of their role and of the overall health and safety structure and policy within the organisation)

4.2.3 **Name of DEPUTY RESPONSIBLE PERSON:** **Malcolm Dickinson**

JOB TITLE: **Caretaker**

Contact Telephone Number: **01636 613024**

E-mail address: **caretaker@fernwood.pc.co.uk**

(The Deputy Responsible Person supports and takes on the responsibilities of the Responsible Person in the absence of the Responsible Person and as and when required)

4.2.4 **Water Monitoring / Control Scheme Responsibility / Service Provider(s)**

Person(s) (in-house) / company(ies) responsible for implementation of the control scheme i.e. routine monitoring of assets and water temperatures

The site is responsible for in-house Legionella monitoring and tasks in accordance with HSG274 Part 2. Guardian Hygiene Services Ltd is the appointed Legionella risk assessment service provider

4.2.5 **Water Treatment Service Provider:** N/A

(Company responsible for the installation and maintenance of the chemical dosing / ionisation / UV System)

4.2.6 **Water Authority Responsible for Supply:** Severn Trent Water

Please Note: It is a requirement of L8 for the Duty Holder to ensure that those who are appointed to carry out the Legionella control measures are given suitable and sufficient information, instruction and training. This includes information, instruction and training on the significant findings of the risk assessment and the appropriate precautions and actions they need to take to safeguard themselves and others. This should be reviewed and updated whenever significant changes are made to the type of work carried out or methods used. Training is an essential element of an employee's capability to carry out work safely, but it is not the only factor. Instructions, experience, knowledge and other personal qualities are also relevant to perform a task safely.

NOTES:

5. SITE DETAILS & SURVEY CONDITIONS

Contact Person during Survey:	- Marion Fox Goddard (Parish Clerk) - Malcolm Dickinson (Caretaker)
Building Use:	- Village hall
Type of Occupation:	- Adults/children, male and female various ages
Level of Occupation:	- Open daily with high occupancy when events are taking place including weekends
Periods Site Left Unoccupied for more than 30 days:	- None
Number of Floors:	- Ground floor only
Number of Separate Buildings:	- One building
Areas of repetition identified where a minimum of 10% assessed	- All areas assessed
Date of Survey:	- 12 th July 2022
Risk Assessor:	- Jamie Norton
Outside Temperature at Time of Survey:	- 27°C
Weather Conditions:	- Hot day, mainly overcast
Other notes/information	- N/A

6. ASSETS IDENTIFIED / ASSESSED	Ticked if Present	Amount present	Assessed
Cold Water Systems			
1. Mains water supply to site	✓	1	1
Other water supplies to site including bore/spring			
2. Cold water storage tank (CWST)			
3. Cold water storage tank (CWST) booster system			
4. Domestic Hot Water Systems			
▪ Calorifiers circulating	✓	1	1
▪ Cals circulating – amount of flow, return or shunt pumps	✓	2	2
▪ Calorifier non-circulating			
▪ Point of use/Low volume water heaters (<15L)			
▪ POU/Low volume water heaters (<15L) built in TMV			
▪ Instant water heaters, no stored water			
▪ Combination water Heaters (CWH'S)			
▪ Combination boilers			
5. Showers			
▪ Mixer shower / TMV shower	✓	11	11
▪ Electric shower			
▪ Pot wash shower			
▪ Emergency Showers			
Other Risk Systems			
6. Water softeners / filters	✓	1	1
7. Fire suppression systems			
8. Fire storage tank			
9. Fire hose reels			
10. Spa Pools / Jacuzzi			
11. Swimming pool			
12. Vehicle washes			
13. Fountains and water Features			
14. Lathe / machine tool coolant systems			
15. Pressure washer			
16. Bubble column / sensory equipment using water			
Outlets in this risk assessment			
17. Sink	✓	3	3
18. Wash hand basin	✓	11	11
19. TMV	✓	6	6
20. WC	✓	10	10
21. Urinal	✓	3	3
22. Bib tap	✓	1	1
23. Baths			
Other systems			
24. Dishwasher	✓	2	2
25. Washing machine			
26. Steam oven with water supply			
27. Drinks hot water boiler			
28. Drinks vending machine / coffee machine			
29. Ice machine			
30. Water drink/water cooler machines			
31. Expansion Vessel	✓	1	1
32. Feed & expansion tank (F&E tank)			
33. RPZ Valve			

7. ASSESSMENT OF POPULATION RISK

This section does not impact on the overall Risk Score of this assessment, although, the following factors increase a person's susceptibility to infection and, hence, will increase the risk of legionellosis:

- Age (risk increases with age)
- Sex (males more at risk)
- Heavy smoking, alcohol, no exercise
- Disease or therapy that reduces immunity

Please Note: When assessing the risk associated with the hazards present in the water system, the assessor will consider the susceptibility of the population

GENERAL INFORMATION	RISK CONDITION	RISK CAT
Does the population include persons over the age of 45?	Yes	Medium
Does the population include smokers?	Possible	Medium
Is the site classed as 'Healthcare' premises?*	No	N/A
Does the population include those with a reduced immune suppression system?	Possible	Medium
Is the population outside the premises affected by the water system?	No	Low
State the population affected outside the premises?	N/A	N/A
State the overall susceptibility of the personnel	MEDIUM	

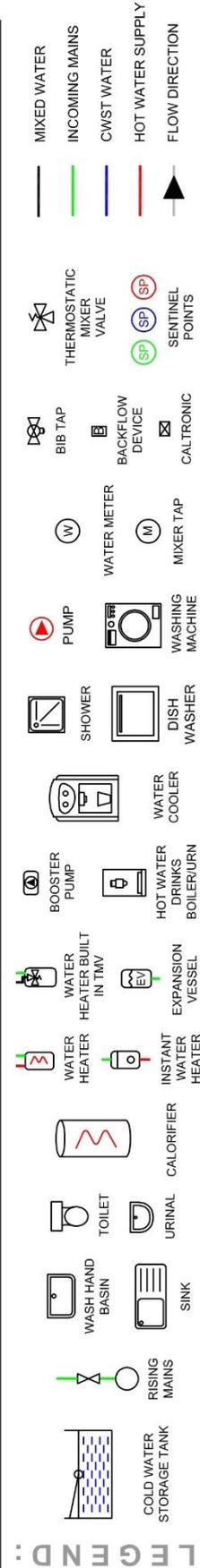
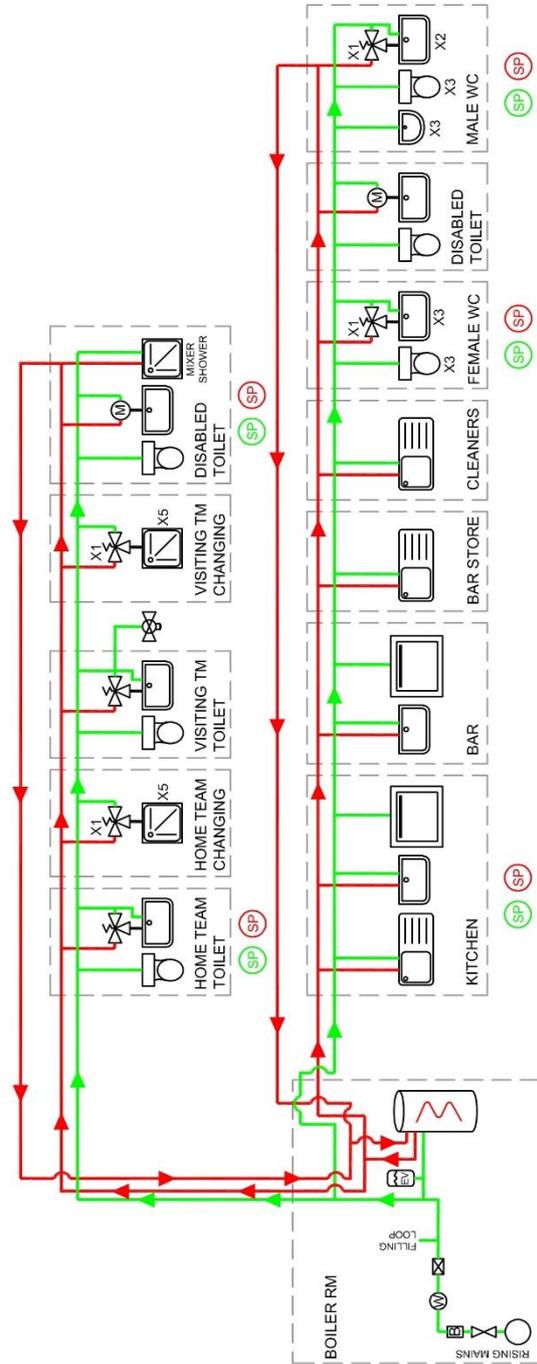
KEY	N/A	No Associated Legionella Risk
	L	Low Legionella Risk
	M	Medium Legionella Risk
	H	High Legionella Risk

*If the site is classed as a 'healthcare' premises, the higher risk is to be addressed with more stringent controls, namely a minimum hot water temperature of 55°C is required rather than 50°C.

8. SCHEMATICS AND KEYS

GUARDIAN HYGIENE SERVICES LTD

ALL DRAWINGS NOT TO SCALE, INDICATIVE ONLY AND NOT NECESSARILY REPRESENTATIVE OF ARRANGEMENT



DATE OF ASSESSMENT: 12.07.2022
DRAWN BY: JAMIE NORTON

SCHEMATIC DRAWING SITE: FERNWOOD VILLAGE HALL, RUBYS AVENUE, FERNWOOD, NEWARK, NG24 3RS

9. EVALUATION / SCORING OF RISK

A qualitative risk assessment has been carried out by the risk assessor by making the judgment of risk on the following factors which affect the risk of Legionellosis associated with a water system:

- The potential for contamination of the system with Legionella bacteria
- The potential for the proliferation of Legionella bacteria in the system
- The potential for the formation of water aerosols / droplets
- The susceptibility of persons exposed to Legionella bacteria

To assist with the assessment of the risk associated with a system, Guardian has produced a guide for the risk assessors, which is included in Appendix B of this document. However, the risk assessor using his / her knowledge and experience of water systems may, where appropriate with justification, deviate from guide risk levels.

The risk from Legionella has been assessed using the following criteria:

- Low Risk** Action is required to maintain as Low Risk / to follow good operating practice
- Medium Risk** Action is required as soon as practicable
- High Risk** Immediate action is required

10. RISK ASSESSMENT SURVEY:

10.1 DESCRIPTION OF COMPLETE WATER SYSTEM

The mains water enters in the boiler room near the home team changing rooms where it provides cold mains water throughout the building. The site doesn't have any cold water storage tanks. The hot water is provided by a 220L Viessmann Calorifier in the boiler room. The site has 11x showers and an outside tap.

