### District of South Cambridgeshire

Maintenance Committee Meeting 18 March 2021

Item: MA121 20a) Legionella Risk Assessment overview

#### **Actions to take - Summary:**

- Showers regular cleaning and disinfection
- Weekly records of flushing infrequently used outlets
- Formal thermal control regime needs to be in place especially due to school's use
- Formal water hygiene regime needs to be in place especially due to school's use
- Records of cleaning and descaling quarterly cleaning
- Disinfect HWSV on an annual basis
- Fit automatic flushing valves to expansion vessels OR flush regularly
- Hot water cylinders water stored under 60c (should be at 60c)
- Service all TMVs on an annual basis
- Install insulation to pipework in the building where required

### **Recommendations for the risk assessment:**

#### Drinking water - Current B (low/medium risk) these recommendation would take grading to A

RS.03 - Complete a monitoring regime on the domestic cold-water services outlets to include monthly monitoring of the 'control method' as a minimum. P1 (High priority. To be completed as soon as reasonably practicable)

RS.08 - Ensure that any scaled outlets are de-scaled and disinfected on a regular basis. P1

 ${\rm RS.13a}$  - Install suitably approved insulation to the domestic mains cold water pipework throughout the building. P1

RS.05 - Consider the introduction of an annual water sample and analysis for the drinking water supply quality standard.P2 (moderate priority)

RS.01 - Fit automatic 3 port flushing valves to purge the potential dead leg caused by the unsatisfactory pipe work configuration and expansion vessel internal bladder. P1

# <u>Hot water storage – current level C (medium risk), could be A with recommendations. All</u> recommendations P1

A formal hygiene monitoring regime is not in operation. Monthly Thermal Monitoring is not In Place. Shower heads to be cleaned and disinfected and flushing regimes.

RH.52 - Where no access/ inspection hatch is installed, disinfect the calorifier on an annual basis, and undertake water sampling and analysis for specific legionella bacteria annually

RH.63 - Ensure that all outlets and particularly showers are operated under a controlled and approved method on a minimum basis of weekly with record available in the site log book "Vacant Rooms"

### District of South Cambridgeshire

- RH.61 Ensure appropriate operational and hygiene regime.
- RH.64 Ensure that all outlets are operated on a minimum basis of weekly including holiday periods with record available in the site log to prove flushing is undertaken.
- RH.66 Ensure that hot water is stored at a minimum temperature of 60°C and that return temperatures are at a minimum of 50°C.
- RH.67 Establish a monitoring regime where the hot water storage calorifier/s flow and return and 'sentinel' outlet temperatures are logged on a minimum of a monthly basis.
- RH.79a Service all TMV's annually taking account of any manufacturer's recommendations.
- RH.78a Install suitably approved insulation to the domestic hot water pipe work throughout building.
- RH.58 Remove centralised Thermostatic mixing valve (TMV) and install a single individual TMV to each area of use.
- RH.53 Consider the installation of an anti-stratification circulating pump and system to ensure tepid temperatures do not exist within the base of the vessel/s. Chemical cleaning / disinfection may be required prior to installation.
- RH.50 Investigate the low hot water temperature at the sentinel far point s supplied from the hot water system.

# <u>Combi boilers/water heaters – current level B (low/medium risk) would be A with</u> recommendations (All P1)

- RWH 81 Establish a monitoring regime where the hot water heater/s temperatures are logged on a minimum of a monthly basis.
- RWH 83 Ensure appropriate operational and hygiene regime.
- RWH 84 Ensure that all outlets and particularly showers are operated under a controlled and approved method on a minimum basis of weekly with record available in the site log book.

## District of South Cambridgeshire

HOT AND COLD-WATER SERVICES - RECOMMENDED TESTING & MAINTENANCE PROGRAMME

SERVICE	TASK	FREQUENCY
HOT WATER SERVICE	Arrange for samples to be taken from hot water calorifiers, in order to note conditions of drain water.	ANNUALLY
	Visual check on internal surfaces of calorifiers for scale or sludge. Check representative taps for temperatures as above on a rotational basis.	ANNUALLY
	Check temperatures in flow and return at calorifiers.	MONTHLY
	Check water temperatures up to one minute to see if it has reached 50°C at the sentinel taps. (55°C Healthcare)	MONTHLY
COLD WATER SERVICE	Visually inspect cold water storage tanks and carry out remedial work where necessary. Check representative taps for temperature as above on a rotational basis.	ANNUALLY sis.
	Check tank water temperatures remote from ball valve and mains temperature at ball valve. Note maximum temperatures recorded by fixed max/min thermometers where fitted.	BI-ANNUAL
	Check that temperature is below 20°C after running the water for up to 2 minutes in sentinel taps.	MONTHTLY
SHOWER HEADS	Dismantle, clean and descale shower heads and hoses.	AS NECCESARY
LITTLE-USED OUTLETS	Flush through and purge to drain, or purge to drain immediately before use, without release of aerosols.	WEEKLY

