# Newlands Primary School
# Review Report 14th January 2015

This Legionella review survey was carried out on the 14th January 2015; there was seen to be a water systems logbook in place for the schools water systems; this was seen filed in the caretaker's office and was seen to be in a good order. The responsible person and deputy's names for this school were seen nominated in writing and recorded within section 2 of the logbook documentation. The logbook was seen to have been last audited in December 2011 but this was probably from the old school; I would recommend the logbook be audited at least on an annual basis. The monitoring records were seen to be up to date as of December 2014.

I was informed that weekly flushing is being carried out within the school; this was seen recorded within the logbook documentation. The showerheads are being cleaned and disinfected on a quarterly basis; this was last carried out in October 2014 and was seen recorded in the logbook documentation. The risk assessment report carried out in 2013 was seen filed within section nine of the logbook documentation.

There has been remedial works carried out on the recommendations made from the 2013 risk assessment; a Legionella control programme has been put in place for the school; the deadleg pipe work seen mainly within the plant room area has now been removed. One of the shower rooms has now been removed and converted to a store room; it should be ensured all the domestic water pipe work from the old shower room has been cut back to the live point; I was unable to check this as the room is full of stored items.

There is a cold water storage tank located at height within the plant room area; this tank serves cold water down service to the three pump booster set which in turn serve the hot water calorifier and boosted cold water to the school. The tank is of GRP construction and is fitted with integral insulation; the tank has a screened vent and screened overflow pipe work. There is no crossflow of water through this tank; I would recommend a sparge pipe be fitted to create a crossflow of water.

Internal inspection proved there to be some sediment on the base of the tank; it is not known when this tank was last cleaned and disinfected; I would recommend the tank be cleaned and disinfected annually if required. The drain on this tank has been shortened as recommended in the risk assessment to reduce the length of deadleg pipe work.

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

**Water Storage Tank** **10.6ºC This is Satisfactory**

Hot water within the school is supplied by two hot water calorifiers located within the Plant Room. Calorifier No 1 supplies all hot water outlets within the school with the exception of the main kitchen this is supplied from calorifier No.2. Both calorifiers have factory fitted insulation fitted beneath the outer metal casings; there is a single common return pump fitted to the system. Both calorifiers are supplied from the domestic cold water storage tank via a three pump booster set and a duplex water softener, which are also located within the Plant Room. The calorifiers are heated by the LTHW boilers which are also located within the Plant Room.

It should be ensured that the booster pumps are set to alternate automatically thereby ensuring that no pump remains idle and creates a dead leg. The gauges mounted on swan necks and highlighted as deadleg pipe work in the 2013 risk assessment have now been removed.

**At the time of this review the hot water storage and return temperatures were:**

| | |
|---|---|
| **No.1 Calorifier Flow** | **60.0ºC This is Satisfactory.** |
| **No.1 Calorifier Return** | **53.0ºC This is Satisfactory.** |
| | |
| **No.2 Calorifier Flow** | **60.0ºC This is Satisfactory.** |
| **No.2 Calorifier Return** | **53.0ºC This is Satisfactory.** |

**Hot water should be stored at 60.0ºC and the return should be maintained at 50.0ºC or more at all times.**

Monthly monitoring records seen at the time of this review indicate that both hot water calorifier's storage and return temperatures are normally satisfactory.

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. Flushing of water outlets should be carried out during long school holidays and shut down periods.

Ensure all taps are cleaned and descaled on a regular basis to help maintain a good flow of water though the outlets and system.

TMVs are fitted within the school building; no records were seen at the time of this review for servicing of TMVs I would recommend this is carried out as recommended by the manufacturers.

The duplex water softener should continue to be serviced and maintained in line with the manufacturer's recommendations; continue to check water quality and record in logbook.

Air conditioning / air handling units where fitted should be serviced and maintained to the manufacturer's recommendations; all condensate trays and traps (if fitted) should be cleaned and disinfected at service schedule regimes that should be in place.

Clean inline strainers (e.g on the incoming mains cold water riser) / filters on a regular basis or as recommended by the manufacturers.

| | | Remedial / Recommendations | Priority |
|---|---|---|---|
| **Newlands Primary School** | | Continue to carry out monthly temperature monitoring and record in logbook. | **3** |
| | | Clean and disinfect cold water storage tank and continue annually if required. | **3** |
| | | Fit sparge pipe in cold water storage tank to create a cross flow of water through it; or replumb pipe work. | **3** |
| | | Open and flush through water softener by-pass on a regular basis to prevent deadleg pipe work. | **3** |
| | | Continue to clean and disinfect showerheads quarterly and record. | **3** |
| | | Continue to flush all infrequently used outlets weekly and record when carried out. Continue during shut down periods and school holidays. | **3** |
| | | Clean any inline strainers on a regular basis or as part of a maintenance schedule. | **3** |
| | | Maintain and service TMVs (blender valves) as recommended by the manufacturers. | **3** |
| | | Air conditioning / air handling units where fitted should be serviced and maintained to the manufacturer's recommendations; all condensate trays and traps (if fitted) should be cleaned and disinfected at service schedule regimes that should be in place. | **3** |
| | | Audit logbook at least on an annual basis and record when carried out. | **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.