10.2 WRITTEN CONTROL SCHEME, TRAINING AND RECORD KEEPING

Check	Written Control Scheme /Comments	Risk Level
2.01 Is there a written Legionella Control Scheme / Management System?	The site are completing monthly temperature testing including a log book onsite	Low
2.02 Are the Lines of Communication and Responsibilities for the safe management of the water system documented?	Yes and noted in this risk assessment	Low
2.03 Is there a Legionellosis Control Log Book?	Log book onsite and completed	Low
2.04 Previous risk assessment seen & date of the Previous Legionella Risk Assessment including compliance with remedial actions	Previous legionella risk assessment seen and completed by Guardian on 10/08/2020 & 03/08/2018 by Ames	Low
2.05 Has there been a change to the water system or its use, building or key personnel since the last risk assessment?	No cold water storage tank onsite	N/A
2.06 Is there an accurate Schematic diagram / Plan of the Water System in place?	Yes, provided with this risk assessment	Low
2.07 Is there an Asset Register of Components of water System and Installation Records?	Yes with this risk assessment and installation records from contractors/ Fernwood Village Hall	Low
2.08 Are there documented Method Statements for monitoring / maintenance of the system?	Written control scheme provided in the old Ames folder	Low
2.09 Suitable records maintained & available for 5 years	Monthly temperature checks and risk assessments in the Legionella folder, but temperature checks not completed correctly or actioned	High
2.10 Is there Routine Monitoring of all CWSTs i.e., annual visual inspection and annual (Summer) temperature check of incoming mains into the tank and remote from the ball cock?	No cold water storage tanks onsite	N/A
2.11 Is there Routine Monitoring of CWS/HWS? i.e. Sentinel points – monthly and representative outlets on a rotational basis to ensure the whole system is reaching satisfactory temperatures	Monthly temperature checks not completed correctly	High
2.12 Is there Routine Monitoring of all Calorifiers? i.e. Monthly temperature checks of the Flow and Return and annual visual check of internal surfaces and / or purge of debris in the base and inspection of purge water	Calorifier onsite, but not compliant with temperature checks	High
2.13 Where a Chemical Dosing System is installed, is there Routine Monitoring of Biocide Levels?	N/A	N/A
2.14 Is there sustained Routine Flushing of little-used Outlets (where required) and is it logged?	Little used outlet are being flushed by the caretaker and recorded in the Legionella log book	Medium
2.15 Is there a Legionella Sampling Regime in place? If so, on what basis?	No Legionella samples certificate in the Legionella folder	Medium
2.16 Have any previous samples taken been found to be positive for Legionella? If so, what were the levels?	N/A	N/A

2.17 Is there adequate Training (including refresher training) of Personnel / Contractors with Responsibilities for the Control of Legionella?	Yes, Marion and Malcolm have completed Legionella awareness training by Ames in 2018. (Guardian Hygiene Services are fully trained to City & Guilds standard.	Medium
2.18 Level of competence of site staff & any contractors responsible for Legionella management including site records / log books?	Yes, Marion and Malcolm have completed Legionella awareness training by Ames in 2018. (Guardian Hygiene Services are fully trained to City & Guilds standard and competent to complete the tasks contracted to do.	Medium
2.19 Is there Adequate Emergency Procedures in place in case of Legionella Positive / Case of Legionellosis associated with the site?	Yes via the lines of communication	Low
Overall risk		HIGH

Comments and Recommendations:

2.09, 2.11 & 2.12 The site are completing monthly temperature checks, but the documents being used are not adequate. E.g. The temperatures are generally the same result at each point which is unlikely. Please ensure the monthly temperature checks are completed correctly. The Calorifier monthly flow and return temperature are not correct but no actions put in place to resolve the issue. Please see picture below of water monitoring records.

2.09 Just for reference: All Legionella records should be held for 5 years.

2.14 Just for reference: Little used outlet is any outlet not being used at least weekly. Please ensure all little used outlets (hot & cold water) are flushed at least weekly until the outlet stabilises and is comparable to supply water or for a minimum 2 minutes (without creating aerosols). Flushing at a lower flowrate but for longer periods of time can also help reduce aerosols being created. This action should be recorded in your Legionella log book. This will include the outside bib tap, which is being flushed weekly and recorded in the Legionella log book.

2.15 It is recommended that Legionella samples are taken from appropriate points in the water systems on at least an annual basis to confirm the effectiveness of the Legionella control scheme and due to issues in the system including high cold water temperatures and the Calorifier not at the correct flow/return temperatures. Samples should taken from the appropriate points in the system to ensure they are representative of the water flowing around the system in accordance of HSG274 part 2. Analysis of water samples for Legionella should be performed in UKAS-accredited laboratories, which Guardian use.

2.17 & 2.18 Marion Fox Goddard and Malcolm Dickinson have completed Legionella awareness training by Ames in 2018. All members of onsite staff with responsibilities for the control of Legionella should complete formal training on Legionella due to the last course being 4 years old. It is recommended that all persons documented on the lines of communication and onsite with the responsibility for the control of Legionella on site receive formal Legionella training.

Thermometer used for temperature testing needs to be fit for purpose and accurate. To ensure the equipment continues to give reliable and accurate results throughout its life it needs to be regularly checked and calibrated. You should have a management procedure that ensures the thermometer equipment is suitably calibrated and all checks/results of Calibration stored in the Legionella log book.

Photographs:

2022

AMES

Section 5.3

HOT & COLD WATER TEMPERATURES

The person taking the temperature should sign and date in the relevant box in the grid above
Any discrepancies should be reported to the person responsible for maintenance immediately
All Cold Temperatures should be below 20°C within 2 minutes of draw-off, and all hot temperatures should be 50°C or above within one minute.
Sentinel outlets are typed in Red

Location	Jan		Feb		Mar		Apr		May		Jun		Jul		Aug		Sep		Oct		Nov		Dec	
	Hot	Cold	Hot	Cold	Hot	Cold	Hot	Cold	Hot	Cold	Hot	Cold												
Changing Room Block	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Home Toilet HWB	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Home Changing Room Shower 1	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Home Changing Room Shower 2	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Home Changing Room Shower 3	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Home Changing Room Shower 4	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Home Changing Room Shower 5	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Disabled Toilet HWB	54	10	54	10	54	10	54	10	54	10	54	10	54	10										
Outside Garden X1 Bib tap	N/A	10																						
Hall Block																								
Kitchen HWB	50	10	51	12	52	11	53	12	51	16	52	18	55	18										
Bar HWB	51	10	52	12	52	11	53	11	51	16	51	17	57	18										
Date	6-1-22		6-2-22		3-3-22		6-4-22		4-5-22		3-6-22		4-7-22											
Signature	MD																							

Log book results, all temperatures are generally the same result

AMES

Section 5.2

CALORIFIER & WATER HEATER TEMPERATURES

Parameters: Stored at 60 °C minimum

Date	Item	Temp Stored	Temp Flow	Temp Return	S / NS	Action required	Signature
1-7-2021	HOT WATER	54	54	47		None	MD
1-8-2021	HOT WATER	56	56	49		None	MD
30-8-2021	HOT WATER	56	56	49		None	MD
5-10-2021	HOT WATER	56	56	48		None	MD
5-11-21	HOT WATER	56	56	51		None	MD
6-12-21	HOT WATER	56	56	53		None	MD
1-22	HOT WATER	55	55	52		None	MD
8-2-22	HOT WATER	56	56	52		None	MD
9-3-22	HOT WATER	55	55	52		None	MD
6-4-22	HOT WATER	55	55	51		None	MD
4-5-22	HOT WATER	55	55	51		None	MD
3-6-22	HOT WATER	55	55	51		None	MD

Calorifier flow temperatures and sometimes the return temperature incorrect

10.3 MAINS / WATER SOURCE DISTRIBUTION SYSTEM

Check	Result	Risk
3.01 Water Source i.e. mains / private water supply (including location)	The mains water enters in the boiler room near the home team changing rooms	Low
3.02 Incoming Mains Temp(°C)	19°C	Low
3.03 Nearest Outlet Temp (°C)	19.2°C Home team changing room WC	Low
3.04 Furthest Outlet Temp (°C)	21.1°C Entrance male WC 21.1°C Entrance female WC	Medium
3.05 Any representative outlet not achieving 20°C within 2 minutes	Yes	Medium
3.06 Insulation of pipework	Yes in roof space	Low
3.07 Chemical / UV Treatment / Ionisation	None onsite	N/A
3.08 Backflow protection	Device on mains, device on outside tap, air gaps at outlets	Low
3.09 Stop Valve Accessible	Yes	Low
3.10 Dead-legs present	No	Low
3.11 Dead-ends present	Yes	Medium
3.12 Presence of Little-Used Outlets	Yes, but site flushing	Low
3.13 Accessibility of Pipe-work	Average	Low
	Overall risk	MEDIUM

Comments and Recommendations for Mains / Water Source Distribution System:

3.04 & 3.05 By reviewing the data from your onsite log book including the monthly legionella results and by temperature profiling, the mains water at this site is normally below 20°C. The incoming mains water temperature should be below 20°C. The recent long run of hot weather with temperatures outside being near 25-30°C has caused the cold mains water temperature to rise above 20°C. In an exceptionally hot summer, it may be necessary to review the risk assessment and take appropriate action to mitigate the risk to ensure regular water flow through the system.

It's important to keep the cold water moving in the system to prevent bacteria from developing, so the system should have a high turnover of cold water. Please ensure all the cold outlets are flushed at least twice a week for a minimum of 2 minutes (without creating aerosols). This action should be recorded in your Legionella log book. Please continue this until the weather gets cooler or when the mains is below 20°C at all outlets.

3.11 Deadends in the system, please see section 10.10 deadends & deadlegs in the water system for further information.

Flexi pipe fitted and used as a filling loop for the central heating system in the boiler room. Filling loops should be a temporary connection and should be disconnected after filling the system to avoid cross flow contamination from the heating system to mains cold water.