## District of South Cambridgeshire

### HOT AND COLD-WATER SERVICES - TEMPERATURE CONTROL REGIME

FREQUENCY	CHECK	ACQUIRED STANDARD		NOTES
		COLD	нот	
MONTHLY	Sentinel Taps	The water temperature should be below 20°C after running the water for up to two minutes.	The water temperature should be at least 50°C within a minute of running the water. (55°C Healthcare)	This check makes sure that the supply and return temperatures on each loop are unchanged, i.e. the loop is functioning as required.
	If fitted, input to TMV's on sentinel basis.		The water supply to the TMV temperature should be at least 50°C within a minute of running the water. (55°C Healthcare)	One way of measuring this is to use a surface temperature probe.
	Water leaving and returning to water heater/calorifier.		Outgoing water should be at least 60°C and the return at least 50°C.	If fitted, the thermometer pockets at the top of the water heater/calorifiers and the return leg are useful points for accurate temperature measurements. If installed, these measurements could be carried out and logged by a building management system.
BI-ANNUAL	Incoming cold-water inlet (at least once in the winter and once in the summer).	The water should preferably be below 20°C at all times.		The most convenient place to measure is usually at the ball valve inlet to the coldwater storage vessel.
ANNUALLY	Representative number of taps on a rotational basis.	The water temperature should be below 20°C after running the water for two minutes.	The water temperature should be at least 50°C within a minute of running the water. (55°C Healthcare)	This check makes sure that the whole system is reaching satisfactory temperatures for Legionella control.

## District of South Cambridgeshire

See page 12 of risk assessment below, which outlines areas where actions are needed.

SUBJECTS REVIEWED	YES/NO	COMMENTS	DATE ACTIONED
RISK ASSESSMENT			REVIEWED
Are the current system details correct?	New risk assessment	Available within this Assessment	18/02/2021
Is there a current up to date cold water	No water tanks found	Available within this	5
cistem/tank survey?	175.000 N. O.	Assessment	
Is there a current photograph of the	n/a	Available within this	
cistem/tank(s)?	0000000	Assessment	
Is there a current up to date hot water survey?	YES	Available within this	
	YES	Assessment Available within this	
Is there a current photograph of the calorifier/water heater(s)?	TES	Available within this Assessment	
Are the schematic drawing details correct?	YES	Available within this	5
Constraint and Constr	93,650%	Assessment	
Does the assessment need up dating?	NO	Available within this Assessment	
LOG BOOK		Assessment	) — — — — — — — — — — — — — — — — — — —
Is the maintenance schedule up to date?	NO		
Are the Responsible Person details up to date?	YES	×	
Is the training log up to date?	NO	79	
Have any training requirements been identified?	YES	22	E:
Is there an annual review of the system?	YES	8	
Are the disinfection procedures being followed?	NO		
Are all the log sheet entries up to date?	NO	9	
Has any remedial works been identified and recorded?	YES	62 - 5	0
Has identified remedial work been rectified?	NO	2	
Are outlets cleaned/disinfected on a minimum of	NO	8	9
annually and certified?	100		
Has the system been tested for legionella and	YES	(5)	Š.
certified?	1000000		
Has the annual mains water analysis been	NO	S	
recorded and certified?		00	
SUMMARY OF COMPLIANCE WITH ACOP			8
Has the system been adequately risk assessed?	YES	Available within this Assessment	
Is the scheme satisfactory for minimising the	No scheme in place	a race administra	1 1
risk?			
Has the scheme been fully implemented?	NO	9	
Are the records being kept up to date by all	NO	N) A	
responsible/competent personal?			
Does the scheme effectively function in line with	NO	9	
the requirements of the ACOP (L8)?	10 ma 1 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m 2 m		

Client is to fill in actioned section to conform to current legislation.