



**WATER MANAGEMENT  
PROCEDURE**  
For schools within the Excalibur Academies  
Trust

Revision	Status	Date	Title of Reviewer	Purpose/Outcome
1	Approved	Sept 18	Davina Nicholls	
2	Reviewed	30.07.2019	Davina Nicholls	
3	Reviewed	19.04.2022	Davina Nicholls	Review and logo update
4	Localised	25.04.2022	Davina Nicholls	
5	Reviewed and Signed	28.04.23	Lucy Crump	

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### Appendix 1 – Evidence of compliance

- Monthly water temperature checks; sentinal/non-sentinal
- Monthly water heaters checks
- Monthly cold water inlet & storage tank temperature checks
- Flushing
- Descaling
- 6 month water sampling

## **1.0 Flushing of Little Used Water Outlets**

Academies are required to identify any little used water outlets, which is generally defined as any tap or water source (inside and outside) that is not likely to be run for a significant amount of time at least once a week. All water in water systems should flow regularly and not be allowed to stagnate in unused pipework as this creates a significant health risk. To combat this, Academies must flush their little used outlets once a week and keep a formal record of each outlet flushed. There is a specific procedure for flushing hot and cold taps and they are as follows:

1.1 Cold outlets – should be flushed until the water temperature drops to minimum and then for a further minute.

1.2 Hot Outlets – should be flushed until temperature reaches maximum and then for a further minute.

You are not required to check the temperature accurately as part of this procedure. Be careful with hot taps as there could be a scald risk if you test the water temperature with your hand. It should be fairly easy to tell without touching the water when the temperature has reached maximum, and you can always run the tap a little longer just to be sure.

During holiday periods, all taps become little used outlets. Therefore, when coming back into the building after a period of little or no usage it is good practice to flush all taps to remove any stagnant water from the pipes and tanks.

1.3 Weekly Flushing of Water Outlets Form, see Appendix 1

1.4 Termly Flushing of Water Outlets Form, see Appendix 2

## **2.0 Water Temperature Checks**

All Excalibur Academies are required to check the temperature of the water in their systems at specific locations on a routine basis. These locations are as follows:

### **2.1 Cold Water Inlet**

Cold water can be fed either directly from the mains or from a storage tank. It is important to check the temperature of the water coming into the tank at least twice a year, once in the winter and once in the summer to make sure outside factors such as weather do not raise the temperature to an extent as to encourage bacterial growth.

### **2.2 Clarifiers/Water Heaters**

Clarifiers/Water Heaters can be all shapes and sizes, from large industrial units that feed hundreds of taps, to small under the counter units that feed one or two. All need to be tested at the supply pipe to make sure that they are heating water to a temperature that will kill bacteria. Some water heaters have return circuits and these must be tested to make sure the circuit is being kept at a temperature that will deter bacterial growth. See Appendix 3, Check List Form.

### **2.3 Sentinel Outlets**

Sentinel Outlets are technically defined by the HSE as those, which are closest to, and furthest from the water heater that feeds them, therefore their numbers will vary depending on how many water heaters and runs the buildings have. Testing them once a month should identify any drop in temperature in the system before Bacteria has enough time to grow to a dangerous extent. Cold outlets should also be

considered as sentinels in the same manner, i.e. the closest to and furthest from the inlet and/or tank. While cold water systems are not considered to be as susceptible to disease as their hot water counterparts, they should run below a certain temperature and checking of cold water ‘sentinels’ helps to monitor this. See Appendix 4 & 5 for Check List Forms.

## 2.4 Thermostatic Mixer Valves (TMV)

TMVs can be found built into the pipework that supplies certain hot taps. They mix the cold and hot water to produce a temperature warm enough to wash hands in but not hot enough to scald more vulnerable users meaning that the whole system is kept hot and only cooled in a small section of pipework at its point of use. Hot taps with TMVs at sentinel locations require checking where the hot water (and sometimes cold if it is the only tap on the sink) comes into the valve. It is also worth checking the temperature at the tap to make sure the TMV is set correctly, but this is recorded separately.