Photographs:



Mains water stop valve in the boiler room next to the home team changing rooms



Outside bib tap off the visiting team WC, has backflow protection internally



Filling loop in the boiler room

10.4 COLD WATER STORAGE TANKS (CWST) AND DISTRIBUTION – NONE ON SITE

Check	Result	Risk	Result	Risk
CWST				
Asset Number:				
Location:				
Services Supplied by CWST:				
Tank Capacity (Litres):				
Sparge pipe fitted inside the tank				
4.1. CWST Material (WRAS approved)				
4.2 CWST Insulation				
4.3 Close-fitting CWST Lid				
4.4 CWST Lid Vent				
4.5 Overflow Screen				
4.6 Warning Pipe Screen (for tanks over 1000L)				
4.7 Vent Pipe feeds CWST				
4.8 Supply Water Temp (°C) (ball valve) (<20°C)				
4.9 Stored Water Temp (°C) (<2°C increase from 4.8)				
4.10 Visible Bio-films in CWST				
4.11 Visible Sediment in CWST				
4.12 Visible Corrosion within CWST & Internal tank condition(s)				
4.13 Visible Scale within CWST				
4.14 CWST's linked (i.e. parallel to avoid stagnation / low flow)				
4.15 Cross flow-inlet opposite outlet, outlet at bottom of CWST				
4.16 Turnover of CWST (turnover within 24 hours/12 hours in healthcare)				
4.17 Dead-legs present				
4.18 Dead-ends present				
4.19 Safe Access to, around and into the CWST for inspection and cleaning				
4.20 Does the CWST have hollow supports?				
4.21 Adequate Lighting				
COLD WATER DISTRIBUTION				
4.22 Nearest Outlet Temp (°C)				
4.23 Furthest Outlet Temp (°C)				
4.24 Any representative outlet not achieving 20°C within 2 minutes				
4.25 Accessibility of pipe work				
4.26 Presence of little used outlets / flushing regime				
4.27 Backflow Protection				
4.28 Dead-legs present				
4.29 Dead-ends present				
4.30 CWS pipework insulation				
4.31 Expansion vessels if fitted, right way up, WRAS/BS6920 approved/allow flushing				
CWST Risk				

Overall Risk	
Comments and Recommendations for Cold Water Storage Tank / Distribution:	
Photographs:	

10.5 CALORIFIERS / HOT WATER STORAGE VESSELS & ASSOCIATED HOT WATER DISTRIBUTION

Check	Result	Risk	Result	Risk	Result	Risk
Asset Number:	Calorifier 1					
Make / Model:	Viessmann 6182 Vitovalor PT2 Installed 03/04/2019					
Location:	Boiler room next to home team changing rooms					
Outlets / Area Served:	Whole building					
Heating Method:	Direct gas & solar					
Vented / Unvented:	Unvented system					
Storage Capacity:	220L					
Construction Material	Stainless steel tank					
Flow pipework size & material	Copper 22mm approx					
Return pipework size & material	Copper 22mm approx					
With / without Circulation	With circulation					
5.1 Flow Water Temp (>60°C)	55.9°C	Medium				
5.2 Return Water Temp (>50°C)	51.6°C	Low				
5.3 Water Source	Mains	Medium				
5.4 Calorifier Insulation	Yes	Low				
5.5 Drain Valve Fitted / Operational & location of valve	Yes, drain valve fitted and working	Low				
5.6 Purge Water Condition	Not tested	N/A				
5.7 Access Hatch to Clean and Inspect Calorifier	No by design	N/A				
5.8 Internal Condition	Unknown	N/A				
5.9 Suitable Vent Fitted	Yes	Low				
5.10 Evidence of Stratification	Unable to test	N/A				
5.11 Destratification Pump Fitted	Yes	Low				
5.12 Storage Capacity / Meets Demand	Yes	Low				
5.13 Alternation of Stand-by Pumps	No stand by pumps	N/A				
5.14 Period of Operation (N.B: if not in use for more than 7 days may create a dead-leg)	Continuous	Low				
5.15 Temperature Gauge Fitted / Operational	Yes	Low				
5.16 Calorifiers linked correctly (i.e. parallel to avoid stagnation / low flow)	Single Calorifier	Low				
5.17 Expansion vessels i.e. if fitted, to be right way up, WRAS / BS6920 approved and allow flushing	Fitted correctly, no flushing	Medium				
5.18 Dead-leg / dead-end associated with cal i.e. Swan neck	Yes	Medium				
5.19 Calorifier linked to solar heating system and is it managed, monitored and maintained effectively?	Linked to solar for heating	Low				
5.20 Safe Access to and around the Calorifier	Yes	Low				
5.21 Adequate Lighting	Yes					
HOT WATER DISTRIBUTION						
5.22 Nearest Outlet Temperature (>50°C / 55°C Healthcare)	55.2°C Home team changing room WC	Low				

5.23 Furthest Outlet Temp (>50°C / 55°C Healthcare)	51.4°C Entrance male WC 51.8°C Entrance female WC	Low			
5.24 Any representative outlet not achieving 50°C (55°C Healthcare) within 1 minute	No	Low			
5.25 Presence of little used outlets /flushing regime	Yes, but site flushing	Low			
5.26 HWS pipe work insulation	Yes in loft space	Low			
5.27 Accessibility of HWS pipe work	Average	Low			
5.28 Backflow protection	Some devices and air gaps at the outlets	Low			
5.29 Dead-legs present	No	Low			
5.30 Dead-ends present	Yes	Medium			
5.31 Recirculation / Booster Pump	Yes	Low			
Calorifier / Hot Water Storage Vessel Risk		Medium			
Overall Risk			MEDIUM		
Comments and Recommendations for Calorifier / Distribution:					
<p>5.1 The site are completing monthly temperature checks, but the Calorifier monthly flow and return temperature are not correct with no actions put in place to resolve the issue. Where the temperatures are not correct, it should be documented and remedial action put into place. The Calorifiers flow temperatures was too low on my visit, currently flowing out at 55.9°C and returning at 51.6°C. The Calorifier should be set to at least 60°C returning at 50°C or more and reaching the outlets at 50°C or more to prevent bacteria from developing in the water. Please arrange for the Calorifier to be turned up to achieve the correct temperatures. Legionella bacteria multiply where temperatures are between 20-45°C and nutrients are available. Legionella bacteria remains dormant below 20°C and do not survive above 60°C.</p> <p>5.17 Expansion vessel on Calorifier 1 in the boiler room: Expansion vessels in systems operating at steady temperature and pressure may have long periods without exchanging any significant amount of water and therefore can be at risk of aiding microbial growth. There is no isolation and drain valve fitted to allow flushing of the water within the vessels. HSG 274 part 2 recommends that expansion vessels, where practicable, are to be flushed and purged to drain on a monthly – six monthly basis, I recommend flushing every 3 months or install a flow through vessel so flushing wouldn't be required. Another option would be to install an Anti-Legionella valve to the expansion vessel which basically convert the vessels to 'flow through' vessels so flushing is not required.</p> <p>5.18 The Calorifier has a temperature gauge on the flow pipework which is about 30cm long. The length of pipework from the main pipe to the temperature gauge is too long and could cause the hot water to stagnate in the pipe. The temperature gauges should be removed and the pipework cut back to the main pipe. Inline temperature gauges should be fitted.</p> <p>5.30 Deadends in the system, please see section 10.10 deadends & deadlegs in the water system for further information.</p>					

Photographs:



**Viessmann 6182 Vitovalor PT2
in the boiler room, installed
03/04/2019**



**Viessmann 6182 Vitovalor PT2
in the boiler room, 220L hot
water tank**



**Viessmann 6182 Vitovalor PT2
in the boiler room, internal
picture**



**Viessmann 6182 Vitovalor PT2
in the boiler room, drain valve
at the base of the Calorifier**



**Viessmann 6182 Vitovalor PT2
in the boiler room, return
pump**



**Viessmann 6182 Vitovalor PT2
in the boiler room, expansion
vessel**



**Viessmann 6182 Vitovalor PT2
in the boiler room,
temperature gauge on the flow**

10.6 LOW STORAGE VOLUME (<15L) / INSTANTANEOUS HOT WATER HEATER & ASSOCIATED HOT WATER DISTRIBUTION – NONE ON SITE

Check	Result	Risk	Result	Risk	Result	Risk
Asset Number:						
Make / Model:						
Location:						
Construction Material:						
Heating Method:						
Serves:						
Hot Water Storage Capacity:						
6.01 Water Source						
6.02 Flow Water Temp (50 - 60°C/55°C Healthcare)						
6.03 Regularity of Use / Period of Operation						
6.04 Turnover of stored water						
6.05 Dead-legs present						
6.06 Dead-ends present						
HOT WATER DISTRIBUTION						
6.07 Presence of little used outlets / flushing regime						
6.08 Nearest Outlet Temperature (>50°C / 55°C Healthcare)						
6.09 Furthest Outlet Temperature (>50°C / 55°C Healthcare)						
6.10 Any representative outlet not achieving 50°C (55°C Healthcare) within 1 minute						
6.11 HWS pipe work insulation						
6.12 Accessibility of HWS pipe-work						
6.13 Backflow protection						
6.14 Dead-legs present						
6.15 Dead-ends present						
6.16 Expansion vessels if fitted, right way up, WRAS/BS6920 approved/allow flushing						
Low storage volume / instantaneous hot water						

heater and distribution risk						
Overall Risk						
Comments and recommendations for Low Storage Volume / Instantaneous Hot Water Heater and Distribution:						
Photographs:						

10.7 COMBINATION WATER HEATERS & ASSOCIATED HOT WATER DISTRIBUTION – NONE ON SITE

Check	Result	Risk	Result	Risk	Result	Risk
Asset Number:						
Make / Model:						
Location:						
Construction Material:						
Heating Method:						
Serves:						
Cold Water Storage Capacity:						
Hot Water Storage Capacity:						
7.01 Cold Water Source						
7.02 Temperature of Cold Water						
7.03 Evidence of hot water entering the cold water space						
7.04 Close-fitting CWST Lid						
7.05 Screened CWST Lid Vent						
7.06 Overflow Screen						
7.07 Cleanliness of CWST (i.e. presence of bio-films, scale and sediment)						
7.08 Flow Water Temp (as close to 60°C as poss. without exceeding it)						
7.09 Regularity of Use / Period of Operation						
7.10 Turnover of stored water						
7.11 Dead-legs present						
7.12 Dead-ends present						
HOT WATER DISTRIBUTION						
7.13 Nearest Outlet Temperature (to confirm heater operates as close to 60°C as possible)						
7.14 Furthest Outlet Temperature (>50°C)						
7.15 Any representative outlets not achieving 50°C						
7.16 Presence of little-used outlets / flushing regime						

7.17 HWS pipe work insulation						
7.18 Accessibility of HWS pipe-work						
7.19 Backflow protection						
7.20 Dead-legs present						
7.21 Dead-ends present						
7.22 Recirculation / Booster Pump						
Combination Water Heater and Distribution Risk						
Overall Risk						
Comments and recommendations for Combination Water Heater / Distribution:						
Photographs:						

Health and Safety Guidance

The following benchmarks should be used regarding scald risks from water heaters:

If hot water outlet temperatures at sinks, basins, baths or showers are in excess of 60°C, for zero risk populations, then this should be identified as a potential "**scald risk**" with a recommendation for the installation of warning labels or blender valves.

