CONTROL OF LEGIONELLA POLICY	Frittenden CEP School
DATE OF REVIEW: January 2019	
DATE OF NEXT REVIEW January 2022	
TO BE REVIEWED BY: Resources Committee	

This policy sets out the control of legionella in hot and cold water systems in school, including responsibilities, training testing and records.

1. POLICY STATEMENT

The school will undertake to ensure compliance with the relevant legislation with regard to the Control of Legionella in hot and cold water systems for all pupils and employees and to ensure best practice by extending the arrangements as far as is reasonably practicable to others who may also be affected by our activities.

2. THE LAW

a. As legislation is often amended and Regulations introduced, the references made in this Policy may be to legislation that has been superseded. For an up to date list of legislation applying to schools, please refer to the Department for Education website at www.education.gov.uk/schools and the Health and Safety Executive websitewww.hse.gov.uk.
   i. Health and Safety at Work Act 1974
   ii. Management of Health and Safety at Work Regulations 1999
   iii. Care Standards Act 2000

3. DEFINITIONS

a. Legionella is a generic term for a type of bacteria which is common in natural and artificial water systems. Legionellosis is the name given to a group of pneumonia-like illnesses caused by Legionella.

4. MANAGEMENT

The Headteacher will ensure that:

i. Relevant risk assessments are carried out and that control measures are implemented.
ii. Appropriate training is provided.
iii. Ensure that flushing and testing of water outlets is carried out in accordance with **Appendix 1.**
iv. Any problems with water or the water system are reported to Kent County Council and advice will be sought immediately from Skanska 0800 901 2464
v. Monitor disinfection procedures where necessary – see Appendix 2.
vi. Records are kept for each water outlet of flushing and testing and disinfection procedures.

5. GENERAL INFORMATION

a) Legionella is a generic term for a type of bacteria (legionellae) which is common in natural and artificial water supplies. The bacteria thrive at temperatures between **20ºc and 45ºc** but can be killed by elevated temperatures or chemical treatment.

b) The School stores and distributes hot water above 50ºc. Users are protected from scalding by controlling the delivery temperature of hot water from a tap to 43ºc by the use of thermostatic mixing values. Checks are required to ensure that the valves are working correctly.

c) All illnesses due to the legionella species are known collectively as "Legionellosis" but the most well known is "Legionnaires' disease" which can be serious for elderly people and others with respiratory problems or immune-deficiency.

d) Infection is only a risk when there is inhalation of very fine water droplets that are contaminated with high concentrations of legionella bacteria. Healthy people are unlikely to contract an infection and outbreaks are rare though well publicised.

e) Control is normally achieved by suitable design and maintenance of the water system and its associated plant. Additional control is achieved by appropriate storage of water and delivery of water at temperatures which do not allow the bacteria to proliferate.

6. RISK ASSESSMENT

a. Assessment of risk is mostly confined to
   i. Monitoring whether control measures are being instigated fully.
   ii. Correct water temperatures are being maintained.
   iii. Engineering measures, such as temperature control values, are working properly.

b. Any failures must be reported immediately to the Headteacher who will inform Kent County Council and / or Skanska.

7. CONTROL MEASURES

a. To achieve ongoing control of legionella, thorough flushing of the water system is required alongside any engineering controls.

b. Effective control measures will require the school to:
   i. Monitor any water outlets that are not in regular use.
   ii. Record the flushing of all water outlets
   iii. Record the temperature of hot and cold water outlets.

c. Full details of flushing and testing regimes that need to be carried out can be found in **Appendix 1**

8. TESTING ARRANGEMENTS

a. Under certain circumstances, for example when there have been alterations or maintenance work to the water system, testing is to be carried out in according with **Appendix 1**

b. Disinfection of the system will be necessary when testing indicates there is a need. – see **Appendix 2.**

9. INFORMATION, INSTRUCTION TRAINING

a. The Headteacher will ensure that suitable and sufficient training and information is given the School Caretaker, and any other member of staff, who has responsibilities for flushing, record keeping and taking temperature readings as required by the appendices. (See **Appendix 3** for a Site Summary of Nominated Authorities).

b. Any new measures that are introduced to control legionella will need appropriate training provision.

c. The Headteacher or School Business Manager will ensure that a record of all instruction and training given to members of staff is recorded in the Legionella Log.