Please see the following table for target temperatures and methods of measuring them:

## 2.5 Monitoring the Temperature Control Regime

Frequency	Check	Standard to Meet		Notes
		Cold Water	Hot Water	
Monthly	Sentinel Outlets (Non TMV)	The water temperature should be below 20°C after running the water for up to two minutes	The water temperature should be at least 50°C within a minute of running the water	Take this reading from the water coming out of the tap using a probe or infrared (IR) thermometer
Monthly	If fitted, input to TMVs on a sentinel basis	The water temperature should be below 20°C after running the water for up to two minutes	The water temperature should be at least 50°C within a minute of running the water	A surface probe put on the supply pipe from the TMV is best for this, if not use an IR thermometer but you may need to attach masking tape to the copper as they can struggle with the surface. You will only need to check the cold input if there is no cold tap at the sink.
Monthly	If fitted, output from TMVs on a sentinel basis	N/A	N/A	Take this reading from the water coming out of the tap using a probe or infrared (IR) thermometer
Monthly	Water leaving and returning to clarifiers	N/A	Outgoing water should be at least 60°C, return at least 50°C	Outgoing (supply) water can be measured close to the clarifiers but measure incoming

				(return) water far enough away from the clarifiers to avoid ambient temperature affecting the reading
Six Monthly	Incoming cold water inlet (at least once in the winter and once in summer)	The water should preferably be below 20°C at all times	N/A	Take temperature at ball valve inlet with probe or IR thermometer. (Legal limit 25°C, but if above 20°C the water supplier should be informed.)
Annually	Representative number of taps on a rotational basis	The water temperature should be below 20°C after running the water for up to two minutes	The water temperature should be at least 50°C within a minute of running the water	Take this temperature as per sentinel taps or TMVs

2.6 Cold Water Inlet and Storage Tank Temperature Check Form, see Appendix 6.

2.7 Water Temperature Report Check Form, see Appendix 7.

### 3.0 Responsibilities

Termly Flushing of Little Used Water Outlets is the responsibility of the individual school, a person should be delegated this task and a schedule set for when this should happen.

Weekly Flushing of Little Used Water Outlets is the responsibility of the individual school, a person should be delegated this task and a schedule set for when this should happen.

Monthly Sentinel Tap Temperature Checks, these checks will be completed by **Ergo Facilities Management for Primary Schools within the Excalibur Academies Trust**

Monthly Non Sentinel Tap Temperature Checks, these checks will be completed by **Ergo Facilities Management for Primary Schools within the Excalibur Academies Trust**

Monthly Water Heater Temperature Checks, these checks will be completed by **Ergo Facilities Management for Primary Schools within the Excalibur Academies Trust**

6 Monthly Cold Water Inlet and Storage Tank Temperature Checks, these checks will be completed by **Ergo Facilities Management for Primary Schools within the Excalibur Academies Trust**

Monthly Temperature Check Report, this will be completed by the RP(s) for the monthly checks.

Legionella Risk Assessments (max. 5 yearly, with annual reviews) will be undertaken by a competent contractor, with recommendations being implemented within a timely manner.

Head of School: Lucy Crump

A handwritten signature in black ink that reads "Lucy Crump". The signature is written in a cursive style with a long horizontal flourish underneath the name.

Academy Ogbourne CofE Primary School

Date 28.04.2023

## Appendix I

Ergo Facilities Management Ltd conduct all our water management checks, evidence is available monthly on Egnyte. See below for examples:

PPM SCHEDULE 2021/22  
Client: Ogbourne Primary School  
Site: Ogbourne

2021-2022	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
<b>ELECTRICAL</b>												
EMERGENCY LIGHT FLICK TEST												
LIGHTING CHECK												
<b>WATER</b>												
WATER TEMPERATURES - SENTINEL TAPS												
WATER TEMPERATURES - NON SENTINEL TAPS												
COLD WATER INLET & STORAGE TANK TEMPERATURE												
WATER HEATERS												
PLUMBING CHECK												
FLUSHING												
DESCALING												
6-MONTHLY WATER SAMPLING												
<b>FIRE AND SECURITY</b>												
CENTRAL FIRE ALARM CHECK												
ACCESS CONTROL												
FIRE EXTINGUISHERS / BLANKETS (Visual check only)												
WALKWAY AND FIRE ROUTE CHECK												
FIRE SHUTTER CHECK												
FIRE DOORS - HOUSEKEEPING												
FIRE DOORS - FULL CHECK												


