

LEGIONELLA RISK ASSESSMENT

Holton Village Hall

Holton, Oxford, OX33 1PR

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Approved By:	Village Hall Management Committee
Version:	1.0

Prepared in accordance with:

HSE ACOP L8 (4th Edition) | HSG274 Parts 1, 2 & 3 | The Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (COSHH) | Management of Health and Safety at Work
Regulations 1999

1. Introduction and Legal Framework

This Legionella Risk Assessment has been prepared for Holton Village Hall, Oxford, OX33 1PR, in compliance with the Health and Safety at Work etc. Act 1974, the Control of Substances Hazardous to Health Regulations 2002 (COSHH), and the guidance contained within:

- HSE Approved Code of Practice L8 – Legionnaires' Disease: The Control of Legionella Bacteria in Water Systems (4th Edition, 2013)
- HSG274 – Technical Guidance for the Control of Legionella Bacteria in Water Systems (Parts 1, 2 & 3)
- HSG274 Part 2 – The control of legionella bacteria in hot and cold water systems
- BS 8558:2015 – Guide to the design, installation, testing and maintenance of services supplying water for domestic use

Under COSHH and ACOP L8, the duty holder (the Village Hall Management Committee) has a legal obligation to:

- Identify and assess the risk of exposure to Legionella bacteria from work activities and water systems on the premises
- Prevent or control any identified risk
- Keep records of assessments and control measures
- Appoint a Responsible Person (RP) to manage and implement the Water Safety Plan
- Review the risk assessment regularly and whenever there is reason to suspect it is no longer valid

Legionella pneumophila is a waterborne bacterium that can cause Legionnaires' disease, a potentially fatal form of pneumonia. The bacterium proliferates in water systems where temperatures are between 20°C and 45°C, and where conditions such as stagnation, scale, corrosion, biofilm, or organic matter are present.

2. Property and System Details

Property Details	
Site Name:	Holton Village Hall
Address:	Holton, Oxford, OX33 1PR
Building Use:	Community / Village Hall – occasional and event-based occupancy
Water Supply:	Mains cold water supply from Castle Water Ltd
Hot Water System:	Vented hot water storage cylinder (indirect cylinder). Primary heat source: oil-fired boiler via indirect heating coil. Hot water cylinder fed from a header tank located within the loft. Secondary/supplementary heat source: electric immersion heater (used periodically).
Heating System:	Oil-fired boiler providing central heating via radiators throughout the hall and indirect hot water heating to the storage cylinder via a primary heating coil.
Hot Water Distribution:	Hot water pipework distributing to kitchen, bar, ladies' toilets, gentlemen's toilets, and disabled toilet.
Outlets Surveyed:	Kitchen sink, kitchen dishwasher, bar sink, bar dishwasher, ladies' hand basins, gentlemen's hand basin, disabled toilet hand basin
Cold Water System:	Mains-fed cold water direct to all outlets and storage
Date of Survey:	11 th April 2026
Assessor:	Clive Ganczarski, Chartered Engineer
Responsible Person (RP):	To be appointed by the Management Committee

3. Risk Rating Matrix

The following risk rating matrix is used throughout this assessment to evaluate the significance of identified hazards. Risk scores are calculated as: Risk = Likelihood × Severity.

Likelihood / Severity	1 – Negligible	2 – Minor	3 – Moderate	4 – Major	5 – Catastrophic
1 – Rare	1	2	3	4	5
2 – Unlikely	2	4	6	8	10
3 – Possible	3	6	9	12	15
4 – Likely	4	8	12	16	20
5 – Almost Certain	5	10	15	20	25

Score	Rating	Action Required
1–4	LOW	Manage by routine procedures. Monitor and review annually.
5–9	MEDIUM	Implement additional controls. Review within 3 months.
10–15	HIGH	Urgent action required. Implement controls within 1 month.
16–25	VERY HIGH	Immediate action required. Do not use system until controls implemented.

