



## WATER QUALITY (INCLUDING LEGIONELLA) POLICY

### AIMS

This guidance is applicable to all employees of and contractors for the School who undertake activities associated with water services and systems. Water systems are considered to include all water plant, pumps, pipes, tanks, valves, showers, chillers and towers.

### OBJECTIVES

The objectives are:

- 1.1 To clearly identify the responsibilities of individuals as appropriate.
- 1.2 To ensure that suitable and sufficient risk assessments are in place where significant risks have been identified, in particular legionella, as follows:
  - (a) water systems incorporating an evaporative condenser;
  - (b) hot and cold water systems;
  - (c) other plant and systems containing water which is likely to exceed 20C and which may release a spray or aerosol during operation or when being maintained.
- 1.3 To ensure that systems are managed and controlled in accordance with the COSHH Regulations and the L8-2013 Approved Code of Practice and HS(G) 274 guidance

### GUIDANCE

2.1 Day to day responsibility for monitoring and ensuring that the systems are being correctly operated lies with the NMS Sites Manager, who has attended a certificated Health and Safety course on Control of Legionella in Domestic Water Systems. He maintains appropriate records of testing and certification.

2.2 The School has appointed a competent consultant / contractor (AEC) to conduct a risk assessment which includes a manual which specifies control regimes. AEC conducts these risk assessments every 2 years.

An example of the areas contained within the manual is included at Appendix 1.

2.3 In areas of the premises where the School is deemed to be responsible, it will:

- a) undertake a water quality risk assessment on all relevant water systems;
- b) the assessment will be updated as appropriate, for example if new equipment is added and as a matter of course reviewed every two years;
- c) the details of any risks will be made available to those persons who may be affected;
- d) copies of the risk assessment will be available for inspection by persons entitled to do so;
- e) if the risk assessment shows that there is a reasonably foreseeable risk, the NMS Sites Manager working with the CEO of NMS will ensure the implementation of safety precautions and control measures. In most cases, this will require a written Water Quality Scheme by a competent person and will involve contractors carrying out maintenance regimes on water systems;

2.4 A Water Quality Log Book will be maintained for each relevant system, available for inspection and will contain:

- (a) the risk assessment findings;
- (b) the written scheme detailing control measures;
- (c) the results of monitoring, inspections, tests or checks completed and the dates;
- (d) details of the water system not in use and control measures taken;

2.5 Where school employees (e.g. maintenance staff) have responsibility for implementing practical control measures, an example list of duties is included at Appendix 2 to this guidance

2.6 the records will be kept for the period for which they remain current and at least 5 years following that period.

2.7 In the event of a positive water sample, the Water Contractor / Consultant will notify the NMS Sites Manager immediately. The notification will cover:

- Details of the sample
- The organism
- Location
- Advice on appropriate remedial measures, such as isolating the building and disinfecting the system.

The Head Teacher will be informed at once, even if no one is ill, and remedial action will be taken at once. The CEO of NMS must be notified at once if anyone becomes ill with legionella, as any outbreak of the disease must be reported to the HSE and the HPA.

## LEGAL REQUIREMENTS AND EDUCATION STANDARDS

References:

A. Handbook for the Inspection of Independent Schools: Part 3: The Regulatory Requirements of Independent Schools ([www.isi.net](http://www.isi.net)).

B. 'Legionnaires' disease: Essential Information for Providers of Residential Accommodation' HSE Guidance, May 2003 ([www.hse.gov.uk](http://www.hse.gov.uk))

C. 'Approved Code of Practice - The Control of Legionella Bacteria in Water Systems (ACOP L8)' HSE, 2013) and HSG 274 guidance ([www.hse.gov.uk](http://www.hse.gov.uk))

D. 'How good is the Drinking Water'? ([www.dwi.gov.uk](http://www.dwi.gov.uk))

E. 'Guidelines for Environmental Design in Schools' DCSF Guidance, 2003([www.gov.uk/df](http://www.gov.uk/df))

F. Additionally, notice has been paid to HSE L8 Guidance paragraphs 65-69 & HSE Microbiological Monitoring Part 2 para 2.119  
<http://www.hse.gov.uk/pubns/books/hsg274.htm>

This policy will be reviewed annually.