<b>OTHERS</b>												
DOOR RELEASE BUTTONS												
LADDER INSPECTION (Visual check only)												
OUTSIDE PLAY EQUIPMENT - (Visual check only)												
EXTRACT GRILLE												
<b>HANDYMAN DUTIES</b>												
HANDYMAN DUTIES AS PER TABS HELPDESK												
KEY:												

KEY: ■ = Incomplete    ■ = Complete


2021/22 SENTINEL TAPS											
POINT	BLOCK	ROOM	LOCATION	TYPE (HOT, HOT TMV, COLD)	SUPPLIED FROM	POSITION ON RUN	HOT TEMP. AT OUTLET/TMC SUPPLY $\geq 50^{\circ}\text{C}$	COLD TEM. AT OUTLET/TMV SUPPLY $< 20^{\circ}\text{C}$	TEMP. AT TMV OUTLET ( $41^{\circ}\text{C} \pm 2^{\circ}\text{C}$ )	ACTION REQUIRED YES/NO	DESCALED YES/NO
1	Main	Old Staff Toilet/Store (06)	Wash hand basin	Cold	Mains	Closest		10.7		No	No
2	Main	Poplars Classroom(18)	Sink on wall left of main door as you enter	Hot TMV	Water Heater 1	Closest			42.0	No	No
3	Main	Staffroom (18)	Sink by door to classroom	Hot	Water Heater 1	Furthest	60.1			No	No
4	Main	Acorn Classroom (16)	Sink in far corner	Hot TMV	Water Heater 2	Only outlet			40.8	No	No
5	Main	Oaks Classroom (14)	Sink on fa wall	Hot TMV	Combi Boiler 5	Furthest			42.0	No	No
6	Main	Staff Toilet (09)	Wash hand basin	Hot TMV	Water Heater 3	Furthest			41.2	No	No
7	Main	Disabled Toilet (10A)	Wash hand basin	Hot TMV TMV is inside tap	Water Heater 3	Closest			42.3	No	No
8	Main	Main Girls Toilet (11)	Wash hand basin far RHS	Hot TMV	Water Heater 4	Closest			42.2	No	No
9	Main	Main Girls Toilet (11)	Wash hand basin far RHS	Cold	Tank	Closest		10.8		No	No
10	Main	Main Boys Toilet (12)	Wash hand basin far RHS	Hot TMV	Water Heater 4	Furthest			42.5	No	No
11	Main	Main Boys Toilet (12)	Wash hand basin middle	Cold	Tank	Furthest		10.7		No	No
12	Main	Main Kitchen (21)	Main sink on exterior wall	Hot	Combi Boiler 5	Closest	54.7	10.8		No	No
13	Mobile	Right Hand Toilet (03)	Wash hand basin	Hot TMV TMV inside water heater	Water Heater 6	Closest			39.9	No	No
14	Mobile	Willows Classroom	Only sink	Cold	Mains	Furthest		10.7		No	No