4. Hazard Identification

4.1 Potential Legionella Sources

The following water system components and conditions have been assessed as potential sources of Legionella risk at this premises:

- Hot water storage cylinder/calorifier – primary risk source if not maintained at correct temperature
- Hot water distribution pipework – dead legs, infrequently used sections, low-flow branches
- Cold water inlet and supply pipework where temperatures may be elevated
- Infrequently used or little-used outlets (hand basins in toilets, bar sink, etc.)
- Flexible hose connections at outlets
- Biofilm formation in pipework, particularly at low-flow or stagnant points
- Scale and corrosion within the storage cylinder and distribution system
- Dishwashers (kitchen and bar) – internal water chambers, spray arms, filters, and inlet/outlet hose connections as potential sites for biofilm accumulation and Legionella proliferation

4.2 Susceptible Persons

The following persons who may use or visit Holton Village Hall are considered at increased risk from Legionellosis:

- Elderly persons attending events or functions
- Persons with underlying respiratory conditions or compromised immune systems
- Persons receiving cancer chemotherapy or organ transplants
- Persons with diabetes, kidney disease, or chronic lung disease

Given the community hall nature of the premises, members of the public including vulnerable individuals may attend events. This increases the importance of maintaining effective Legionella controls.

5. Water System Description

5.1 Cold Water Supply

Cold water is supplied directly from the mains at the incoming stopcock. The mains cold water feeds directly to all cold taps and also supplies the hot water storage cylinder. There is no cold water storage tank identified at this premises; therefore risks associated with cold water storage cisterns are not applicable.

Cold water supply pipes should be kept insulated from heat sources and maintained at temperatures below 20°C at all times.