If hot water outlet temperature at sinks, basins, baths or showers are in excess of 55°C, for high risk populations (very young, very elderly, infirm or significantly mentally or physically disabled or those with sensory loss), then this should be identified as a potential "**scald risk**" with a recommendation to consider fitting thermostatic mixing valves (TMVs) (preferably incorporated directly in the tap fitting. Temperatures at TMVs should be set at 38-43°C.

If the hot water outlet temperatures be in excess of 62°C in cleaners/caretakers rooms, kitchens, laundries etc. then this again should be highlighted as a potential "**scald risk**" with a recommendation for approved 'Hot Water Warning' signage to be installed.

Please Note: If the temperature of the hot water supply is reduced in order to address a scalding risk this will compromise the control of Legionella.

10.8 SHOWERS / SPRAY HOSES / SPRAY TAPS

Check	Result	Risk	Result	Risk	Result	Risk
Asset Number:	Shower 1-5		Shower 6-10		Shower 11	
Location:	Home team changing rooms		Visiting team changing rooms		Changing room disabled WC	
Type of Shower:	Push button mixed shower via a TMV		Push button mixed shower via a TMV		Rada Thermoscopic Exact 3 mixer shower	
Individual / Bank of Showers (indicate number)	Bank of 5		Bank of 5		Individual shower	
8.01 Cold Water Source i.e. mains /CWST fed – indicate which CWST	Mains	Medium	Mains	Medium	Mains	Medium
8.02 Hot Water Source i.e. indicate which calorifier / water heater)	Calorifier 1	Medium	Calorifier 1	Medium	Calorifier 1	Medium
8.03 Regularity of Use / Period of Operation / Flushing	Infrequently but flushed by the site	Low	Infrequently but flushed by the site	Low	Infrequently but flushed by the site	Low
8.04 TMV/ built-in TMV used	Rada Thermostatic 320 TMV	Low	Rada Thermostatic 320 TMV	Low	Rada Thermoscopic Exact 3 mixer	Low
8.05 Shower Hose Restrained	Fixed shower heads	Low	Fixed shower heads	Low	Not restrained	Medium
8.06 Visible Contamination / Scale on Showerhead(s)	Light	Low	Light	Low	Light	Low
8.07 Quarterly Shower Head Clean / Descale	Quarterly shower cleaning completed	Low	Quarterly shower cleaning completed	Low	Quarterly shower cleaning completed	Low
8.08 Does the rate of fouling indicate that the quarterly clean / descale is adequate?	Yes	Low	Yes	Low	Yes	Low
8.09 Backflow protection	Fixed showers, air gap	Low	Fixed showers, air gap	Low	None seen	Medium
8.10 Dead-legs present	No	Low	No	Low	No	Low
8.11 Dead-ends present	No	Low	No	Low	No	Low
Shower / Spray Tap Risk		Medium		Medium		Medium
Overall Risk				MEDIUM		

Comments and Recommendations for Showers / Spray Hoses / Spray Taps:

Just for reference: Any showers which are not used on a weekly basis, should be flushed through with hot and cold water supplies for a minimum of 5 minutes each week, without the creation of aerosols. Shower head cleaning and flushing should be recorded in your Legionella log book. Showers are a high risk due to the amount of aerosols created when used.

8.05 & 8.09 Shower 11 in the disabled WC changing room was not threaded through a restrainer and no backflow protection was seen. Showers where the shower head can drop in the shower tray may result in back siphonage/backflow of water into the hot & cold water system. To provide backflow protection, the following is recommended;

Robust factory applied retaining rings of the design which do not allow the shower hose to be removed are a recognised method of maintaining an AUK3 air gap acceptable in all types of premises. This might not be possible due to the shower being in a disabled WC. Where this is not possible the position of the shower and shower fittings must provide a minimum gap of 25 mm between the showerhead and the spill over level of the shower. If the shower head can't be restrained or the minimum air gap cannot be achieved, then other forms of backflow devices would be required depending on the fluid category. An example of this could be an Arrow Valves shower double check valve is intended to provide backflow protection from shower flexible hose and is fitted between the shower valve and a hose. Double Check Valves (type ED) are suitable for Fluid Category 3 risks, such as domestic bath / shower hoses. The valve is WRAS approved.

Photographs:



Home team changing room showers 1-5



Home team changing room shower 1



Home team changing room shower 2



Home team changing room shower 3



Home team changing room shower 4



Home team changing room shower 5



Visiting team changing room showers 6-10



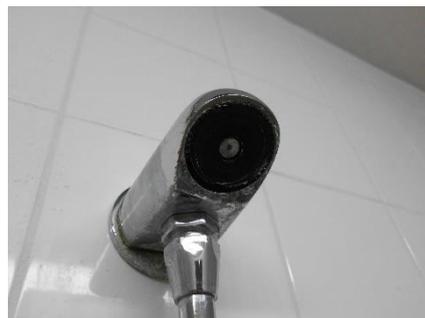
Visiting team changing room shower 6



Visiting team changing room shower 7



Visiting team changing room shower 8



Visiting team changing room shower 9



Visiting team changing room shower 10



**Disabled WC changing rooms
Shower 11**



**Disabled WC changing rooms
Shower 11**

10.9 GENERAL RISK FACTORS

Check	Result	Risk
9.01 Presence of scale on water fittings	Yes, medium scale on outlets	Medium
9.02 Is there any form of scale control /water softener /water filter? Please give details as to type and part of water system it covers	Caltronic electronic scale inhibitor fitted on the mains supply in the boiler room	Low
9.03 If 'Yes' to scale 9.02 above, is it maintained?	None maintenance unit	N/A
9.04 Where TMVs are fitted are they fitted in accordance with HSG 274 pt 2 guidance?*	Yes	Low
9.05 Where TMV's are fitted are they being serviced and maintained in accordance with relevant guidance?***	Completed by Guardian Hygiene Services Ltd	Low
9.06 Are flexible hoses fitted?	Yes	Medium
	Overall Risk	MEDIUM

Comments and Recommendations for General Risk Factors:

9.01 The majority of the outlets have scale and debris which should be removed as this is a nutrient for bacterial growth.

9.05 Where TMV's are employed to control hot water to outlets temperatures in order to prevent scalding, they should be set to 41°C for wash hand basins. The TMV in the visiting team WC requires adjusting as its currently at 46.6°C.

9.06 Flexi pipes present in the building. There is a risk of microbial colonisation on the inner liners so as a recommendation, please consider replacing them (unless WRAS approved) with hard pipe, soft bendable metal pipe or plastic pipes. All replacement pipework should be WRAS approved. Flexi pipes might be required where vibration can occur. Flexi pipes noted in the following locations, but not limited to:

- 1x Flexi pipe in the home team WC on toilet
- 1x Flexi pipe in the visiting team WC on toilet
- 2x Flexi pipes in the disabled WC changing rooms
- 2x Flexi pipes in the kitchen (WRAS approved)
- 2x Flexi pipes in the disabled WC entrance (WRAS approved)

Photographs:



Caltronic electronic scale inhibitor on the mains in boiler room



Rada Thermostatic 320 in the home team changing rooms for the 5x showers



Rada Thermostatic 320 in the visiting team changing rooms for the 5x showers



TMV in the home team WC



TMV in the visiting team WC



TMV in the entrance female WC



TMV in the entrance male WC



Flexi pipe in the home team WC



Flexi pipe in the visiting team WC



2x Flexi pipes in the disabled WC changing rooms



2x Flexi pipes in the disabled WC entrance (WRAS approved)



Example of medium scale on the majority of the outlets

*including being accessible, as close to the POU as possible and preferably serving a single outlet.

**Relevant guidance:

HSG274 part 2 Table 2.1 checklist for hot and cold water systems

TMV3 Buildcert standard / NHS Model Engineering Specification D08

10.10 DEADENDS & DEADLEGS IN THE WATER SYSTEM

List of deadend and deadleg locations in the building including photographs, locations and water system affected.

Location	Notes (recommendation)	Pipework length & diameter	Water system affected	Risk Level	Photo
Boiler room	The Caleffi Multibloc Inlet Control Valve in the boiler room has a pipe coming from the bottom of the valve which has been capped off (about 10cm long) creating a deadend in the system. The deadend should be removed which might mean replacing the valve so no deadend is present. Deadends provide an environment for bacterial growth due to water stagnation.	22mm 10cm long approx	Mains	Medium	
Kitchen	Deadend hot pipe in the kitchen behind the fridge and left of the cooker. The pipe used to feed a sink or wash hand basin which has been removed. The deadend is about 20cm long 15mm near the return pipe. Ideally, the pipework should be cut off in the roof space and the pipework removed to prevent water stagnation. Deadends provide an environment for bacterial growth due to water stagnation.	20cm long 15mm but about 4m long from the roof	Calorifier	Medium	
Kitchen	Deadend cold pipe in the kitchen behind the fridge and left of the cooker. The pipe used to feed a sink or wash hand basin which has been removed. The deadend is about 20cm long 15mm pipework. The pipework should be cut off in the roof space and the pipework removed to prevent water stagnation. Deadends provide an environment for bacterial growth due to water stagnation.	4m long 15mm	Mains	Medium	
Overall Risk				MEDIUM	

10.11 OTHER RISK OUTLETS NOT IDENTIFIED WITHIN THE DOCUMENT

List of other significant risk outlets identified (which may include, but not restricted to, washing machines, dish washers, vending machines, ice machines, fire sprinklers and hose reels, drinking water fountains)

Location	Notes (including maintenance regimes)	Asset ID (where applicable)	Temp (where applicable)	Risk Level	Photo
Bar	The Hobart dishwasher in the bar should be maintained and serviced as per manufacturer's instructions including any filters. Confirmation is to be sought from the machine manufacturer and / or the installer to ensure that machine is provided with the appropriate level of backflow protection as this can be built into the machine.	N/A	N/A	Low	
Kitchen	The Bosch dishwasher in the kitchen should be maintained and serviced as per manufacturer's instructions including any filters. Confirmation is to be sought from the machine manufacturer and / or the installer to ensure that machine is provided with the appropriate level of backflow protection as this can be built into the machine.	N/A	N/A	Low	
Bar store room	The bib tap in the bar has backflow protection built in but has a hose pipe attached for cleaning the beer lines. When the hose pipe is not in use it should be disconnected and fully drained down to prevent any stagnant water inside the hose. Stagnant water creates a risk of bacteria developing.	N/A	N/A	Low	
Overall Risk				LOW	