Appendix 1 to the Control of Legionella Policy

FLUSHING AND TEMPERATURE TESTING PROCEDURES

Completing and recording water temperatures

Water temperature record sheets need to be filled in and kept within the logbook. It is usual to spread this over the 12 months, i.e. if you have 24 taps you need to sample 2 per month. Outlets failing to meet the required temperature should be reported for suitable action and retested in subsequent months until satisfactory. Hot Water should be at least 50^{o}C after 1 minute and cold water below 20^{o} C after 2 minutes flow.

If these temperatures cannot be achieved then the Headteacher or School Business Manager is to be informed with a view to taking remedial action or informing KCC / Skanska.

Scientific tests may be required when there appears to be a problem with the water supply, e.g. discolouring, temperature problems, etc. These should be reported to the Headteacher with a view to informing Skanska who will arrange appropriate testing where it is considered necessary.

Hot and Cold Water Temperature Monitoring
A single cold and hot tap on the main hot and cold water systems, which are not connected via a thermostatic mixing valve, are to be run for one minute (in the case of a hot tap) and two minutes (in the case of a cold tap) every month so that a temperature can be taken using a thermometer and recorded on the Water Temperature Check List.

A schedule for precautionary checks on hot and cold water taps (where there is water storage), the responsible person should organise checks to be carried out at the frequencies indicated below. Where the temperatures fall outside the standards actions should be taken to resolve the problem.

Monthly Checks
Taps: Temperature of cold water sentinel taps, to check that water is below 20°C.

Run cold tap for 2 minutes then measure temperature by inserting calibrated digital thermometer in the water flow and record reading.

Temperature of hot water sentinel taps (nearest and furthest to the calorifier/ water heater), to check that water is above 50°C.

Run hot tap for 1 minute then measure temperature by inserting calibrated digital thermometer in hot water flow and record reading.

Yearly / Bi-annual Checks:
The cold water tanks must be inspected (findings recorded) annually to ensure that there is not a build-up of any foreign bodies. Flushing / cleaning should take place if necessary.

Cold water tank temperatures should be recorded bi annually. Flow rates should be checked.

Flushing infrequently used taps

Hot or warm water left in pipes for long periods can allow Legionella bacteria to multiply presenting a risk when finally discharged e.g. taps after the summer holidays. Identify infrequently used taps on

the 'Weekly flushing record sheet' and record when flushing takes place. Flush each tap for several minutes to ensure stagnant water is fully discharged. Flush all sentinel taps monthly. Sentinel taps are the first and last taps on a water distribution system – see schematic drawing.

Actions in the event of negative temperature monitoring checks

In the event of a negative temperature test result being noted, (i.e. either Hot water below 50c or cold above 20c) by the Responsible Person the following actions should be carried out.
If hot water:

- then the boiler settings need to be reviewed to ensure that the temperature can be raised.
- Further additional temperature checks should be made after 48 hours to ensure that the problem does not persist.
- If the temperature cannot be raised to the required level then further action needs to be taken to ensure the boiler is serviced / checked.

If cold water

- then the situation should be monitored more closely for a period.
- In the event that the temperature remains above the required 20c then further advice needs to be sought from Property Services.

In either case if monitoring indicates an ongoing issue then the water supply must be examined/ tested by a suitably qualified contractor to ensure that the Legionella risk is managed. In the event that a test of the water supply indicates that Legionella is present in high concentrations then the following actions need to be carried out:

- Inform Skanska and contact Area Education Officer, who will take relevant steps to ensure that the issue can be monitored.
- To shut down any processes which are capable of generating and disseminating airborne water droplets and keep them shut down until remedial cleaning or other work has been done.
- To immediately arrange emergency disinfection to be undertaken if required.
- Depending on the client group or staff group that may have been exposed – monitor client/ staff health to discern whether there are any undiagnosed cases of illness.