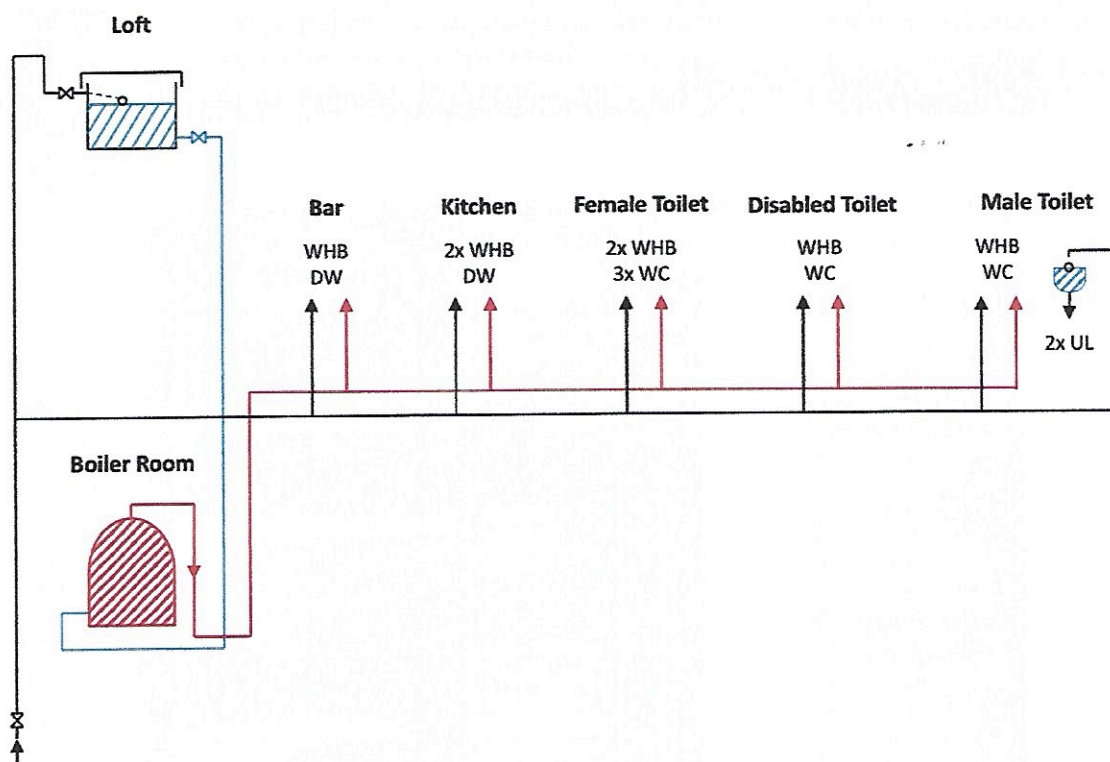
5.2 Hot Water Storage System

Hot water is generated and stored in a vented indirect hot water storage cylinder. The cylinder is heated primarily by an oil-fired boiler via an indirect heating coil (primary circuit). An electric immersion heater is also fitted to the cylinder and is used periodically as a supplementary or backup heat source. The same oil-fired boiler provides space heating to the hall via a radiator circuit. Hot water is distributed from the cylinder via copper pipework to the following outlets:

- Kitchen: 2 No. sink pillar taps
- Bar: sink pillar taps
- Ladies' Toilets: 2 No. hand basin pillar taps
- Gentlemen's Toilets: hand basin pillar taps
- Disabled Toilet: hand basin pillar mixer tap
- Kitchen: dishwasher (hot water inlet connection)
- Bar: dishwasher (cold water inlet connection)

The distribution system must be designed and maintained to ensure hot water reaches all outlets at or above 50°C within one minute of running.

The hot and cold-water supply within the village hall is shown in the schematic below.



Holton Village Hall – Hot & Cold Water Supply Schematic

18th May 2026

5.3 Known System Deficiencies and Concerns

- Intermittent and variable use of facilities (village hall events only) increases stagnation risk
- Risk of tepid water temperatures if storage cylinder thermostat is set incorrectly or fails
- Flexible hoses connecting to taps may harbour biofilm if not regularly cleaned
- Dishwashers in the kitchen and bar areas – periods of non-use allow water to stagnate in inlet hoses, internal chambers, and filter assemblies; spray arms may generate fine aerosols during operation
- Dishwasher drain hose back-siphonage risk if air-break is absent or incorrectly installed
- Oil-fired boiler – if the boiler is shut down for maintenance, seasonal servicing, or fuel shortage, the primary heat source to the cylinder is lost; reliance on the immersion heater alone may result in the cylinder not reaching or sustaining 60°C
- Immersion heater – used only periodically; if the immersion heater thermostat is set below 60°C or is faulty, the cylinder may not reach the required storage temperature when operating on immersion heat alone
- Primary heating circuit pipework – oil-fired boiler primary flow and return pipework passing close to or through cold water supply routes may elevate cold water temperatures above 20°C if insufficient separation or insulation exists

6. Detailed Risk Assessment Register

The table below records each identified risk, its current controls, residual risk rating, and recommended further actions. Risk ratings are calculated using the matrix in Section 3.

