



Legionella Risk Assessment Reviewer Guidance – Building Hot & Cold Water Systems
Reference: HSE Control of Legionella Bacteria in Water Systems: Audit Checklists C200

**Fairisle Infants & Nursery
School**

Risk Assessment Review

12th September 2018



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Property Name & Description: Fairisle Infants & Nursery School			Review Date: 12th September 2018
Responsible Person(s) Name & SCC Appointment: Mrs S Ottens (Responsible Person) M.O'Brien (Deputy)			Last Review: 27th September 2016
Compliance & Control Measure Checks	Yes	No	Comments/Observations
Have there been changes (or being proposed) to the use of the property in which the water systems are installed?		NO	
Have there been changes (or being proposed) to the water systems or their use?		NO	
Is there new information about potential risks or control measures?		NO	
Do the results of monitoring indicate that control measures are no longer effective?		NO	
Are the roles & responsibilities of all staff involved in control measures clearly defined in writing including responsible persons(s) & contractors?	YES		Responsible person and deputy have been nominated in writing and recorded within the logbook documentation.
Have the persons nominated to carry out control measures including responsible person(s) received appropriate training?		NOT KNOWN	
Has there been a legionella bacteria incident associated with the water systems in the property?		NOT KNOWN	

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Risk Assessment, Written Scheme & Property/System Change Checks			
Risk Assessment	Yes	No	Comments/Observations
Does the Risk Assessment identify foreseeable risks & include an up to date schematic of the water systems?		NO	Drawings have been updated at the time of this 2018 review. The original risk assessment was not seen within the logbook documentation.
Does the Risk Assessment include the measures & precautions to be taken to control foreseeable risks?		NO	No original risk assessment seen within the logbook documentation.
Written Scheme			
Are inspection & maintenance measures identified in the Risk Assessment being carried out?	YES		Temperature Monitoring is being carried out.
Have remedial works identified in the Risk Assessment & subsequent reviews to minimise foreseeable risks been completed?		NO	Deadleg pipe work still seen in place at the time of this 2018 review. No calorifier monitoring being carried out on the nursery calorifier.
Are the records of water system temperature monitoring & flushing representative of control measures, & up-to-date?	YES		Temperature monitoring is up to date as of August 2018; no records seen for any flushing.
Property & System Changes			
Have changes to property occupancy resulted in fewer occupants, intermittent occupation, or partial closure?		NO	Assumed school running at full capacity.
Have changes or modifications to the water systems resulted in low use outlets; dead legs; redundant service equipment or additional fittings e.g. TMV's?	YES		Nursery showers are infrequently used. Deadleg pipe work still seen in nursery mixed toilet cupboard space area and girls toilet by cleaners room.
Are there any other aspects of the water system including its design, operation & maintenance that have increased foreseeable risks?	YES		Nursery calorifier flow and return temperatures were found to be low at the time of this 2018 review and this calorifier is not being monitored monthly.



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Risk Was (Circle)	Insignificant	Low	Medium	High	Uncertain
Risk Now (Circle)	Insignificant	Low	Medium	High	Uncertain

Remedial action to be taken	By Whom	By When
<p>Ensure the Nursery hot water calorifier maintains 60.0c storage and at least 50.0c on the return system. High The nursery calorifier was still found to have low storage and return temperature at the time of this 2018 review. High</p>		
<p>Remove deadleg pipe work. High The deadleg and additional deadleg pipe work was seen in place. High</p>		
<p>If the nursery showers are infrequently used; flush at least on a weekly basis and record when carried out; consider removal along with all associated pipe work if not required. High The nursery showers are still infrequently used and are not being flushed weekly. High</p>		
<p>Continue to clean and descale showerheads at least on a quarterly basis or at the rate of fouling. Medium The showerheads are being cleaned on a quarterly basis; this was last carried out in August 2018. Medium</p>		
<p>Flush all infrequently used outlets weekly and record when carried out. Continue during shut down periods and school holidays. Medium No flushing records were seen at the time of this 2018 review. Medium</p>		



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Risk Was (Circle)	Insignificant	Low	Medium	High	Uncertain
Risk Now (Circle)	Insignificant	Low	Medium	High	Uncertain

<p>Ensure all TMVs are serviced and maintained as recommended by the manufacturers or at least on an annual basis. Medium TMVs are being serviced and adjusted on a six monthly basis; this was last carried out in August 2018. Medium</p>		
<p>Audit logbook documentation at least on an annual basis; archive old record sheet paper work. Medium The logbook was last audited in October 2016. Medium</p>		



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Compliance & Control Checks	Reviewer notes
Have responsible person(s) considered whether foreseeable risks could be eliminated?	Refer to Southampton City Council.
Have the responsible person(s) & deputies been nominated in writing?	Responsible person and deputy have been nominated in writing; ensure this is maintained up to date.
Are responsible person(s)/deputies contact details available in the event of an emergency?	No responsible person or deputies contact details were seen recorded within the logbook documentation.
Are the roles & responsibilities of all Council staff, & contractors involved in control & compliance measures identified in writing?	No roles and responsibilities of council and contractors involved in control and compliance measures were seen in writing within the log book documentation.
Have they all received appropriate training?	No training records were seen for any staff or contractors. Refer to Southampton City Council
Has the competence of contractors been checked and appropriate documentation held on file?	Refer to Southampton City Council.
Have other Health & Safety issues been actioned e.g. COSHH/MHSWR assessments for treatment chemicals and flushing routines?	Refer to Contractors used by Southampton City Council.
Do responsible person(s) keep a log of water system defects and follow up on progress?	All system defects are assumed phoned through to Southampton City Council Property Services.
Do the responsible person(s) have a budget for remedial works and are they aware of the programme for completion?	Refer to Southampton City Council.