Appendix 2 to the Control of Legionella Policy

PROCEDURE FOR DISINFECTION

If the school produces a sufficiently high result after testing, and a risk assessment recommends action, it will be disinfected by an approved contractor. The Headteacher or an elected representative will arrange the time and date of disinfection with the selected contractor.

Affected areas will be withdrawn from use until disinfection has been completed. Flushing of outlets in these areas will cease until disinfection has been completed.

A supply of clean water for the kitchen area will be drawn off from an uncontaminated source and stored in containers on the morning of a disinfection visit. Once disinfection commences, the water system will not be usable (except in WC's) until the contractors declare it safe. (Note: Drinking water must only be drawn from the bottled supply).

Alternative hand cleaning methods will be instigated to supplement the wearing of protective gloves for personal care. (eg. Hibiscrub & antiseptic wipes).

Staff and pupils will be protected from accidental use or drinking of disinfected water by securing the outlets or denying them access.

Disinfected areas will be re-instated immediately after completion of the disinfection process and the flushing regime will recommence.

APPENDIX 3

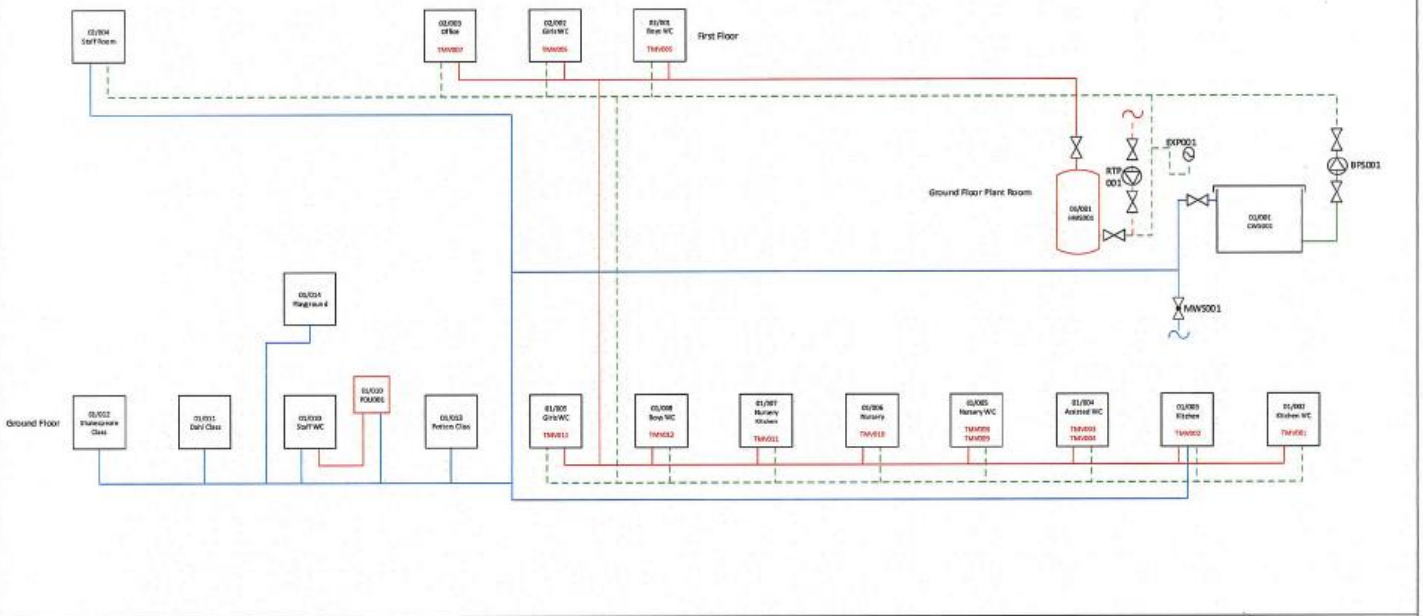
NOMINATED AUTHORITIES

Site Name *Frittenden CEP School*

	NAME	ADDRESS	TEL. NO
Headteacher	Ms N Costello	Frittenden CEP School The Street Frittenden Kent TN17 2DD	01580 852250
Responsible Person	Mr F Weatherly	Frittenden CEP School The Street Frittenden Kent TN17 2DD	01580 852250
Office manager	Mrs D Kneller	Frittenden CEP School The Street Frittenden Kent TN17 2DD	01580 852250
Skanska	Various		0800 901 2464
Water hygiene risk assessment company		HSL Alton House, Alton Business Park, Alton Road, Ross-on-Wye, Herefordshire, HR9 5BP	0845 604 6729