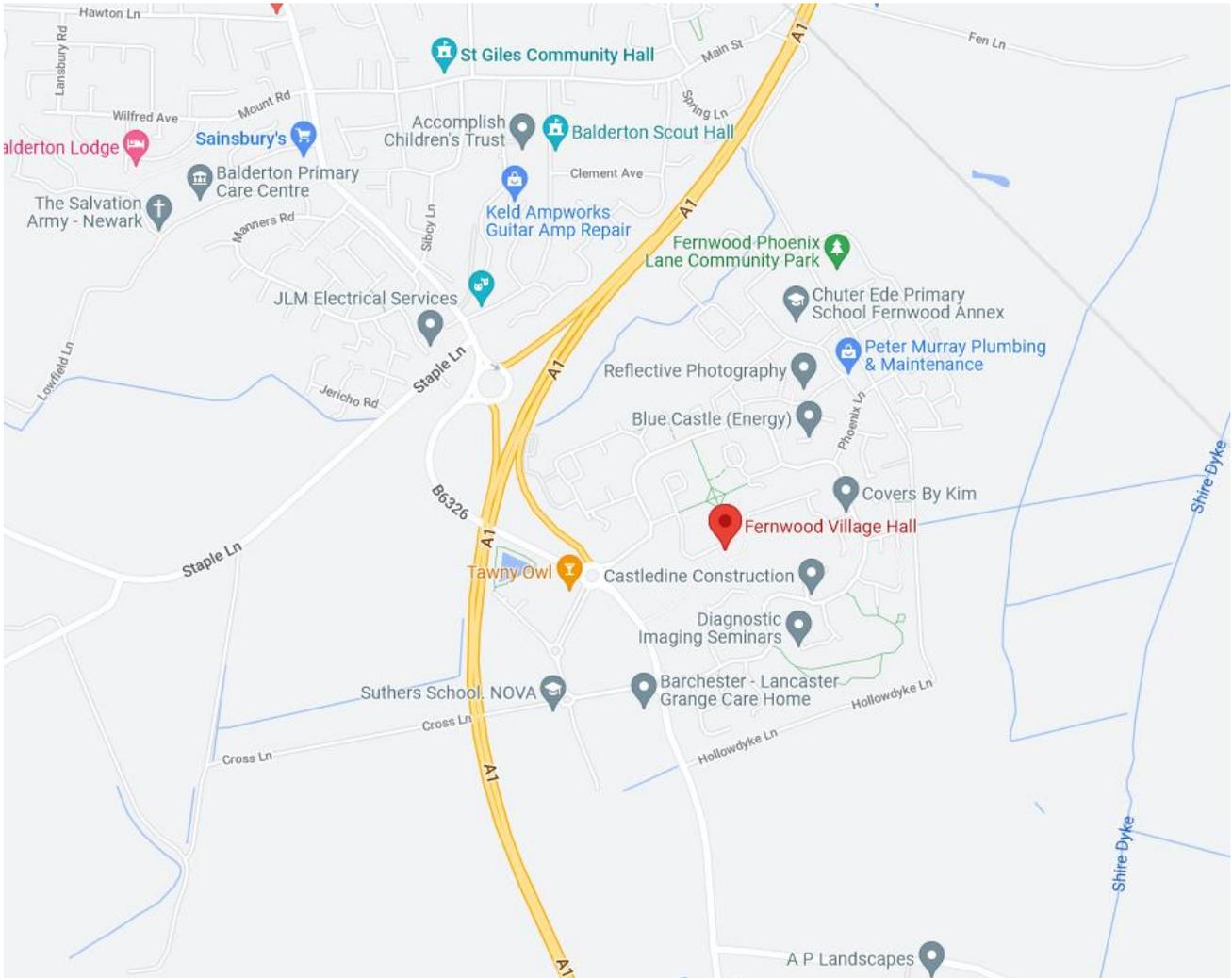
10.13 COMBINED RISK SCORING:

Area of Risk	Average Risk Score
Written Control Scheme, Training and Record Keeping	High
Mains / Water Source Distribution System	Medium
Cold Water Storage Tanks (CWST) & Associated Distribution	N/A
Calorifiers / Hot Water Storage Vessels & Associated Hot Water Distribution	Medium
Low Volume Hot Water Storage Vessels (<15L) / Instantaneous Water Heaters & Associated Hot Water Distribution	N/A
Combination Water Heaters and Associated Hot Water Distribution	N/A
Showers / Spray Hoses / Spray Taps	Medium
General Risk Factors	Medium
Deadends & Deadlegs in the water system	Medium
Other Risk Outlets	Low
OVERALL RISK : MEDIUM	

Further Comments:

- Risk Assessment Completed By:** - Jamie Norton
- Date:** - 12th July 2022
- Risk Assessment Report Checked By:** - Hannah Lord
- Signed:** - *H Lord*
- Date of Check:** - 15th July 2022

11. SITE LOCATION MAP



APPENDICES

A LEGIONELLA CONTROL SCHEME IN ACCORDANCE WITH HSG 274 PART 2

Service	Action to Take	Frequency
Calorifiers	Inspect calorifier internally by removing the inspection hatch or using a boroscope and clean by draining the vessel. The frequency of inspection and cleaning should be subject to the findings and increased or decreased based on conditions recorded	Annually, or as indicated by the rate of fouling
	Where there is no inspection hatch, purge any debris in the base of the calorifier to a suitable drain. Collect the initial flush from the base of hot water heaters to inspect clarity, quantity of debris, and temperature	Annually, but may be increased as indicated by the risk assessment or result of inspection findings
	Check calorifier flow temperatures (thermostat settings should modulate as close to 60 °C as practicable without going below 60 °C). Check calorifier return temperatures (not below 50 °C)	Monthly
Hot Water Services	For non-circulating systems: take temperatures at sentinel points (nearest outlet, furthest outlet and long branches to outlets) to confirm they are at a minimum of 50 °C within one minute (55 °C in healthcare premises)	Monthly
	For circulating systems: take temperatures at return legs of principal loops (sentinel points) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises). Temperature measurements may be taken on the surface of metallic pipework.	Monthly
	For circulating systems: take temperatures at return legs of subordinate loops, temperature measurements can be taken on the surface of pipes, but where not practicable, the temperature of water from the last outlet on each loop may be measured and this should be greater than 50 °C within one minute of running (55 °C in healthcare premises). If the temperature rise is slow, it should be confirmed that the outlet is on a long leg and not that the flow and return has failed in that local area	Quarterly (ideally on a rolling monthly rota)
	All HWS systems: take temperatures at a representative selection of other points (intermediate outlets of single pipe systems and tertiary loops in circulating systems) to confirm they are at a minimum of 50 °C (55 °C in healthcare premises) to create a temperature profile of the whole system over a defined time period	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for Legionella control
POU water heaters (no greater than 15 litres)	Check water temperatures to confirm the heater operates at 50 – 60 °C (55 °C in healthcare premises) or check the installation has a high turnover	Monthly – six monthly, or as indicated by the risk assessment
Combination water heaters	Inspect the integral cold water header tanks as part of the cold water storage tank 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

Cold water tanks	Inspect cold water storage tanks and carry out remedial work where necessary	Annually
	Check the tank water temperature remote from the ball valve and the incoming mains temperature. Record the maximum temperatures of the stored and supply water recorded by fixed maximum / minimum thermometers where fitted	Annually (Summer) or as indicated by the temperature profiling
Cold water services	Check temperatures at sentinel taps (typically those nearest to and furthest from the cold tank, but may also include other key locations on long branches to zones or floor levels). These outlets should be below 20 °C within 2 minutes of running the cold tap. To identify any local heat gain, which might not be apparent after one minute, observe the thermometer reading during flushing	Monthly
	Take temperatures at a representative selection of other points to confirm they are below 20 °C to create a temperature profile of the whole system over a defined period. Peak temperatures or any temperatures that are slow to fall should be an indicator of a localised problem	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for Legionella control
	Check thermal insulation to ensure it is intact and consider weatherproofing where components are exposed to the outdoor environment	Annually
Showers and spray taps	Dismantle, clean and descale removable parts, heads, inserts and hoses where fitted	Quarterly or as indicated by the rate of fouling or other risk factors e.g. areas with high risk patients
POU filters	Record the service start date and lifespan or end date and replace filters as recommended by the manufacturer (0.2 µm membrane POU filters should be used primarily as a temporary control measure while a permanent safe engineering solution is developed, although long-term use of such filters may be needed in some healthcare situations)	According to manufacturer's guidelines
Base exchange softeners	Visually check the salt levels and top up the salt, if required. Undertake a hardness check to confirm operation of the softener	Weekly, but depends on the size of the vessel and the rate of salt consumption
	Service and disinfect	Annually, or according to manufacturer's guideline
Multiple use filters	Backwash and regenerate as specified by the manufacturer	According to manufacturer's guidelines
Infrequently used outlets	Consideration should be given to removing infrequently used showers, taps and any associate equipment that uses water. If removed, any redundant supply pipework should be cut back as far as possible to a common supply (e.g. to the recirculating pipework or the pipework supplying a more frequently used upstream fitting) but preferably by removing the feeding 'T' Infrequently used equipment within a water system (i.e. not used for a period equal to or greater than 7 days) should be included on the flushing regime Flush the outlets until the temperature at the outlet stabilises and is comparable to supply water and purge to drain	Weekly, or as indicated by the risk assessment

	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	
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 the 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 or on a frequency defined by the risk assessment, taking account of any manufacturer's instructions
Expansion vessels	Where practical, flush through and purge to drain	Monthly – six monthly, as indicated by the risk assessment

B RISK SCORING GUIDE

The risk assessment will take account of the following factors:

- The potential for contamination of the system with Legionella bacteria
- The potential for the proliferation of Legionella bacteria in the system
- The potential for the formation of water aerosols / droplets
- The susceptibility of persons exposed to Legionellosis

The following scoring system of the risk from Legionella is designed to act as a guide for risk assessors, however, using their knowledge and experience of water systems and Legionella bacteria may, where appropriate and with justification, deviate from the guide risk score.

