



## Mothballing water services **aquavent** water and air hygiene

### *COVID-19: Decommissioning - and recommissioning - a property during periods of non-occupancy*

The Legionella Control Association has issued a statement regarding the expectation for management of water systems during this period of COVID-19 precautions. Their statement stresses that the Health and Safety at Work Act still applies and Dutyholders must be taking reasonably practicable steps to control risk from legionella throughout this time.

“ Dutyholders implicated in an outbreak of Legionnaires’ disease resulting from actions taken for COVID-19 precautions are not likely to have any exemption from prosecution.

The following principles should be considered when making decisions on what to do to control legionella during the COVID-19 outbreak:

1. The expectation for evaporative cooling systems is that they will be maintained as usual or switched off safely – there is no leeway in this
2. The expectation for water systems supplying critical services, for example hospitals, is that they will be maintained as usual – there is no leeway in this
3. Hot and cold water systems in buildings that are empty or with under occupancy must address the issue of stagnation:
  - a) If the building is still partially in use take additional measures to keep the remaining occupants safe
  - b) Buildings that are temporarily shut down (mothballed) should follow the guidance in HSG274 Part 2 paragraphs 2.50-2.52

For all of the work there should be a task risk assessment in place to ensure operatives are working safely.

#### **Recommissioning Water Systems:**

It is essential that when buildings reopen following the lifting of COVID-19 restrictions, any water system is not simply put straight back into use. During the period of shutdown it would be sensible to formulate a recommissioning plan for each water system to

allow safe start-up and assurance to users that it is safe.

Any plan for recommissioning buildings must take into account the safety of the operatives carrying out the work. It is foreseeable that the hazard present within water systems in this situation would be greater than normally expected. Reasonably practicable measures such as limiting aerosol, minimising exposure and use of respiratory protective equipment (RPE) should be considered.

Evaporative cooling systems should already have robust start-up and shut-down procedures in place and the expectation is that these will be followed.

The minimum expectation for small, simple hot and cold water systems would be flushing through with fresh mains water. Larger buildings, those with tanks, showers, calorifiers and more complex pipework the expectation is likely to be for more extensive flushing followed by cleaning and disinfection.

In all cases where systems are being recommissioned it is sensible to have evidence to prove/reassure that the recommissioning process has been effective.

*There is potential for multiple outbreaks of Legionnaires’ disease following the COVID-19 outbreak if actions taken now are not carefully considered. The responsibility for legionella control lies with the ”* Dutyholder.

*Aquavent is able to offer a robust and comprehensive water hygiene management service throughout the COVID-19 pandemic, including decommissioning and recommissioning where necessary.*

## LONG TERM – OVER 12 WEEKS

### Decommissioning

All buildings containing a domestic hot, cold or both domestic water services, which are to be unoccupied for any long-term period should be decommissioned into safe storage using as a minimum the following procedures:

1. Place notices on all entrances and exits explaining that the building will have no water services until recommissioned by Aquavent (leaving contact names and numbers)
2. Contact service suppliers – water, gas and electricity – prior to commencement of works for any specific instructions or actions to be taken
3. Isolate any electrical supplies to calorifier immersions or electric water heaters
4. Isolate any low pressure hot water secondary pumps feeding any calorifiers
5. Flush any soil/foul pipework with clean water prior to drain down of the systems
6. Drain down any water storage vessels, including cold water storage tanks and calorifiers
7. Ensure that soil/foul connection to the main sewer is plugged to prevent gassing off into the building
8. Isolate the incoming main, placing a warning notice of the procedures in place
9. Issue report for client to file in the site logbook.



### Recommissioning

All buildings containing a domestic hot, cold or both domestic water services which are to be unoccupied for any long-term period should be recommissioned using the following procedures:

1. Survey the system to make sure it is safe to reinstate services
2. Contact service suppliers – water, gas and electricity – prior to commencement of works for any specific instructions or actions to be taken
3. Reinstate connection of soil/foul pipework to the main sewer
4. Check water storage tanks for internal condition and clean if required
5. Turn on the incoming mains: flush the cold water pipework while checking for any leaks
6. Check the cold water storage tanks/mains fed calorifier for correct filling
7. Prime the calorifiers and hot water systems and bleed out any air
8. Chemically disinfect the system dosing the incoming main, cold water storage tanks and

calorifiers, drawing the chemical through all outlets

9. Reinstate electrical supplies to all water heaters, turn on units and check for temperatures of 60<sup>0</sup>C
10. Reinstate LPHW supplies to calorifiers and check flow and return temperatures to make sure they confirm to standards (60<sup>0</sup>C on the flow and a minimum of 50<sup>0</sup>C or 55<sup>0</sup>C in healthcare on the return)
11. Recalibrate all TMVs to a maximum outlet temperature of 43<sup>0</sup>C (if installed)
12. Remove any warning notices
13. Take a bacteriological sample from several outlets on the system to confirm that the disinfections process has been successful
14. Issue works report, disinfection certificates and sample analysis reports to the client for filing in the site logbook

## **SHORT TERM – 4 TO 12 WEEKS**

### **Decommissioning**

All buildings containing a domestic hot, cold or both domestic water services, which are to be unoccupied for a short-term period of 4 to 12 weeks should be decommissioned into safe storage using as a minimum the following procedures:

1. Place notices on all entrances and exits explaining that the building or flat has had its water services decommissioned and that any water discharge should be carried out in a controlled manner by a competent person
2. Systems should not be used until recommissioned by Aquavent (leaving contact names and numbers)
3. Isolate any electrical supplies to calorifier immersions or electric water heaters
4. Isolate any LPHW secondary pumps feeding any calorifiers
5. Flush all soil/foul pipework with clean water on a weekly basis and record
6. Flush all cold water pipework and outlets on a weekly basis and record
7. Drain down any water storage vessels, including cold water storage tanks and calorifiers
8. Isolate the incoming main, placing a warning notice of the procedures in place between flushing visits
9. Issue weekly flushing report for client to file in the site logbook

### **Recommissioning**

All buildings containing a domestic hot, cold or both domestic water services, which have been unoccupied for a short-term period of 4 to 12 weeks should be recommissioned using as a minimum the following procedures:

1. Survey the system to make sure it is safe to reinstate services
2. Check water storage tanks for internal condition and clean if required
3. Turn on the incoming mains: flush the cold water pipework while checking for any leaks

4. Flush all soil/foul pipework with clean water
5. Check the cold water storage tanks/mains fed calorifier for correct filling
6. Flush the calorifiers and hot water systems and bleed out any air
7. Chemically disinfect the system dosing the incoming main, cold water storage tanks and calorifiers, drawing the chemical through all outlets
8. Reinstate electrical supplies to all water heaters, turn on units and check for temperatures of 60<sup>0</sup>C
9. Reinstate LPHW supplies to calorifiers and check flow and return temperatures to make sure they confirm to standards (60<sup>0</sup>C on the flow and a minimum of 50<sup>0</sup>C or 55<sup>0</sup>C in healthcare on the return)
10. Recalibrate all TMVs to a maximum outlet temperature of 43<sup>0</sup>C (if installed)
11. Remove any warning notices
12. Take a bacteriological sample from several outlets on the system to confirm that the disinfections process has been successful
13. Issue works report, disinfection certificates and sample analysis reports to the client for filing in the site logbook

## **VERY SHORT TERM – LESS THAN 4 WEEKS**

Properties that are to be unoccupied for a period of less than 4 weeks should have the following procedure carried out during the period when not in use:

1. Place notices on all entrances and exits explaining that the building or flat has had its water services decommissioned and that any water discharge should be carried out in a controlled manner by a competent person
2. Systems should not be used until recommissioned by Aquavent (leaving contact names and numbers)
3. Flush all soil/foul pipework with clean water on a weekly basis and record
4. Flush all hot and cold water pipework and outlets on a weekly basis and record
5. Isolate the incoming main, placing a warning notice of the procedures in place between flushing visits
6. Issue weekly flushing report for client to file in the site logbook

**NOTE:** Carry out this process until the building is brought back into use - or if the building is going to be unoccupied for a further extended period follow the appropriate process contained within the procedure.

Properties that are to be unoccupied for a period of less than 4 weeks should have the following procedure carried out immediately prior to the new occupants moving into the property:

1. Survey the system to make sure it is safe to reinstate the services
2. Check water storage tanks for internal condition and clean if required
3. Turn on the incoming mains; flush the cold water pipework while checking for any leaks
4. Flush all soil/foul pipework with clean water