



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

Oak Lodge Day Care Centre

Risk Assessment Review

4th January 2018



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Property Name & Description: Oak Lodge Day Care Centre			Review Date 4th January 2018
Responsible Person(s) Name & SCC Appointment: Martin Bowyer (Responsible Person)			Last Review: N/A
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?		NO	The Responsible person and deputy have not been nominated in writing within section two of 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?	YES		Drawings were updated at the time of this 2018 review.
Does the Risk Assessment include the measures & precautions to be taken to control foreseeable risks?	YES		
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?	YES		Deadleg removal.
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 December 2017
Property & System Changes			
Have changes to property occupancy resulted in fewer occupants, intermittent occupation, or partial closure?		NO	
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?		NO	
Are there any other aspects of the water system including its design, operation & maintenance that have increased foreseeable risks?	YES		Combination boiler constantly not achieving desired hot water temperatures fault sheets submitted almost every other month. Shower not being used and not being flushed weekly.



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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>A logbook which conforms to the requirements of the ACoP L8 should be put in place at the earliest opportunity; the duty holder, responsible person and deputy for the Day Centre should be nominated in writing and recorded within the logbook along with all contact details. High</p> <p>A logbook has been put in place; the responsible person and deputy have not been recorded. High</p>		
<p>A Written Scheme should be prepared for the Day Centre to ensure that all necessary controls and procedures that are in place are maintained, monitored and remain effective. High</p> <p>A written scheme produced by SCC has been put in place. Low</p>		
<p>Continue monthly temperature monitoring as recommended in the ACoP L8 & HSG 274 and continue to record the findings. High</p> <p>Monthly monitoring is being carried out by contractors Sealy Technical Services. Low</p>		
<p>Ensure the combination boiler is adjusted to achieve a minimum of 50.0°C at the outlets or to the TMVs. High</p> <p>On gong problems with the combination boiler hot water temperatures this should be rectified. High</p>		
<p>Remove deadleg pipe work or at least flush through on a regular basis. High</p> <p>Deadleg pipe work has been removed. Low</p>		
<p>The showerhead and hose should continue to be cleaned and descaled at least on a quarterly basis or as indicated by the rate of fouling and recorded when carried out. Medium</p> <p>This is carried out quarterly. Medium</p>		



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Risk Now (Circle)	Insignificant	Low	Medium	High	Uncertain

Remedial action to be taken	By Whom	By When
<p>Thermostatic Mixing Valve tap outlets in toilet areas should be serviced and maintained to the manufacturer’s recommendations; record when carried out. Medium</p> <p>No records seen to indicate this is being carried out. Medium</p>		
<p>Inline strainers are fitted on the supply pipe work to the TMV tap outlets in both toilet areas; strainers are ideal areas for bacteria proliferation and should be cleaned on a regular basis. Medium</p> <p>No records seen to indicate this is being carried out. Medium</p>		
<p>Ensure any infrequently used outlets within the day centre are flushed through at least on a weekly basis; record when carried out in a water systems logbook. Medium</p> <p>No records seen to indicate this is being carried out. Medium</p>		
<p>Legionella water samples should be taken if the domestic water temperatures fall out of the acceptable limits. Medium</p> <p>No records seen to indicate this has been carried out. Medium</p>		
<p>It should be ensured that all staff involved with the Legionella control within the day centre has adequate training and all training records or copies be filed within the logbook documentation. Medium</p> <p>Site staff have no Legionella awareness training. 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 not been nominated in writing.
Are responsible person(s)/deputies contact details available in the event of an emergency?	No responsible person or deputies contact details were seen within section 2 of 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 Southampton City Council.
Do responsible person(s) keep a log of water system defects and follow up on progress?	All system defects are assumed reported to Southampton City Council.
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?	Yes
Does the water system schematic show and identify all equipment & outlets including water softeners, TMV's, pumps, principal valves, stand-by 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?	Deadleg removal was seen recorded in the logbook documentation.
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 comply.
Do any of the materials used in pipe systems & fittings support bacterial growth or corrosion?	All pipe work appeared to be copper.
If TMV's are fitted are they sited within 2m of the outlet(s) served?	TMV taps fitted
Cold Water System	
Have low use outlets been installed upstream of high use outlets?	No
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?	Plant room pipe work was seen to be insulated.
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?	Combination boiler appears to have ongoing faults with maintaining correct hot water temperatures; fault sheets are submitted to SCC almost every other month relating to this issue and this should be rectified.
Are multiple calorifiers connected in parallel?	N/A
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?	N/A
Do electrically heated hot water heaters deliver water instantaneously at 50°C or above?	N/A
Is there a risk of scalding e.g. in buildings used by infants (under 5 years) the disabled or the elderly?	Possible risk to very young children.
Have 'Very Hot' water labels been fitted to outlets used by the public including school children?	No hot water warning labels are 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 seen.
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?	No records seen to indicate TMV taps are being serviced and maintained as recommended by the manufacturers.
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?	N/A
How is calorifier internal condition assessed and what is the periodicity of internal inspection?	N/A
Have outlets that are no longer required been cut back to the nearest main pipe branch?	No outlets have 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?	The showerhead is being cleaned and descaled on a quarterly basis; this was last carried out in October 2017.



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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 is being carried out and 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?	All outlets are being monitored 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 is being recorded in the logbook documentation.
Are calorifier flow & return temperatures checked on a monthly basis and records kept in the system logbook?	Combination flow temperature recorded.
Are calorifier temperatures checked at the base mid-level and top to check for primary heating efficiency and records kept in the system logbook?	N/A
Are CWST inlet & outlet temperatures checked on a 6 monthly basis and records kept in the system logbook?	N/A