3. Mains / Water Source Distribution System								
Check	Result / Risk Score							
3.01 Water Source i.e. mains / Private water supply	Mains	L	Bore Hole	M	Spring	M		
3.02 Incoming Mains Temp (°C)	<20°C	L	20 - 24°C	M	≥25°C	H		
3.03 Nearest Outlet Temp (°C)	<20°C	L	20 - 24°C	M	≥25°C	H		
3.04 Furthest Outlet Temp (°C)	<20°C	L	20 - 24°C	M	≥25°C	H		
3.05 Any representative outlet not achieving 20°C within 2 minutes	No	L	Yes	M / L	Dependant on number of outlets and temperature achieved			
3.06 Insulation of pipe-work	Yes	L	Partial	M	No	H		
3.07 Chemical / UV Treatment / Ionisation	N/A	-	Yes	L	Ineffective	H		
3.08 Backflow protection	Yes	L	No	M / L	Dependant on fluid category			
3.09 Stop Valve Accessible	Yes	L	No	M				
3.10 Dead-legs present	None	L	Yes with Good Flushing Regime	M	Yes with No or Poor Flushing Regime	H		
3.11 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
3.12 Presence of Little Used Outlets	None	L	Yes with Good flushing Regime	L	Yes with No or Poor Flushing Regime	H		
3.13 Accessibility of Pipe Work	Yes	L	Partial	M	No	H		
4. Cold Water Storage Tanks (CWST) and Associated Distribution								
Check	Results / Risk Scores							
4.1. CWST Material (WRAS approved)	Yes	L	No	M/H				
4.2 CWST Insulation	Yes	L	Partial	M	No	H		
4.3 Close-fitting CWST Lid	Yes	L	Damaged	M	Poor Fit	M/L	No	H
4.4 CWST Lid Vent	Yes	L	No screen	M	Damaged	M	No	M
4.5 Overflow Screen	Yes	L	No	M	Damaged	M		
4.6 Warning Pipe Screen (for tanks over 1000L)	N/A	-	Yes	L	No / Broken	M	No W/Pipe	M
4.7 Vent Pipe feeds CWST	No	L	Yes	H				
4.8 Supply Water Temp (°C) (ball valve) (<20°C)	< 20°C	L	20 - 24°C	M	≥25°C	H		
4.9 Stored Water Temp (°C) (<2°C increase from 4.8)	< 20°C	L	20 - 24°C	M	≥25°C	H		

4.10 Visible Bio-films in CWST	None	L	Slight	L/M	Moderate	M/H	Heavy	H
4.11 Visible Sediment in CWST	None	L	Slight	L/M	Moderate	M/H	Heavy	H
4.12 Visible Corrosion within CWST & Internal tank condition(s)	None	L	Slight	L/M	Moderate	M/H	Heavy	H
4.13 Visible Scale within CWST	None	L	Slight	L/M	Moderate	M/H	Heavy	H
4.14 CWST's linked (i.e. parallel to avoid stagnation / low flow)	Not Linked	-	Parallel with float valve	L	Parallel with no valve	M	Not in parallel	M/H
4.15 Cross flow-inlet opposite outlet, outlet at bottom of CWST	Good	L	Fair	M	Poor	H		
4.16 Turnover of CWST (turnover within 24 hours / 12 hours health care)	Daily	L	Weekly	M	Fortnightly +	M/H	Rare/Not Used	H
4.17 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
4.18 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
4.19 Safe access to, around and into the CWST for inspection and cleaning	Good access	L	Not good access	M	No access	H		
4.20 Does CWST have hollow supports?	No	L	Yes	M/H				
COLD WATER DISTRIBUTION								
4.22 Nearest Outlet Temp (°C)	<20°C	L	20 - 24°C	M	≥25°C	H		
4.23 Furthest Outlet Temp (°C)	<20°C	L	20 - 24°C	M	≥25°C	H		
4.24 Any representative outlet not achieving 20°C within 2 minutes	No	L	Yes	M/L	Dependant on number of outlets and temperature achieved			
4.25 Accessibility of pipe-work	Yes	L	Partial	M	No	H		
4.26 Presence of little used outlets / flushing regime	No	L	Yes with flushing	L/M	Yes with no flushing	H		
4.27 Backflow Protection	Yes	L	No	M/H	Dependant on fluid category			
4.28 Dead-legs present	None	L	Yes with Good Flushing Regime	M	Yes with No or Poor Flushing Regime	H		
4.29 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
4.30 CWS pipework insulation	Yes	L	Partial	M	No	H		
4.31 Expansion vessels i.e. if fitted, to be right way up, WRAS / BS6920 approved and allow flushing	N/A	-	Yes right way up, maintained and subject to flushing	L	Dependant on extent of compliance	M/H		

5. Calorifiers / Hot Water Storage Vessels & Associated Distribution								
Check	Result / Risk Score							
5.1 Flow Water Temp (>60°C)	≥60°C	L	40 - 60°C	M	≤40°C	H		
5.2 Return Water Temp (>50°C / 55°C healthcare)	≥50°C (55°C)	L	40 - 50°C	M	≤40°C	H		
5.3 Water Source	Mains	L	Low Risk Tank	L	Med Risk Tank	M	High Risk Tank	H
5.4 Calorifier Insulation	Yes	L	Partial	M	No	H		
5.5 Drain Valve Fitted / Operational	Yes	L	Damaged	M	No	M		
4.6 Purge Water Condition /Temperature (≥60°C)	Clear	L	Fair	M	Poor	H		

5.7 Access Hatch to Clean and Inspect Calorifier	Yes	L	No access to inspect interior	M / H				
5.8 Internal Condition	Clear	L	Fair	M	Poor	H		
5.9 Suitable Vent Fitted	Yes	L	No	M / H				
5.10 Destratification Pump Fitted	Yes	L	No	M	Not required	L		
5.11 Evidence of Stratification	No	L	Yes	H	Unable to Check	H		
5.12 Storage Capacity / Meets Demand	Yes	L	Fair	M	No	H		
5.13 Alternation of Stand-by Pumps	N/A	-	Yes	L	No	M / H		
5.14 Period of Operation (N.B: if not in use for more than 7 days may create a dead-leg)	Continual	L	Off at night / weekends	M	Off for more than 7 days/ out of use	H		
5.15 Temperature Gauge Fitted / Operational	Yes	L	No	M				
5.16 Calorifiers linked correctly (i.e. parallel to avoid stagnation / low flow)	Yes	L	No	M / H				
5.17 Expansion vessels i.e. if fitted, to be right way up, WRAS / BS6920 approved and allow flushing	N/A	-	Yes right way up, maintained and subject to flushing	L	Dependant on extent of compliance	M / H		
5.18 Deadleg / deadend associated with cal i.e. Swan neck pressure gauge fitted?	Yes	M	No	L				
5.19 Calorifier linked to solar heating system and is it managed, monitored and maintained effectively?	Not linked	L	Linked to solar heating and well managed, monitored and maintained particularly where there is little heat gain from the panels	L	Linked to solar heating but concerns over the management, monitoring and maintenance	M / H		
5.20 Safe access to and around the calorifier	Good access	L	Not good access	M	No access	H		
HOT WATER DISTRIBUTION								
5.22 Nearest Outlet Temperature (>50°C / 55°C healthcare)	≥50°C (≥55°C)	L	40 - 50°C	M	≤40°C	H		
5.23 Furthest Outlet Temp (>50°C / 55°C healthcare)	≥50°C (≥55°C)	L	40 - 50°C	M	≤40°C	H		
5.24 Any representative outlet not achieving 50°C (55°C healthcare)	No	L	Yes	M / L	Dependant on number of outlets and temperature achieved			
5.25 Presence of little used outlets / flushing regime	No	L	Yes with flushing	L / M	Yes with no flushing	H		
5.26 HWS pipe work insulation	Yes	L	Partial	M	No	H		
5.27 Accessibility of HWS pipe work	Yes	L	Partial	M	No	H		
5.28 Backflow protection	Yes	L	No	M / H	Dependant on fluid category			
5.29 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
5.30 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3cm)	H		

5.31 Recirculation / Booster Pump	No	L	Yes and well Maintained	L	Yes and not maintained	M		
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6. Low Storage Volume (<15L) / Instantaneous Hot Water Heater and Associated Hot Water Distribution								
Check	Result / Risk Score							
6.01 Water Source	Mains	L	Low Risk Tank	L	Med Risk Tank	M	High Risk Tank	H
6.02 Flow Water Temp (50-60°C / 55°C healthcare)	≥60°C	L	40 - 60°C	M	≤40°C	H		
6.03 Regularity of Use / Period of Operation	Continual	L	Off at night / weekends	M	Off for more than 7 days/ out of use	H		
6.04 Turnover of the stored water	High	L	Medium	M	Low	H		
6.05 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
6.06 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
HOT WATER DISTRIBUTION								
6.07 Presence of little used outlets / flushing regime	No	L	Yes with flushing	L/ M	Yes with no flushing	H		
6.08 Nearest Outlet Temperature (>50°C)	≥50°C	L	40 - 50°C	M	≤40°C	H		
6.09 Furthest Outlet Temperature (>50°C)	≥50°C	L	40 - 50°C	M	≤40°C	H		
6.10 Any representative outlet not achieving 50°C (55°C healthcare)	No	L	Yes	M /L	Dependant on number of outlets and temperature achieved			
6.11 HWS pipe work insulation	Yes	L	Partial	M	No	H		
6.12 Accessibility of HWS pipe-work	Yes	L	Partial	M	No	H		
6.13 Backflow protection	Yes	L	No	M / H	Dependant on fluid category			
6.14 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
6.15 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
6.16 Expansion vessels i.e. if fitted, to be right way up, WRAS / BS6920 approved and allow flushing	N/A	-	Yes right way up, maintained and subject to flushing	L	Dependant on extent of compliance	M / H		

7. Combination Hot Water Heater and Associated Hot Water Distribution								
Check	Result / Risk Score							
7.01 Cold Water Source	Mains	L	Low Risk Tank	L	Med Risk Tank	M	High Risk Tank	H
7.02 Temperature of Stored Cold Water	≤20°C	L	>20°C	M / H	N.B: The Water Regs permit a max temperature of 39°C which contradicts Legionella control			
7.03 Evidence of hot water entering the cold water space	No	L	Yes	M / H				
7.04 Close-fitting CWST Lid	Yes	L	Damaged	M	Poor Fit	M / H	No Lid	H

