Site Water Management Logbook

Site	
Address 1	
Address 2	
Town / City	
Post Code	

Vector Compliance Ltd
Vector House, 45 Collwyn Road, Bridgend, CF33 6AL
Tel: 01656 746860
Email: hello@vector-compliance.co.uk | web: www.vector-compliance.co.uk

Contents

Site Details & Nominated Authorities

Client Details

Client Name: _____
Address 1: _____
Address 2: _____
Post Code: _____
Tel No: _____

Site Details

Site Name: _____
Address 1: _____
Address 2: _____
Post Code: _____
Tel No: _____

Water Treatment Contractor

Vector Compliance Ltd
Vector House
45 Collwyn Road
Bridgend
CF33 6AL

Leigh Wallis (Account Manager)

Tel: 01656 746860

E-mail: leigh@vector-compliance.co.uk

Nominated Authorities

		Name	Position	Tel No.	Legionella Awareness Training Undertaken Yes / No
Statutory Site Duty Holder					
Nominated Responsible Person					
Deputy Nominated Responsible Person					
Operational Staff See previous page; list all relevant	**A**				
	B				
	C				
	D				
Service Providers See previous page; list all relevant	**A**		Risk Assessors		
	B		Water Treatment Company		
	C				
	D				

Section 7

Weekly Task Records

Service	Task	Frequency
Little Used Outlets	Consideration should be given to removing infrequently used showers, taps and any associated equipment that uses water. If removed, any redundant supply pipework should be cut back as far as possible to a common supply (eg to the recirculating pipework or the pipework supplying a more frequently used upstream fitting) but preferably by removing the feeding 'T'. Infrequently used equipment within a water system (ie not used for a period equal to or greater than seven days) should be included on the flushing regime. Flush the outlets until the temperature at the outlet stabilises and is comparable to supply water and purge to drain regularly use the outlets to minimise the risk from microbial growth in the peripheral parts of the water system, sustain and log this procedure once started.	Weekly Twice Weekly (Healthcare)

Weekly / Twice Weekly Flushing Record

****All outlets (inc. showers) require weekly flushing if not in regular use. ****
Flush each outlet for 2-3 minutes; take care where aerosol is created.

**** HWS circulating pumps to be changed over (where fitted) on a weekly basis. ****

Date	Low Use Outlet Location(s)	Signature

Weekly / Twice Weekly Flushing Record

Date	Low Use Outlet Location(s)	Signature

Section 8

Monthly Task Records

Service	Task	Frequency
Hot Water Services	Take temperatures at sentinel points (nearest outlet, furthest outlet and long branches to outlets) to confirm they are at a minimum of 50°C within one minute (55°C in healthcare). Sentinel outlets should be marked on the schematic for ease of identification: Ⓢ	Monthly
	Check calorifier flow temperatures (thermostat settings should modulate as close to 60 °C as practicable without going below 60 °C) Check calorifier return temperatures (not below 50°C, 55°C in healthcare).	Monthly
Cold Water Services	Check temperatures at sentinel taps (typically those nearest to and furthest from the cold tank, but may also include other key locations on long branches to zones or floor levels). These outlets should be below 20 °C within two minutes of running the cold tap. To identify any local heat gain, which might not be apparent after one minute, observe the thermometer reading during flushing Sentinel outlets should be marked on the schematic for ease of identification: Ⓢ	Monthly
Hot & Cold Water Services	Check the level of Chlorine Dioxide in the water at the sentinels is between 0.1mgl and 0.5mgl	Monthly
Cold Water Services	Check the Total Oxidant level at the nearest outlet to the generator is not more than 0.5mgl	Monthly
POU water heaters (no greater than 15 litres)	Check water temperatures to confirm the heater operates at 50–60 °C or check the installation has a high turnover	Monthly to Six Monthly
Expansion Vessels	Where practical, flush through and purge to drain	Monthly in Care Settings Six Monthly all Other Buildings

Temperature Monitoring Report

Vector Compliance
Vector House
45 Collwyn Road
Bridgend
CF33 6AL
Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

Temperature Monitoring Report

Vector Compliance
Vector House
45 Collwyn Road
Bridgend
CF33 6AL
Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

Temperature Monitoring Report

Vector Compliance
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Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

Temperature Monitoring Report

Vector Compliance
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Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

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Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

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Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

Temperature Monitoring Report

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Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

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Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

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Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

Temperature Monitoring Report

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Vector House
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Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

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Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

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Tel: 01656 746860

Site: ..... Date: .....

