Bassett Green Primary School
Review Report 12th November 2018

This Legionella review survey was carried out on the 12th November 2018; there was seen to be a water systems logbook in place for the school's water systems; this is filed within the schools new building reception area. The responsible persons and deputies' names for the school were seen nominated and recorded in writing within section 2 of the logbook documentation. The logbook was seen to have last been audited in June 2017; the monitoring records were seen to be up to date as of November 2018. The original risk assessment for the school was not seen filed in the logbook documentation; the complete risk assessment carried out on the New Building in 2015 was also not seen; only a few sheets from this risk assessment were filed in the logbook documentation; I would recommend the full assessments be filed.

Since the previous review there appears to have been no remedial works carried out; again, the local water heaters within the South Block boys and girl's toilet areas are still not working and the water flow at the outlets in both toilet areas is still very poor. The Honey Bees toilet area water heater was again found to have low storage temperature and again very poor flow of hot water at the outlets the shower is not connected electrically therefore cannot be used creating a deadleg. The water heater within the Puffins Nurture room cupboard space has been isolated thus creating deadleg pipe work and no hot water to both staff toilet areas.

The deadleg pipe work highlighted in the previous review was still seen to be in place and new additional deadleg pipe work was seen in the old staff room now Badgers Classroom in the New Building.

The old fire hose reel pipe work was still seen to be in place around the main school building; again, it is not known if this pipe work is still live or if it has been disconnected from the live water services and drained. I would again recommend this be investigated to ensure this system is not connected to the main domestic water services and be drained if possible.

Hot water within Bassett Green Primary School is mainly by local water heaters located within various areas around the school. There are two hot water calorifiers; one located at height within the main kitchen and one located in the site manager's office; at the time of this 2018 review the site managers office calorifier was found to have slightly low storage of 58.0C the main kitchen was satisfactory above 60.0C.

There are local water heaters fitted within the school; it should be ensured that all water heaters with a capacity no greater than 15 litres store hot water at 50.0c - 60.0c; water heaters with a greater capacity should store hot water at 60.0c or more. Random water heaters checked at the time of this 2018 review were found to be satisfactory with the exception of Both South Block girls and boys toilet water heaters; Honey Bees toilet water heater and the medical room water heater which should be adjusted.

Hot water storage within the new building is by a single Vaillant type calorifier located within the first-floor plant room; the calorifier has a capacity of 211 litres and is heated by the LTHW system boiler. The calorifier has factory fitted insulation located beneath the outer casing; the calorifier is fitted with a return system; this has a single circulating / return pump fitted.

<u>The return pump was still seen to be on a timer switch and appears to operate from 08.00am through to 18.00pm; this is not satisfactory as the return system should maintain 50.0°C or more at all times.</u>

At the time of this 2018 review the calorifier storage and return temperatures were found to be low; records seen indicate the temperatures have been low from August 2018 through to October 2018 which is not satisfactory; this has been reported to SCC on the fault sheets by the contractor carrying out monitoring; I would recommend this system be investigated.

Hot water storage and return temperatures at the time of this 2018 review were:

Calorifier Storage	**48.0°C**	**This is Not Satisfactory**
Calorifier Return	**44.0°C**	**This is Not Satisfactory**

I would recommend the system be adjusted to store hot water at 60.0ºC and the return maintain 50.0ºC or more and the return pump is left running at all times.

Cold water storage within the new building consists of one water storage tank located in the first-floor plant room; the tank is of plastic construction and has a good fitting lid fitted. The storage tank lid was seen to be fitted with a screened vent; the overflow pipe work is also fitted with an insect screen. The storage tank is fitted with a poly fibre jacket for insulation; this was seen to be in a fair condition. Internal inspection of the storage tank proved there to be light sediment build up on the base of the tank; sediment can act as a nutrient for bacteria proliferation and should be cleaned and disinfected annually if required. The inlet and outlet on this storage tank are not fully opposed therefore there is only a partial crossflow of water through this tank; the water storage tank was last cleaned and disinfected in February 2017; I would recommend this is carried out on an annual basis if required.

The water temperature of the storage tank at the time of this 2018 review was:

Water Storage Tank 19.2°C This is Satisfactory

There was seen to be some deadleg pipe work and areas within Bassett Green Primary School these were noticed in the following areas:

- There is deadleg pipe work still in place at the side of the freezer in the medical room area. See drawing No.18.

- There is deadleg pipe work still in place in the staff kitchen on the supply to the water cooler. See drawing no.17.

- The outlets within Springfield toilet and shower room areas are not used creating deadleg areas. See drawing No.12A.

- There is deadleg pipe work in the old staff room now Badgers Classroom beneath the sink in the cupboard space and above the sink where the water boiler has been removed.

- The water heater in Puffins Nurture room store cupboard space has been isolated creating deadleg Pipe work. See drawing No.13

- The water heaters in both South Block girls and boy's toilet areas have no use as very poor flow of water at the outlets thus creating deadleg areas. See drawings No. 9 & 10.

- The shower in Honey Bees Toilet area is not connected electrically and cannot be used thus creating deadleg pipe work. See drawing No.6.

There are many water outlets within this school it should be ensured that they all get regular use and if not should be put on a weekly flushing regime. It is very important that all showers are used on a regular basis and shower heads are continued to be cleaned and disinfected a least on a quarterly basis.

Many areas within the school are fitted with TMVs (blender valves) these should be serviced and maintained to manufacturer's recommendations; no records were seen at the time of this 2018 review to indicate this is being carried out.

		Remedial / Recommendations	Priority
Bassett Green Primary School		Investigate water supply to the old fire hose reels to ensure disconnected from domestic water main and drained.	**5**
		Locate original risk assessment for school and the complete risk assessment for the New Building and file in logbook documentation.	**5**
		Remove deadleg pipe work.	**5**
		Ensure New Building hot water calorifier is adjusted to store hot water at 60.0C and the return pump runs at all times to maintain 50.0C or more in the return system at all times.	**5**
		Ensure all local water heaters with no greater than 15 litres capacity store hot water at 50.0c – 60.0c. All water heaters with greater than 15 litres capacity store hot water at 60.0c or more.	**5**
		Investigate no hot water in South Block girls and boy's toilet areas faulty water heaters.	**5**
		Investigate booster pumps on South block boys and girl's toilet hot water system for correct operation as very poor flow of hot water.	**5**
		Investigate Isolated water heater creating no hot water flow in the staff toilet areas; investigate no or very poor hot water flow in the medical room and disabled toilet.	**5**
		Clean and disinfect cold water storage tank annually if required.	**3**
		Ensure all showerheads are continued to be cleaned and disinfected quarterly or as required and recorded when carried out.	**3**
		Continue flushing all infrequently used outlets weekly; start recording when carried out. Continue during shut down periods and school holidays.	**3**
		Maintain and service TMVs (blender valves) as per manufacturer's recommendations.	**3**
		Continue to audit logbook at least on an annual basis.	**3**

1 = Insignificant risk.

2 = Controlled risk.

3 = Risk is controlled, but deteriorating conditions could increase risk.

4 = Potential hazards identified, but uncertain about risk.

5 = Risk Uncontrolled.