7.05 Screened CWST Lid Vent	Yes	L	No Screen	M	Damaged	M	No Vent	M
7.06 Overflow Screen	Yes	L	No Screen	M	Damaged	M		
7.07 Cleanliness of CWST (i.e. presence of bio-films, scale and sediment)	None	L	Slight	L/ M	Moderate	M / H	Heavy	H
7.08 Flow Water Temp (As close to 60°C as possible without exceeding it)	55 - 60°C	L	40 - 55°C	M	≤40°C	H		
7.09 Regularity of Use / Period of Operation	Continual	L	Off at night / weekends	M	Off for more than 7 days/ out of use	H		
7.10 Turnover of the stored water	High	L	Medium	M	Low	H		
7.11 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
7.12 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
HOT WATER DISTRIBUTION								
7.13 Nearest Outlet Temperature (>50°C)	≥50°C	L	40 - 50°C	M	≤40°C	H		
7.14 Furthest Outlet Temperature (>50°C)	≥50°C	L	40 - 50°C	M	≤40°C	H		
7.15 Any representative outlet not achieving 50°C	No	L	Yes	M /L	Dependant on number of outlets and temperature achieved			
7.16 Presence of little used outlets / flushing regime	No	L	Yes with flushing	L/ M	Yes with no flushing	H		
7.17 HWS pipe work insulation	Yes	L	Partial	M	No	H		
7.18 Accessibility of HWS pipe-work	Yes	L	Partial	M	No	H		
7.19 Backflow protection	Yes	L	No	M /H	Dependant on fluid category			
7.20 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
7.21 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		
7.22 Recirculation / Booster Pump	No	L	Yes and well Maintained	L	Yes and not maintained	M		

8. Showers / Spray Hoses / Taps								
Check	Result / Risk Score							
8.01 Cold Water Source i.e. mains /tank fed – indicate which tank	Mains	L	Low Risk Tank	L	Med. Risk Tank	M	High Risk tank	H
8.02 Hot Water Source i.e indicate which calorifier / water heater)	Low Risk Water Heater / Cal.	L	Med Risk Water Heater / Cal.	M	High Risk Water Heater / Cal.	H		
8.03 Regularity of Use / Period of Operation / Flushing	Daily	L	Weekly	M	Fortnightly +	M /H	Rare / Not Used	H
8.04 TMV/ built-in TMV used	No	L	Yes	M				
8.05 Shower Hose Restrained	Yes	L	No	M				

8.06 Visible Contamination / Scale on Showerhead(s) / Tap(s)	None	L	Slight	L/M	Moderate	M/H	Heavy	H
8.07 Quarterly Shower Head Clean / Descale	Yes	L	No	M				
8.08 Does the rate of fouling indicate that the quarterly clean /descale is adequate?	Yes	L	No	M/H				
8.09 Backflow protection	Yes	L	No	M/H	Dependant on fluid category			
8.10 Dead-legs present	None	L	Yes with Good flushing Regime	M	Yes with No or Poor Flushing Regime	H		
8.11 Dead-ends present	None	L	Short (<3cm)	M	Long (≥3 cm)	H		

9. General Risk Factors								
Check	Result / Risk Score							
9.01 Presence of scale on water fittings	No	L	Slight	M	Heavy	H		
9.02 Is there any form of scale control / water softener / water filter?	Yes	-	System covers all parts of the water system	L	System covers only part of the water system	L/M	System acts only on the water supply into an appliance	L/M
9.03 If Yes to 9.02 above, is it well maintained?	Yes	L	No	M/H				
9.04 Where TMVs are fitted, are they fitted in accordance with HSG 274 pt 2 guidance?	Yes	L	No	M/H	Dependant on nature of non-conformance			
9.05 Where TMVs are fitted are they being serviced and maintained in accordance with relevant guidance?	Yes	L	No – no cleaning, descaling or disinfection of filters	M/H				
9.06 Are flexible hoses fitted?	No	L	Yes but WRAS approved and not EPDM	L/M	Yes but not WRAS approved and are EPDM	M/H	Yes but not WRAS approved, are EPDM and in poor condition	H

C RISK ASSESSOR'S/REPORT CHECKER'S CERTIFICATES

27/11/2012/VWF9504/06/12/2012



CERTIFICATE OF ACHIEVEMENT FOR

Jamie Norton

Who attended the

Risk Assessment for Legionella Control within Hot and Cold Water Systems

DURATION

2 days

COURSE VENUE

Guardian Hygiene, Lincoln

DATE OF COURSE

27th November 2012 - 28th November 2012

Course Director

Managing Director

Keith Holmes

James W Booth



PPL TRAINING

0845 2600 966

www.ppltraining.co.uk



10/17/2011/VWF9504

City & Guilds
Accredited

CERTIFICATE OF ACHIEVEMENT FOR

Jamie Paul Norton

Who attended the

Legionellosis – Legionella Control within
Hot & Cold Water Systems Course

DURATION

3 day

DATE OF COURSE

September 21, 2011

Managing Director



James W Booth



PPL TRAINING
0845 2600 966
www.ppltraining.co.uk



D INSURANCE CERTIFICATION



redefining / standards

CERTIFICATE OF INSURANCE

Policy Number BN BDX 6983587/5799283

This is to certify that on the date of issue of this certificate, the policyholder was insured under the above policy subject to the terms and conditions agreed with AXA. This certificate does not form part of the policyholder's contract with AXA. This is a summary of cover only, in force as at the issuance date of this certificate. Full details of the coverage provided are included in the policyholder's full policy wording.

INSURANCE DETAILS	
Broker	Bradshaw Bennett Ltd
Period of insurance	04 February 2022 to 03 February 2023 both days inclusive
Underwritten by	AXA Insurance UK PLC

INSURED DETAILS	
Insured	Guardian Hygiene Services Ltd
Address	Unit 11 Lincoln Enterprise Park, Newark Road, Aubourn, Lincoln, LN5 9EJ
Business description	Pest control, timber treatment and/or fumigation works
Additional business activities	Water Management Services, Washroom Services and Cleaning Contractors

PUBLIC AND PRODUCTS LIABILITY - INSURED	
Public Liability Limit of indemnity	£5,000,000 each and every claim, defence costs in addition
Products Liability Limit of Indemnity	£5,000,000 all claims occurring during the period of insurance, defence costs in addition
Pollution Limit of Indemnity	£5,000,000 all claims occurring during the period of insurance, defence costs in addition
Financial Loss Limit of Indemnity	£500,000 all claims occurring during the period of insurance, defence costs in addition
Terrorist Act Limit of Indemnity	£5,000,000 all claims occurring during the period of insurance, defence costs in addition
Excess	Nil
Financial loss excess	The first 10% of each and every claim or £250 whichever is the higher amount
Cover includes:	Contractual Liability, Indemnity to Principals, Liability for Sub-Contractors, Use of Firearms

EMPLOYERS' LIABILITY - INSURED	
Limit of indemnity	£10,000,000 all claims and their defence costs which arise from the same accident or event
Terrorist Act	£5,000,000 all claims and their defence costs which arise from the same event (included within and not in addition to the overall limit/amount insured above)

PROFESSIONAL INDEMNITY - NOT INSURED	
Limit of indemnity	Nil
Limit applies to	Any one claim, defence costs in addition
Excess	Nil

Axa Insurance UK plc Registered in England and Wales No 78950.
 Registered Office: 20 Gracechurch Street, London, EC3V 0BG. A member of the Axa Group of Companies.
 Axa Insurance UK plc is authorised by the Prudential Regulation Authority and Regulated by the Financial Conduct Authority and the Prudential Authority.

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CERTIFICATE OF EMPLOYERS' LIABILITY INSURANCE (a)

(Where required by regulation 5 of the Employers' Liability (Compulsory Insurance) Regulations 1998 (the Regulations), one or more copies of this certificate must be displayed at each place of business at which the policyholder employs persons covered by the policy)

POLICY NUMBER BN BDX 6983587/5799283

1. **NAME OF POLICYHOLDER:** Guardian Hygiene Services Ltd
2. **DATE OF COMMENCEMENT OF INSURANCE POLICY:** 04 February 2022
3. **DATE OF EXPIRY OF INSURANCE POLICY:** 03 February 2023

We hereby certify that subject to paragraph 2: -

1. the policy to which this certificate relates satisfies the requirements of the relevant law applicable in Great Britain (b) Northern Ireland, the Isle of Man, the Island of Guernsey, the Island of Jersey and the Island of Alderney; and
2. (a) the minimum amount of cover provided by this policy is no less than £5 million (c)

Signed on behalf of AXA Insurance UK plc
(Authorised Insurer)

Claudio Gienal
CEO AXA UK & Ireland

Notes

- (a) *Where the employer is a company to which regulation 3(2) of the Regulations applies, the certificate shall state in a prominent place, either that the policy covers the holding company and all its subsidiaries, or that the policy covers the holding company and all its subsidiaries except any specifically excluded by name, or that the policy covers the holding company and only the named subsidiaries.*
- (b) *Specify applicable law as provided for in regulation 4(6) of the Regulations.*
- (c) *See regulation 3(1) of the Regulations and delete whichever of paragraphs 2(a) or 2(b) does not apply. Where 2(b) is applicable, specify the amount of cover provided by the relevant policy.*

AXA Insurance UK plc Registered in England and Wales No 78950.

Registered Office: 20 Gracechurch Street, London EC3V 0BG. A member of the AXA Group of companies. AXA Insurance UK plc is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Telephone calls may be monitored and recorded.

LCA Code of Conduct for LCA Members

Legislative requirements for the control of Legionella put the responsibility for compliance clearly with the owner/operator of water systems. Under the Health and Safety at Work etc Act 1974 and the Control of Substances Hazardous to Health Regulations as regards risks from Legionella, all owners and operators of such systems have a responsibility to ensure that Legionella risk is controlled and kept to an acceptable level. The HSE Approved Code of Practice and guidance on regulations (L8) stresses that whilst the actions needed to be undertaken to control the risk may be contracted to an external specialist, the owner/operator must take all reasonable care to ensure the competence of the LCA Member to carry out the work on his behalf.

This Code of Conduct is intended to give guidance on the standard of management of service provision that a service user should expect from LCA Members. The responsibility for the prevention and control of Legionella lies with the service user and the LCA Member Company, and not the LCA.

The LCA does not approve specific products or services or assess the competence of individual LCA Member employees.

The LCA Code of Conduct requires that LCA Members establish an appropriate management system for the provision of services associated with the control of Legionella. A valid registration with the LCA is evidence that the Member has an appropriate management system in place to comply with the LCA Member Commitments and that these are regularly audited by the LCA.

The LCA Member Requirements in this document are designed to help service users select an LCA Member by detailing the capability that they should expect in nine critical areas.

