

Bitterne Park Primary School Review Report 30th July 2018

This Legionella review survey was carried out on the 30th July 2018; there was seen to be a water systems logbook in place for the buildings water systems; the logbook is filed within the site manager's office. The responsible persons and deputy for the school were seen nominated and recorded in writing within section 2 of the logbook documentation. The logbook was seen to have been last audited in December 2017; the monitoring records were seen to be up to date as of July 2018. Flushing is being carried out within the school on a weekly basis; this is being recorded in separate logbooks seen filed within the site manager's office. The 2014 risk assessment was not seen filed within the logbook documentation at the time of this 2018 review; I would recommend this be located and a copy be filed in the logbook.

There has been some remedial works carried out in the school since the 2016 review; there has been a new hot water calorifier and new configuration of pipe work installed in the main plant room area; the pipe work within the kitchen plant room has also been changed along with a new return pump fitted.

The deadleg pipe work highlighted in the previous review appears to have been removed; this could not be confirmed as the pipe work has now been covered with panels. It was also highlighted in the logbook documentation that deadleg pipe work was disconnected from the live main in the ceiling void again this could not be confirmed.

I was informed that further refurbishments will be carried out in some toilet areas later this year.

Hot water storage within the upper school building is by two hot water calorifiers; one located within the main kitchen plant room serving the main kitchen, the reception kitchen, and the headmasters toilet area; the upper school building plant room calorifier serves other areas of the upper school building.

The upper school main plant room hot water calorifier has now been replaced with a new A.O Smith type gas fired calorifier; the capacity of this calorifier is 368 litres. The calorifier has factory fitted insulation beneath the outer casing; the system has been fitted with a de-stratification pump and the system has a single hot water return pump which was not running at the time of this 2018 review.

The calorifier was found to have a slightly low storage temperature and a very low return temperature; this was reported to the site manager who informed me this is being addressed. It has also been reported to SCC in the last two months on fault sheets 6239 and 5659 that the calorifier storage temperature was low; this should be addressed at the earliest opportunity.

The main kitchen plant room calorifier is an Andrews's type with a capacity of 350 litres; the calorifier is gas fired and supplied directly from the mains water service via a pressure reducer. The calorifier has factory fitted insulation located beneath the outer casing; the hot water system is fitted with a single circulating return pump; a new return pump and pipe work configuration has been carried out since the previous review.

The calorifier storage and return temperatures at the time of this 2018 review were:

Main Plant Room Calorifier Flow **58.0°C This is Not Satisfactory**

Main Plant Room Calorifier Return **30.0°C This is Not Satisfactory**

Kitchen Calorifier Flow **58.0°C This is Not Satisfactory**

Kitchen Calorifier Return **51.0°C This is Satisfactory**

The main plant room return pump should be investigated for the correct operation as it was seen to be switched off at the time of this review; ensure both calorifiers are adjusted to store hot water at 60.0°C or more.

There are local water heaters fitted within the school; it is recommended that water heaters with no greater than 15 litres capacity should operate at 50° - 60°c. Some water heaters checked at random the time of this 2018 review were found to be satisfactory.

There was still seen to be possible deadleg pipe work within the school these were noticed in the following areas:

- Investigate the old fire hose reel pipework still seen fitted in the school; ensure the pipe work is no longer live and connected to the live water main thus creating deadleg pipe work; I would again recommend removal if found to be live and connected.

There are TMVs (Blender Valves) fitted within the school; 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.

It should be ensured that all water outlets within the school buildings all get regular use and if not should be put on a weekly flushing regime. Records seen indicate flushing is being carried out and recorded in separate logbooks.

Ensure all tap outlets are kept clean and free from scale build up to maintain a good flow of water through the systems.

		Remedial / Recommendations	Priority
Bitterne Park Primary School		Ensure the old fire main pipe work is no longer live and still connected to a live water main; if found to be live I would recommend removal.	5
		Locate the 2014 risk assessment and file a copy in the water systems logbook.	5
		Investigate the return pump fitted on the main plant room calorifier for correct operation.	5
		Ensure both hot water calorifiers are adjusted to store hot water at 60.0°C or more.	5
		Continue to flush all infrequently used outlets weekly and record when carried out.	3
		Continue to flush through the by-pass on kitchen plant room water treatment vessel on a regular basis.	3
		Ensure all tap outlets are kept clean and free from scale build up to maintain a good flow of water through the systems; this should include the hand wash station outlets in the girl's toilet area.	3
		Purge hot water calorifiers to drain at least on an annual basis and record when carried out.	3
		Maintain and service TMVs (Blender Valves) as per manufacturer's recommendations.	3
		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.