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Risk Assessment, Written Scheme & Property/System Change Checks	Reviewer notes
Does the risk assessment include all water systems in the building(s) including e.g. fire hose reels, spray fountains, dehumidifiers etc?	The original risk assessment was not seen within the logbook documentation.
Does the water system schematic show and identify all equipment & outlets including water softeners, TMV's, pumps, principal valves, standby equipment, showers, washbasins, water supply origin & systems out of use etc?	Drawings have been updated at the time of this 2018 review.
Does the Written Scheme contain the following: <ul style="list-style-type: none"> •System operating instructions? •Precautions to be taken when operating the system? •Details of the monitoring checks to be carried out on the system? 	NO YES YES
Have changes to the system been recorded in the water system logbook?	No records were seen within the logbook.
How are changes to the system managed & approved including approval by the responsible person(s)?	Refer to Southampton City Council.
How are remedial works co-ordinated, funded and approved including programme priorities?	Refer to Southampton City Council.

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System Design & Construction	Reviewer notes
Are the water systems designed in accordance with BS6700: 1997 & the Water Supply (Water Fittings) Regulations 1999 as amended by latest WRAS guidance?	Visual pipe work appeared to be copper but galvanised metal pipe work seen in th boiler room area.
Do any of the materials used in pipe systems & fittings support bacterial growth or corrosion?	Some metal pipe work still on systems; most pipe work hidden from view.
If TMV's are fitted are they sited within 2m of the outlet(s) served?	TMVs are fitted all appear to be within 2 metres of outlets.
Cold Water System	
Have low use outlets been installed upstream of high use outlets?	Flushing should be carried out weekly on infrequently used outlets showers etc and during school holidays and shut down periods.
Has cold water storage volumes been assessed for turnover (ideally 12 hours) & stagnation risk?	N/A
Is cold & hot water pipe work kept separated and adequately insulated?	Most pipe work is hidden from visual inspection; internal pipe work not insulated where seen.
Are cold water tanks fitted with covers & insect screens, located in a cool well-insulated space, & safely accessible?	N/A
Are multiple CWST's configured in duty/stand-by mode and not operated in parallel?	N/A



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System Design & Construction	Reviewer notes
Hot Water Systems	
Is Calorifier storage capacity capable of maintaining a DHW distribution temperature of at least 50°C during maximum demand periods?	2 x Hot water calorifiers appear capable of maintaining water temperatures at peak times although the nursery calorifier storage and return temperatures were low at the time of this 2018 review.
Are multiple calorifiers connected in parallel?	No
Is the calorifier(s) fitted with the following: <ul style="list-style-type: none"> •Functioning drain valve? •Temperature gauges on the flow & return? •An access panel? •A shunt pump and timer, timed to heat the calorifier to over 60°C for at least an hour a day? •Adequate primary & secondary pipe work insulation? 	Both Calorifiers Yes No No Yes
Do electrically heated hot water heaters deliver water instantaneously at 50°C or above?	Electric water heaters appear to deliver good temperatures.
Is there a risk of scalding e.g. in buildings used by infants (under 5 years) the disabled or the elderly?	Possible risk to young children.
Have 'Very Hot' water labels been fitted to outlets used by the public including school children?	No Hot water warning labels were seen fitted.

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Operation & Maintenance	Reviewer notes
Are low use outlets flushed at least weekly and records kept in the Written Scheme logbook?	No flushing records were seen at the time of this 2018 review.
What are the procedures for bringing stand-by equipment into service?	N/A
If TMV's are fitted, are they being maintained on a 6 monthly basis and records kept in the system logbook?	Records within the logbook documentation indicate this was last carried out in August 2018 and is being carried out on a six monthly basis.
Are CWST's inspected at least annually to include a check that there is cross flow of water and records kept in the system logbook?	N/A
Are calorifier drains checked on a monthly basis for operation and drained water conditions checked and records kept in the system logbook?	No records of calorifier drain purging seen.
How is calorifier internal condition assessed and what is the periodicity of internal inspection?	No records seen Refer to Southampton City Council.
Have outlets that are no longer required been cut back to the nearest main pipe branch?	Deadleg pipe work was still seen in nursery mixed toilet area and girls toilet by cleaners room TMV capped off as tap has been removed.
Are up-to-date O&M manuals for the water system plant held including system valve lists, and pre-start, running, and stopping check off lists?	No records seen.
Are showers & other outlets being cleaned at least quarterly and records kept in the system logbook?	Showerheads are being cleaned and descaled quarterly; this was last carried out in July 2018.



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Monitoring	Reviewer notes
Do system users carry out daily temperature monitoring checks and place records in the system logbook?	No
Are the temperatures of sentinel hot & cold-water outlets checked on a monthly basis and records kept in the system logbook?	Yes this was seen recorded within the logbook documentation.
Are the hot & cold-water temperatures from all other water system outlets checked on an annual basis and records kept in the system logbook?	Additional outlets are checked monthly.
Is the temperature of the hot water supply to TMV's checked on a monthly basis and records kept in the system logbook?	Yes this was seen recorded within the logbook documentation.
Are calorifier flow & return temperatures checked on a monthly basis and records kept in the system logbook?	The main calorifier is being monitored but the nursery calorifier is not being monitored monthly.
Are calorifier temperatures checked at the base mid-level and top to check for primary heating efficiency and records kept in the system logbook?	Not Known no indication given in logbook. Refer to Contractors carrying out monitoring
Are CWST inlet & outlet temperatures checked on a 6 monthly basis and records kept in the system logbook?	N/A