Employing a LCA Member does not absolve the service user of responsibility for ensuring that work is carried out to the standard required to control Legionella. Service users must make reasonable enquiries to satisfy themselves of the competence of the LCA Member before they enter into a contract for Legionella control services. LCA registration demonstrates that the LCA Member has the capability to deliver effective Legionella control, but it should not be assumed that it is a guarantee of service effectiveness.

Service users should satisfy themselves of LCA Members' capability using the LCA Code of Conduct as a tool to assist.

To find out more about using the LCA Code of Conduct to help select a suitable service provider refer to the **Buyers' Guide** on the LCA website. In the event that the service user believes that an LCA Member has not complied with the LCA Code of Conduct, they should notify the LCA. The LCA will investigate and take appropriate action. Please refer to the **LCA Complaints and Disciplinary Procedure** on the LCA website.

The LCA also recommends that service users verify the LCA Member's registration status by visiting www.Legionellacontrol.org.uk or by contacting the LCA Secretariat by email at admin@Legionellacontrol.org.uk.

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LCA Member Requirements

It is a requirement of LCA membership that Member Companies must have in place formal written procedures to cover their Legionella control activities and that these procedures are followed in practice and that records are kept. The formal written procedures must be summarised in the form of a "Statement of Compliance" (SoC) that explains how the Member complies with the Code of Conduct. The SoC must be reviewed annually, updated as required and should be referenced back to numbered points of the Code of Conduct below.

1. ALLOCATION OF RESPONSIBILITIES

The LCA member will:

- 1.1 Provide guidance to the service user on what they need to do to comply with the [Law in respect of Legionella control](#).
- 1.2 Formalise a written agreement identifying those services covered by the LCA Member and indicate those which should be provided by the service user to comply with the Law, Regulation, ACoP and the LCA standards for service delivery.

2. TRAINING AND COMPETENCE

The LCA Member will ensure their staff delivering Legionella control services are competent to do so by:

- 2.1 Having a system to identify initial training needs and arrange training for their staff associated with the control of Legionella.
- 2.2 Having a system for assessing and maintaining the competence of their staff, establishing their ongoing training needs.
- 2.3 Maintaining records of training, competence assessments and annual competence validity checks.
- 2.4 Having a system to ensure that developments in industry standards and good practice are identified and disseminated to all appropriate staff.

3. CONTROL MEASURES

The LCA Member will:

- 3.1 Register all Legionella control services they offer with the LCA and state in the written agreement that the LCA Member has LCA registration for the service categories being provided.
- 3.2 Have a management system to gather information, assess the requirements and ensure an appropriate programme of control measures is designed, implemented, monitored and maintained that satisfies as a minimum the LCA Standards for Service Delivery.
- 3.3 Have a system for checking that any recommended corrective, preventive and improvement actions are completed and effective.
- 3.4 Have a calibration and validation procedure to ensure that any testing equipment used in the field is operating correctly.

4. COMMUNICATION

The LCA member will:

- 4.1 Agree with the service user who the appropriate contacts are for routine and emergency communication and who the duty holder and responsible persons are.
- 4.2 Have procedures to communicate appropriately when non-conformance from normal control limits or safe operation is identified.
- 4.3 Bring to the service user's attention any matters affecting the control of Legionella of which they have become aware beyond the responsibilities of their service provision.
- 4.4 Have a staged escalation procedure to ensure that significant matters of concern are escalated, as necessary, to the responsible person, the duty holder and, as a last resort, to the relevant enforcement agency.

5. RECORD KEEPING

The LCA Member will have procedures to:

- 5.1 Identify what records need to be maintained to provide evidence of Legionella control.
- 5.2 Agree with the service user in writing which records should be kept by each party, where and how.
- 5.3 Maintain their own records, including all detail recorded in site records, for a minimum of five years following delivery of service provision and make them available to the service user.

6. REVIEWS

Where the LCA Member delivers onsite, ongoing Legionella control services they will have procedures to:

- 6.1 Review formally, at least annually, all aspects of the service provision with the service user.
- 6.2 Assist the client to assess training needs of staff and then, where requested, advise as to how these can be met.

7. INTERNAL AUDITING

The LCA Member will have a procedure to:

- 7.1 Audit their own management system to ensure it complies with the requirements of the LCA Code of Conduct and Service Delivery Standards and keep a record of that audit.
- 7.2 Audit a representative sample of output / records to ensure the management system is effective and being correctly applied. This should include auditing records of all aspects of service delivery (internal processes and on-site activity), training records, competence assessments, sub-contractor performance, survey information, quotations, service delivery reports, reviews, etc., and keep a record of that audit.
- 7.3 Establish a corrective action programme so that any non-compliance identified is corrected in a timely manner including addressing procedures where failings are systemic.

8. SUB-CONTRACTORS

The LCA Member will:

- 8.1 Check that every non-LCA registered sub-contractor has procedures to carry out adequate task Risk Assessments and produce suitable Method Statements that comply with the LCA service delivery standards.
- 8.2 Review the competence assessments of those staff working on behalf of the LCA Member (LCA registered companies are required to carry out competence assessments and provide them on request and would be subject to the complaints procedure where these cannot be readily provided).
- 8.3 For instances where a non-LCA registered sub-contractor cannot provide records of staff competence assessment for the work being carried out the LCA Member is to conduct a documented assessment of the sub-contractor's capability to carry out the work and the competence of their staff who will be carrying out the work. This is to be validated annually or at any point where there is reason to doubt the sub-contractor's performance.
- 8.4 Include sub-contractor activity in the evidence examined in their internal audits under commitment 7 to ensure that all aspects (scoping, quotation and delivery) are compliant with the LCA Code of Conduct and Service Delivery standards.

9. PROMOTING AWARENESS OF THE LCA

The LCA Member will ensure:

- 9.1 A copy of the LCA Code of Conduct and proof of Registration are made available to all Legionella control service users. This can be achieved either by providing them with hard copies, electronic copies or making them available as downloadable files from their website or links to the LCA website.

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Definitions of Terms Used

1. Service User

This is the LCA Member's client or customer. The service user could be an LCA Member.

2. Sub-contractor

For the purposes of LCA registration, a sub-contractor is a company or an individual who carries out work to their own methodology, associated with the control of Legionella, on behalf of an LCA Member i.e. requirement 8 applies.

Where companies or self-employed individuals are engaged or employed by an LCA Member and work to the methodology of that LCA Member, they are not classed as a sub-contractor and should be treated as any other employee i.e. commitment 2 applies.

3. Management System

A management system is the formal way you carry out your business and normally consists of many individual management procedures for each process within your business. The procedure should include how and when you do things, how you ensure these things are not forgotten, and how you record the results of the actions taken. A written procedure is a document that describes the process.

LCA members should have documented procedures that cover how they deliver Legionella control services and collectively, as a management system, these have to demonstrate how the company complies with the LCA Code of Conduct and Service Delivery Standards.

4. LCA Member (Member)

The LCA Members are those companies that have applied for LCA membership and successfully passed through the review and external audit process. They are then externally audited annually for sustained compliance with the LCA Code of Conduct and Service Delivery Standards thereafter.

LCA Member companies are subject to our Complaints and Disciplinary process for issues brought to our attention. LCA Members are issued an annual Membership certificate and are listed on the LCA website directory page while their membership is valid.

Buyers Guide

Users of LCA member companies should not assume that membership is a guarantee of continuous compliance with the LCA Code of Conduct. Service users should satisfy themselves of both their ongoing compliance and competence using the LCA Code of Conduct as a tool.

The LCA recommends that service users ask the prospective service provider to supply:

- Proof of Registration with the LCA (certificate or link to LCA website listing)
- A copy of the LCA Member's Statement of Compliance
- Corroborating evidence as to how the service provider complies with the LCA Code of Conduct e.g. examples of the LCA Member's previous work, etc.
- Relevant training records and competence assessments for all LCA Member staff who will be involved in the service delivery on your site
- Whatever additional evidence the service user feels is appropriate to satisfy them of their competence and that the specific products and services they are recommending will be effective in controlling Legionella

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The legal duty to comply with relevant health and safety legislation (including avoidance or control of risk to exposure to Legionella bacteria) rests solely with the statutory dutyholder, being either the employer or the person in control of the premises or systems where any relevant risk is present, and this cannot be delegated. Specific functions (e.g. carrying out risk assessment) can be delegated and the Legionella Control Association (LCA) Code of Conduct is designed to help LCA Members, who also have duties under health and safety legislation, to establish appropriate management systems for the prevention or control of risk from Legionella bacteria. The LCA assesses the management systems of LCA members upon initial registration and re-assesses by annual company audits. The LCA cannot and does not carry out other regular supervision of its members' commitments to the LCA Code of Conduct or LCA Service Delivery Standards. A valid LCA certificate of registration (which is only valid if the Company named is listed on the LCA website www.Legionellacontrol.org.uk/directory.php) confirms only that a LCA Member has satisfied LCA requirements at registration, re-registration and its most recent company audit. It does not confirm the LCA Member's actual or continuing compliance with their commitments to the LCA Code of Conduct and/or other LCA guidelines. The LCA does not approve specific products or services as being effective in controlling Legionella or verify the competence of LCA Member's staff and sub-contractors, which is the duty of the LCA Member and the statutory dutyholder. The LCA accepts no liability for any omission or any act carried out in reliance on the LCA Code of Conduct or other LCA guidelines, or any loss or damage resulting from non-compliance with such documents.

Endorsed by the British Association for Chemical Specialities and The Water Management Society



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Legionella Control Association

A Code of Conduct for Service Providers

Certificate of Registration

This is to certify that the following company has submitted a registration under the Conditions of Compliance as laid out in the LCA's Code of Conduct for Service Providers

Name of Company: **Guardlan Hygiene Services Ltd**

Registration Number: **2013/2258** Certificate valid until: **31st August 2022**

Registration under the following services categories:

(1) Legionella Risk Assessment Services

- 1.1 Hot and Cold Water Services
- 1.3 Process and Other Systems
- 1.4 Healthcare Risk Assessment

(3) Hot and Cold Water Monitoring and Inspection Services

(4) Cleaning and Disinfection Services

- 4.1 Hot and Cold Water Systems Disinfection

(6) Training Services

(7) Legionella Monitoring Services

- 7.1 Sampling
- 7.4 Interpretation of Analysis

(8) Plant and Equipment Services

- 8.2 Installation
- 8.3 Servicing/maintenance
- 8.4 Refurbishment

This Certificate is only valid if the Company named is listed on the LCA website www.legionellacontrol.org.uk/directory.php



Signed:

Chairman, Executive Committee



Certificate Secretary

Legionella Control Association Limited. www.legionellacontrol.org.uk

Registered in England and Wales No. 8502723

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