2021/22 NON SENTINEL TAPS											
POINT	BLOCK	ROOM	LOCATION	TYPE (HOT, HOT TMV, COLD)	SUPPLIED FROM	HOT TEMP. AT OUTLET/TMC SUPPLY	COLD TEM. AT OUTLET/TMV SUPPLY	TEMP. AT TMV OUTLET ( $41^{\circ}\text{C} \pm 2^{\circ}\text{C}$ )	ACTION REQUIRED YES/NO	DESCALED YES/NO	
1	Main	Staffroom (18A)	Only sink	Cold	Mains		10.7		No	No	
2	Main	Poplars Classroom (18)	Only sink	Cold	Mains		10.8		No	No	
3	Main	Acorns Classroom	Only sink	Cold	Mains		10.5		No	No	
4	Main	Oaks Classroom (14)	Only sink	Cold	Mains		10.6		No	No	
5	Main	Staff Toilet (09)	Wash hand basin	Cold	Mains		10.8		No	No	
6	Main	Disabled Toilet (10A)	Wash hand basin	Cold	Mains		10.4		No	No	
7	Mobile	Girls Toilet (11)	Left wash hand basin	Hot TMV	WH4			42.4	No	No	
8	Mobile	Girls Toilet (11)	Left wash hand basin	Cold	Mains		10.7		No	No	
9	Mobile	Girls Toilet (11)	Second from left wash hand basin	Hot TMV	WH4			42.6	No	No	
10	Main	Girls Toilet (11)	Second from left wash hand basin	Cold	Tank		10.6		No	No	
11	Main	Girls Toilet (11)	Second from right wash hand basin	Hot TMV	WH4			42.4	No	No	



12	Main	Girls Toilet (11)	Second from right wash hand basin	Cold	Tank		10.5		No	No
13	Main	Boys Toilet (12)	Right wash hand basin	Cold	Mains		10.8		No	No
14	Main	Boys Toilet (12)	Middle wash hand basin	Hot TMV	WH4			42.6	No	No
15	Main	Boys Toilet (12)	Left wash hand basin	Hot TMV	WH4			42.6	No	No
16	Main	Boys Toilet (12)	Left wash hand basin	Cold	Tank		10.8		No	No
17	Main	Kitchen (21)	Wash hand basin	Hot	WH5	52.1			No	No
18	Main	Kitchen (21)	Wash hand basin	Cold	Mains		11.0		No	No
19	Main	Playground	Outside tapby Entrance/Cloakroom (04)	Cold	Mains		10.2		No	No
20	Mobile	Left Hand Toilet (02)	NO LONGER IN PLACE		NO LONGER IN PLACE			X	No	No
21	Mobile	Right hand toilet (03)	Wash hand basin	Cold	Mains		10.5		No	No
22	Mobile	Willows Classroom (04)	Only sink	Hot TMV	WH6			41.6	No	No
DATE: 6/4/2022						ENGINEERS NAME & SIGNATURE: C. Purcell 				

Water Heater Checks 2021/22  
Client: Ogbourne Primary School  
Site: Ogbourne

2021/22 WATER HEATERS									
POINT	BLOCK	ROOM	LOCATION	SUPPLYING	TARGET TEMP. (FLOW)	FLOW TEMPERATURES	RETURN TEMPERATURE (IF APPLICABLE)	ACTION REQUIRED YES/NO	
1	Main	Poplars Classroom (18)	Under sink	Classroom (18) and Staffroom (18A)	°C	41.5	N/A	No	
2	Main	Acorns Classroom (16)	In boxing to right of sink	Sink in room	°C	42.4	N/A	No	
3	Main	Disabled Toilet (10A)	Left hand wall	Disabled toilet (10A) and Staff toilet (09)	°C	43.0	N/A	No	
4	Main	Main Girls Toilet (11)	Far left hand corner on wall	Main girls toilet (11) and main boys toilet (12)	°C	42.1	N/A	No	
5	Main	Hall Cupboard (23)	Left hand wall	Main Kitch (21) and Classroom (14)	°C	60.4	N/A	No	
6	Mobile	Toilet (03)	Right hand wall	Toilet (03) and toilet (04) and sink in classroom (04)	°C	42.5	N/A	No	
DATE: 9/3/2022						ENGINEERS NAME & SIGNATURE: C. Purcell 			

PLEASE NOTE: where temperatures are found to be within the growth range of legionella, recorded temperatures are the temperature after adjustments have been made.