Ref	Hazard	Location	Existing Controls	L	S	Risk Score	Further Actions Required	Priority
1	Hot water stored below 60°C – Legionella proliferation in cylinder	Hot water storage cylinder	Thermostat set to 60°C. Periodic inspection.	3	5	15 HIGH	Verify thermostat set to min 60°C. Conduct monthly temperature checks of stored and circulating water.	URGENT
2	Infrequent use of outlets – stagnation at taps	All outlets (toilets, kitchen, bar)	Outlets used at events	4	4	16 V.HIGH	Implement weekly outlet flushing programme (minimum 2 minutes hot and cold at each tap). Maintain flushing log.	IMMEDIATE
3	Hot water outlet temperature below 50°C at point of use	Kitchen, Bar, Toilets, Disabled	No routine temperature monitoring in place	3	5	15 HIGH	Introduce quarterly temperature monitoring at all outlets. Target ≥50°C within 1 min of running.	URGENT
4	Cold water supply temperature elevated above 20°C	Incoming cold mains and supply pipes	No insulation on cold water piping	3	4	12 HIGH	Monitor cold water temperatures. Insulate cold supply pipes away from heat sources. Target <20°C.	URGENT
5	Flexible hoses – biofilm harbouring connections	Under-sink connections at all outlets	No inspection or replacement schedule	3	4	12 HIGH	Inspect all flexible hoses. Replace any over 12 months old with rigid connections or new hoses. Annual replacement schedule.	URGENT
6	Scale and corrosion in cylinder – provides nutrients for Legionella	Hot water storage cylinder	No descaling or inspection record	3	4	12 HIGH	Arrange annual inspection of cylinder. Descale as required. Drain and inspect cylinder every 1-2 years.	HIGH
7	No appointed Responsible Person for water safety	Management/administrative	None	5	5	25 V.HIGH	Appoint a named Responsible Person (RP) with appropriate training/competence under ACOP L8.	IMMEDIATE
8	No Water Safety Plan or log book in place	Management/administrative	None	5	5	25 V.HIGH	Produce a written Water Safety Plan and Logbook as required by ACOP L8. Record all	IMMEDIATE

Ref	Hazard	Location	Existing Controls	L	S	Risk Score	Further Actions Required	Priority
9	Oil boiler shutdown – cylinder temperature falls to Legionella risk range when boiler is off and immersion heater not activated	Hot water storage cylinder / boiler plant room	Similar to infrequent use periods	4	5	20 V.HIGH	maintenance and monitoring. Follow actions in Ref 2, 3 & 4 after a boiler shutdown in accordance with the time periods stipulated	IMMEDIATE
10	Immersion heater thermostat set below 60°C – cylinder fails to reach safe storage temperature when used as sole heat source	Hot water storage cylinder	No verification of immersion heater thermostat setting on record	4	5	20 V.HIGH	Check and set immersion heater thermostat to minimum 60°C immediately. Verify temperature achieved at cylinder after full heating cycle. Record in Water Safety Log. Test thermostat operation annually.	IMMEDIATE
11	Oil boiler primary heating coil failure or poor heat transfer – cylinder temperature not reaching 60°C despite boiler operation	Hot water storage cylinder / boiler primary circuit	No recorded check of primary coil performance or cylinder recovery time	3	5	15 HIGH	Include cylinder heat-up performance check in annual boiler service. Verify stored water reaches 60°C within normal recovery time. Investigate and rectify if recovery time is excessive.	URGENT
12	Heat gain to cold water supply pipework from proximity to boiler primary circuit pipework or radiator pipework	Cold water supply pipework throughout hall	Energy survey recommends insulating hot water pipes in boiler room	3	4	12 HIGH	Insulate hotwater pipes in the boiler room to avoid heat loss/transfer. Follow action under Ref. 4	URGENT
13	Kitchen dishwasher – stagnant water in inlet hose, internal chamber and spray	Kitchen – dishwasher	Dishwasher used during events only. No flushing or maintenance schedule.	4	3	12 HIGH	Run a full empty hot wash cycle weekly to purge stagnant water. Clean filters and spray arms monthly. Inspect inlet hose annually	URGENT

Ref	Hazard	Location	Existing Controls	L	S	Risk Score	Further Actions Required	Priority
	arms during periods of non-use						and replace if degraded.	
14	Bar dishwasher – stagnant water in inlet hose, internal chamber and spray arms during extended periods of non-use	Bar – dishwasher	Bar dishwasher used for licensed events only. Likely to be unused for extended periods. No flushing or maintenance schedule.	4	3	12 HIGH	Run a full empty hot wash cycle weekly. Clean filters and spray arms monthly. Check and verify inlet hose air-break annually. Replace inlet hose if over 12 months old or degraded.	URGENT

L = Likelihood, S = Severity. Refer to Section 3 for risk rating definitions.