Site Name	Frittenden C of E Primary		
Address	Frittenden, Cranbrook, Kent, TN17 2DD		
Drawing No. and Title	Drawing 1	Date of RA	15/11/2018

Schematic Drawing



Colour/Symbol Key

= Mains Cold Water
= Boosted Cold Water Services
= Cold Water Down Services
= Hot Water Services - Flow
= Hot Water Services - Return
= Hot Water Services - Mixed
= Non-Domestic Water System
Please refer to the Full Asset Code List for all other abbreviations
= Expansion Vessel
= Non-Return Valve
= Pressure Reducing Valve
= Pump
= Stop Valve
= Tundish
= Valve

Water sources indicated for rooms which were not accessed during the survey are assumed

Drawn by: Wendy Amies Checked by: Lee Punnett Date Checked: 30/11/2018 QA1910 2013 Issue 2

Legionella Control Log Book	
Property Name	Frittenden CEP School
Building Owner	KCC
Responsible Person for Building	Frank Weatherly (caretaker)
Persons in charge of reviewing Legionella Risk Assessment	Nic Costello / Frank Weatherly
Date Log Book started	October 2016
Schematic available	Yes
Risk Assessment (RA) available	Yes (28th January 2015)
Review date of Risk Assessment	January 2017
Does RA contain an Action Plan	Yes
Does RA require routine maintenance?	Yes
Person responsible for undertaking routine monitoring work (weekly/monthly/quarterly).	Frank Weatherly
Does Risk Assessment require Bacteriological Water Testing?	No
Detail of operations relevant to controlling risk/ local management plan: Regular routine testing 6 monthly tank cleaning by 2 yearly risk assessment	

HOT AND COLD WATER SYSTEMS CHECKLIST

Use the checklists to keep up to date with water systems maintenance requirements for your site. Please be aware that not all tables may be relevant to your site. Fill in dates of when work is carried out and initial/ signature in the signed columns.

MONTHLY HOT AND COLD WATER TEMPERATURE RECORD SHEET

Hot water tap outlet record sheet – hot water to be at least 50^0c after 1 minute			
Date	**Location**	**Temp (^{0}C)**	**Signed**

Cold water tap outlet record sheet – cold water to be below 20^0c after 2 minute			
Date	**Location**	**Temp (^{0}C)**	**Signed**

MONTHLY TEMPERATURE CHECKS AT THE SENTINEL HOT AND COLD WATER OUTLETS

Monthly temperature checks at the sentinel hot and cold water outlets **Refer to Schematic Drawing**						
Date	**Hot Temp (^{0}C)** (should reach at least 50 ^{0}C within a minute of running the outlet)		**Cold Temp (^{0}C)** (should be at less than 20 ^{0}C within two minutes of running the outlet)		**Comment**	**Signed**
	Nearest	**Furthest**	**Nearest**	**Furthest**		

Notes: If a thermostatic mixing valve (TMV) is present, use a surface temperature probe for measuring the temperature at the inlet pipe to the TMV

ANNUAL TANK INSPECTION

Annual Tank Inspection			
Date	Findings	Actions	Sign when completed

BI-ANNUAL TANK TEMPERATURE CHECK

Bi-annual water tank temperature check:				
Date	Cold water tank	Hot water tank	Findings / actions	Sign when completed

WEEKLY FLUSHING RECORD SHEET for infrequently used taps

Date	Location	OK (Y / N)	Fault notified (if applicable)	Person/ Signature

Water Hygiene / Boiler maintenance / services information

Record:

- Planned maintenance including services
- Emergency call outs
- Risk assessment
- Training as relevant

Date	Who?	What?	Why?