**Cold Water Inlet Storage Tank  
Temperature Check  
Client: Ogbourne Primary School  
Site: Ogbourne**

COLD WATER INLET LOCATION	Ball valve in tank				
TEST POINT LOCATION	Ball valve in tank				
OLD WATER STORAGE TANK LOCATION	Above external plant room				
INLET 1	SUMMER/WINTER?	COLD WATER INLET TEMP.	TARGET TEMP.	COLD WATER STORAGE TANK TEMP.	TARGET TEMP.
	April	9.8	20°C	10.2	20°C
INLET TEMP. TESTED OK?		ACTION REQUIRED			
Ok		None			
TANK TEMP. TESTED OK?		ACTION REQUIRED			
Ok		None			
DATE: 6/4/2022		ENGINEERS NAME & SIGNATURE: C. Purcell			

**DOMESTIC WATER DISTRIBUTION SERVICES**

**WATER STORAGE CISTERN – ANNUAL INSPECTION**

Name of person with task responsibility chris temple  
 Signature Date: 18.01.22

LOCATION.	1				
1. Make-Up Temperature (20°C Max)	6				
2. Cistern Temperature (20°C Max)	7				
3. Cistern lid close fitting and secure (Y/N)	Y				
4. Cistern lid Vent in good condition (Y/N)	Y				
5. Overflow/warning pipe screens fitted and secure (Y/N)	Y				
6. Corrosion Level (0-5) Refer to key below	1				
7. Sediment Level (0-5) Refer to key below	1				
8. Is cistern free from scale and bio-film (Y/N)	Y				
9. Is cistern lining in good repair (Y, N, NA)	Y				
10. Is cistern non-stagnant	Y				
11 Cistern insulation in good condition (Y/N)	Y				
12 Cistern labelling satisfactory(Y/N) (Capacity, services supplied, make-up source asset No)	N				
13. (Drop Test) < 1 days capacity(Y/N)					
NOTES:					
Water Storage Tank Number 1, Location	Front of school above bin store				
Water Storage Tank Number 2, Location					
Water Storage Tank Number 3, Location					
Water Storage Tank Number 4, Location					
<b>SEDIMENT LEVELS</b> 0 – NEW TANK OR RECENTLY CLEANED 1 – NO SIGNS OF SEDIMENT 2 – MINIMAL SIGNS OF SEDIMENT 3 – MEDIUM SEDIMENT – NO ACTION NECESSARY 4 – HIGH SEDIMENT – CLEAN WITHIN 12 MONTHS 5 – SEVERE SEDIMENT – CLEAN WITHIN 6 MONTHS			<b>CORROSION LEVELS</b> 0 – NEW TANK/RECENTLY PAINTED 1 – NO SIGNS OF CORROSION 2 – SLIGHT CORROSION – ACT WITHIN 2 YEARS 3 – MEDIUM CORROSION – ACT WITHIN 1 YEAR 4 – SEVERE CORROSION – ACT WITHIN 8 MONTHS 5 – SEVERE CORROSION – TANK REPLACEMENT REQUIRED		

**THE LOG BOOK REMEDIAL ACTION SECTION MUST BE COMPLETED IF ANY FAULTS ARE NOTED.**

### Flushing of Little Used Outlets

WEEKLY - Flush through all outlets in unoccupied areas and little used outlets. Cold outlets should be flushed until the water temperature drops to minimum. Hot Outlets should be flushed until temperature reaches maximum and then for a further minute.

Academy Name		Dabourne Primary School																																																			
Outlet Location		January			February				March				April			May					June			July			August			September			October			November			December														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52
20 Outside tap	Date test performed	8/15	2/23	1/6	2/5	6/13																																															
	Signature	[Handwritten signatures]																																																			
		[Handwritten checkmarks]																																																			
21 Outside tap	Date test performed	2/22	5/14	2/5	7/12	5/13	12/13																																														
	Signature	[Handwritten signatures]																																																			
		[Handwritten checkmarks]																																																			
22 Outside tap	Date test performed	5/1	2/23	3/11	1/17	2/28	11/22	2/28	11/23	3/13																																											
	Signature	[Handwritten signatures]																																																			
		[Handwritten checkmarks]																																																			
23 outside tap	Date test performed																																																				
	Signature	[Handwritten signature]																																																			
		[Handwritten checkmarks]																																																			

Jan - Mar '23 - ETO  
 isolated outside tap  
 due to leak in pipe.  
 one in third arm in 14-7