Claire Murdoch  
Head Teacher  
September 2023

Bonyo Dimitrov  
Sites Manager  
September 2023

Review approved Deborah Livsey  
NMS CEO  
September 2023

Next annual review date: August 2024

## Appendix 1: WATER SAFETY MANUAL CONTENTS

Maple Walk school has employed AEC, a firm of water safety specialists to prepare a water safety manual for all the School buildings.

The manual includes schematic drawings of:

- All the hot and cold water systems, water tanks, calorifiers, pipe work, taps showers, heating, ventilation, refrigeration and air conditioning plant in all the buildings

The manual then identifies and assesses the main sources of risk in every building, taking account of:

- Water temperature
- Potential for water stagnation in long pipe runs and 'dead legs' or infrequently used taps and showers
- Potential for aerosol formation, especially in showers, drinking water fountains and fire hoses
- Condition of the water throughout the premises
- The use thermostatic mixing valves (in order to avoid scalding) that potentially set a favourable outlet temperature for legionella growth
- Signs of debris in the system, such as rust, sludge or scale that could provide food for growing legionella
- Condition of the pipe work, plant, tanks etc.

### PHYSICAL PREVENTATIVE MEASURES

The water safety manual identifies a series of preventative measures to the physical structure of our buildings that have been taken, or are planned in order to control the risk of legionella at the School:

- 'Point of use' water heaters have been introduced in some new classes.
- All hot pipes and calorifiers/hot water tanks have been insulated.
- Water is heated and stored in the calorifiers/hot water tanks at temperatures above 60 degrees C in order to kill bacteria
- Cold water is stored below 20 degrees C, so that bacteria cannot thrive.

The manual is reviewed and updated annually, or each time that a new measure is introduced.

## Appendix 2: Internal Control Measures

The Sites Manager has been trained in the need for legionella prevention measures. He is tasked with carrying out the following regular water checks (all of which are recorded in the water manual) in order to maintain good water hygiene:

### Taps

- Any cold tap that has not been used within a seven day period is flushed for 2 minutes on a weekly basis (avoiding splashing so as to minimise the creation of an aerosol)
- Any hot water tap that has not been used within a seven day period is similarly flushed for (models with thermostatic valves fitted: at least 5 minutes/ordinary taps: 2 minutes, or until the temperature reaches 60 degrees C) on a weekly basis and before the water is used
- Monthly temperature checks to hot water are conducted by inserting a thermometer in the outflow of the first and last tap of each circulation system for the required period and recording the temperature. We will contact our Water Consultant about the safety implications if the hot water does not reach 50 degrees C after running for 5 minutes.
- Monthly temperature checks are carried out to the first and last cold water taps in order to ensure that they operate at below 20c after running for 2 minutes. We record the temperatures and will contact our Water Consultant about the safety implications if the cold water exceeds 20 degrees C after running for 2 minutes.

### Toilets

- Any toilet that is not used within a seven-day period is flushed each week, and the flushing mechanism on urinals checked.

### Calorifers/ Hot Water Tanks

- The water temperature leaving and returning to the calorifers/ hot water tanks is inspected on a monthly basis.
- The calorifers/hot water tanks are inspected annually.

### Drains

- Drains are disinfected 3 monthly
- Debris is cleared from external drains termly

### Hot Water Systems

- Hot water systems that are shut off for the holidays must be heated to 60 degrees C, and then kept at that temperature for at least one hour in order to kill all bacteria.
- Staff then flush the system before use.

### Cold Water Systems

- All cold water systems that are unused during the holidays are also thoroughly flushed through before use.

## Appendix 3: EXTERNAL CONTROL SERVICES

We employ external contractors to help us to manage water safety in the following areas:

### Heating plant, Air Conditioning and Condensers

- Our air conditioning equipment and our evaporative condensers are serviced annually.
- Our boilers and heating plant are serviced annually and the system is drained.
- The calorifiers/hot water tanks are checked and descaled.
- The heating system is serviced, sludge removed
- Inhibitor chemicals are topped up annually
- The thermostats on taps are checked and repaired/replaced.
- Point of use water heaters are checked and serviced
- Cold water tanks and pumps are inspected

### Drains

- External drains are inspected and jetted annually.
- Cleaning of debris is completed termly

### Water Sampling

Water sampling and analysis is not considered necessary as sufficient measures are in place. No sampling has been identified in our Risk Assessment.

However, an accredited Water Consultant (AEC) would conduct sampling and analysis of our water supplies, if we suspect Legionella, and/or the temperature in certain units has fallen outside of the required range for a period of time.