7. Required Control Measures and Water Safety Plan

7.1 Immediate Actions (to be completed before premises open to public)

- Appoint a named Responsible Person (RP) with documented competence in Legionella management – ACOP L8 Para 2.6
- Verify hot water storage cylinder thermostat is set to and maintaining a minimum of 60°C – HSG274 Part 2 Para 2.74
- Implement a weekly outlet flushing programme covering all taps. Each outlet to be flushed for a minimum of 2 minutes (cold) and until hot water reaches 50°C (hot) – ACOP L8 Para 2.15
- Inspect all under-sink flexible hose connections and replace any that are deteriorated, kinked, or over 12 months old
- Run a full empty hot wash cycle through both dishwashers (kitchen and bar) immediately to purge any stagnant water before first use
- Check and set the immersion heater thermostat to a minimum of 60°C. Verify the cylinder reaches 60°C after a complete heating cycle when the immersion heater is the sole heat source

7.2 Short-Term Actions (within 1 month)

- Introduce quarterly temperature monitoring at all outlets. Record results in the Water Safety Log. Hot water: $\geq 50^{\circ}\text{C}$ within 1 minute. Cold water: $\leq 20^{\circ}\text{C}$ within 2 minutes
- Insulate hot water pipes in the boiler room to eliminate heat loss/transfer to assist in maintaining cold water below 20°C
- Generate a Water Safety Plan and include within that a copy of the 'Cold and Hot Water System schematic drawing'.
- Carry out annual oil boiler service schedule with a registered OFTEC engineer and ensure that cylinder heat-up performance (recovery time and peak temperature) is checked as part of the service.

7.3 Routine and Periodic Controls

The following programme must be established and maintained by the Responsible Person:

Frequency	Task	Target / Standard	Record Required?
Weekly	Flush all outlets not in regular use for minimum 2 minutes	All outlets used regularly or flushed	Yes – flushing log
Weekly	Run a full empty hot wash cycle through kitchen and bar dishwashers if not used that week	Both dishwashers purged weekly	Yes – flushing log
Monthly	Check hot water storage temperature at cylinder	Storage $\geq 60^{\circ}\text{C}$	Yes – temperature log
Monthly	Clean dishwasher filters, spray arms, and door seals on both units. Check for scale, debris, and biofilm	Filters clean; no scale or biofilm visible	Yes – maintenance log
Quarterly	Temperature check at all hot and cold outlets	Hot $\geq 50^{\circ}\text{C}$ within 1 min; Cold $\leq 20^{\circ}\text{C}$ within 2 min	Yes – temperature log
Annually	Inspect and Replace all flexible hose connections on dishwashers	Replaced within 12 months	Yes – maintenance log
Annually	Annual oil boiler service by OFTEC-registered engineer. Include check of primary coil heat transfer performance and cylinder recovery temperature.	Boiler serviced; cylinder recovery to $\geq 60^{\circ}\text{C}$ verified	Yes – boiler service certificate
Annually	Inspect and descale hot water storage cylinder (include within annual boiler service)	No significant scale or sediment	Yes – inspection report
Annually	Test and verify immersion heater thermostat operation. Confirm set-point	Immersion thermostat confirmed at 60°C	Yes – maintenance log

Frequency	Task	Target / Standard	Record Required?
	is 60°C and temperature is achieved within normal heat-up period.		
Annually	Full review of this risk assessment and Water Safety Plan	Assessment current and signed off	Yes – updated RA document
Annually	Review system schematic and confirm accuracy against physical installation	Schematic up to date	Yes – updated schematic
After any system change	Review risk assessment and update Water Safety Plan following any modifications to the water system	Assessment reflects current system	Yes – revised RA

8. Location-Specific Notes

Location	Notes and Known Risks	Required Actions
Kitchen	Sink likely to receive regular use during events; stagnation risk lower than toilet outlets but still present between events. Dishwasher (commercial or domestic type) connected to cold water supply – presents stagnation and biofilm risk in inlet hose, pump, spray arms, and filter when not in regular use.	Flush sink and run empty dishwasher hot cycle weekly. Clean dishwasher filter and spray arms monthly. Replace inlet hose annually. Confirm drain air-break is fitted.
Bar	Bar sink and bar dishwasher used only during licensed events. Potentially long periods of disuse increase stagnation risk significantly in both the sink supply and the dishwasher internal water circuit. Flexible hose connection likely under bar sink.	Weekly flushing of bar sink essential. Run empty dishwasher hot cycle weekly. Clean dishwasher filter and spray arms monthly. Replace dishwasher inlet hose annually. Remove sink spray aerator. Replace flexible hose annually. Log temperatures quarterly.
Ladies' Toilets	Hand basins potentially infrequently used between events.	Weekly flushing. Monitor outlet temperatures quarterly.
Gentlemen's Toilets	As per Ladies' Toilets. Urinal cistern present – ensure cold mains supply to cistern does not run warm. Risk of urinal flush system being turned off between events.	Weekly flushing of hand basin. Ensure urinal auto-flush system is operational. Monitor cold supply temperature.
Disabled Toilet	Single-occupancy facility likely to be used infrequently. High risk of stagnation in both hot and cold supplies. Thermostatic mixing valve (TMV) scalding protection may be present under HSE guidance for vulnerable users. If so, TMV requires regular maintenance.	Weekly flushing is critical. If TMV fitted: inspect annually and verify set temperature of 38–41°C at outlet. Maintain flushing log. Monitor temperatures quarterly.

9. Thermal Disinfection

In the event of a known or suspected Legionella contamination, or following a period of extended system shutdown (e.g., hall closed for more than 1 month), thermal disinfection of the entire hot water system must be carried out. This must be performed by a competent person in accordance with HSG274 Part 2 and BS 8558.

9.1 Thermal Disinfection Procedure

- Raise hot water storage cylinder temperature to a minimum of 70°C and hold for at least 1 hour
- Sequentially flush each hot water outlet until a temperature of 60°C or above is achieved and maintained for a minimum of 1 minute
- Ensure all persons are excluded from the area during thermal disinfection due to scalding risk
- After disinfection, return the cylinder thermostat to normal operating temperature (60°C) and verify correct operation
- Record date, temperatures achieved, duration, and name of person carrying out disinfection in the Water Safety Log

9.2 Chemical Disinfection

Chemical disinfection (chlorination or other biocide treatment) may be required as an alternative or supplementary measure in some circumstances, and must be carried out by a specialist contractor in accordance with HSG274. The premises should obtain specialist advice before undertaking chemical disinfection.

10. Training and Competency

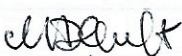
Under ACOP L8 (Paragraphs 2.6–2.12), the duty holder must ensure that all persons involved in the management, operation, and maintenance of water systems have appropriate training, skills, and competence.

- The Responsible Person must receive training relevant to their duties, which may include a recognised Legionella awareness or management course (e.g., City & Guilds, BOHS P902, or equivalent)
- Any contractors engaged to carry out maintenance, temperature monitoring, or disinfection must be competent and hold relevant qualifications or evidence of experience
- Training records must be maintained and reviewed as part of the Water Safety Plan
- Where an external specialist (Legionella consultant or water treatment company) has been engaged, their credentials and scope of appointment must be documented

11. Assessment Review, Declaration and Sign-off

This risk assessment must be reviewed:

- At least annually, as a minimum
- Following any significant change to the water system (alterations, additions, or removals)
- Following any known or suspected Legionella case linked to the premises
- After a period of extended shutdown or recommissioning
- When there is reason to believe the current assessment may no longer be valid

	Responsible Person	Committee Chairperson
Name:	CLIVE GANCZARSKI	MEL AULT
Signature:		
Date:	5/10/26	5/10/26
Review Due:	11 th April 2027	