Outlet Location	Sentinel?		Hot >50°C	Mix	Cold <20°C	Tick Box if Non Compliant (✓)	Comments
	Hot	Cold					
No.1 Calorifier Flow							
No.1 Calorifier Return							
No.2 Calorifier Flow							
No.2 Calorifier Return							

Non-Compliance Found? (List Below)

Comments / Notes:

Time: Sheet of

Name: ..... Signature: .....

Section 9

Quarterly Task Records

Service	Task	Frequency
Showers and Spray Taps	Dismantle, clean and descale removable parts, heads, inserts and hoses where fitted	Quarterly or as indicated by the rate of fouling or other risk factors, eg areas with high risk patients

Shower Cleaning Report

Vector Compliance
Vector House
45 Collwyn Road
Bridgend
CF33 6AL
Tel: 01656 746860

Site: ..... Year: .....

Showerheads, hoses, and spray inserts to be cleaned, de-scaled and disinfected at least every 3 months (quarterly). Use a chlorine-based solution for the disinfection, rinse with clean water after soaking for 1-hour (time dependent on solution strength).

Location of Showerhead	Jan/Feb/Mar		Apr/May/Jun		Jul/Aug/Sep		Oct/Nov/Dec	
	Initial	Date	Initial	Date	Initial	Date	Initial	Date

Shower Cleaning Report

Vector Compliance
Vector House
45 Collwyn Road
Bridgend
CF33 6AL
Tel: 01656 746860

Site: ..... Year: .....

Showerheads, hoses, and spray inserts to be cleaned, de-scaled and disinfected at least every 3 months (quarterly). Use a chlorine-based solution for the disinfection, rinse with clean water after soaking for 1-hour (time dependent on solution strength).

Location of Showerhead	Jan/Feb/Mar		Apr/May/Jun		Jul/Aug/Sep		Oct/Nov/Dec	
	Initial	Date	Initial	Date	Initial	Date	Initial	Date

Shower Cleaning Report

Vector Compliance
Vector House
45 Collwyn Road
Bridgend
CF33 6AL
Tel: 01656 746860

Site: ..... Year: .....

Showerheads, hoses, and spray inserts to be cleaned, de-scaled and disinfected at least every 3 months (quarterly). Use a chlorine-based solution for the disinfection, rinse with clean water after soaking for 1-hour (time dependent on solution strength).

Location of Showerhead	Jan/Feb/Mar		Apr/May/Jun		Jul/Aug/Sep		Oct/Nov/Dec	
	Initial	Date	Initial	Date	Initial	Date	Initial	Date

Shower Cleaning Report

Vector Compliance
Vector House
45 Collwyn Road
Bridgend
CF33 6AL
Tel: 01656 746860

Site: ..... Year: .....

Showerheads, hoses, and spray inserts to be cleaned, de-scaled and disinfected at least every 3 months (quarterly). Use a chlorine-based solution for the disinfection, rinse with clean water after soaking for 1-hour (time dependent on solution strength).

Location of Showerhead	Jan/Feb/Mar		Apr/May/Jun		Jul/Aug/Sep		Oct/Nov/Dec	
	Initial	Date	Initial	Date	Initial	Date	Initial	Date

Section 10

Bi-annual Task Records

Service	Task	Frequency
Expansion Vessels	Where practical, flush through and purge to drain	Monthly in Care Settings 6 Monthly all Other Buildings
Legionella Sampling	**Suggested Sampling Locations:** Nearest & Furthest Sentinels, Cold water Storage Tanks & Calorifier Bases	Six monthly

Section 11

Annual Task Records

Service	Task	Frequency
All Systems	Ensure Operating & Maintenance schedules of the hot & cold water systems are readily available and up to date with named and dated actions throughout the previous year. Logbook audit.	Annually
Calorifiers	Inspect calorifier internally by removing the inspection hatch or using a boroscope and clean by draining the vessel. The frequency of inspection and cleaning should be subject to the findings and increased or decreased based on conditions recorded.	Annually
	Where there is no inspection hatch, purge any debris in the base of the calorifier to a suitable drain. Collect the initial flush from the base of hot water heaters to inspect clarity, quantity of debris, and temperature.	Annually
Hot Water Services	All HWS systems: take temperatures at a representative selection of other points (intermediate outlets of single pipe systems and tertiary loops in circulating systems) to confirm they are at a minimum of 50 °C to create a temperature profile of the whole system over a defined time period	Representative selection of other sentinel outlets considered on a rotational basis to ensure the whole system is reaching satisfactory temperatures for legionella control
Combination Water Heaters	Inspect the integral cold water header tanks as part of the cold water storage tank inspection regime, clean and disinfect as necessary. If evidence shows that the unit regularly overflows hot water into the integral cold water header tank, instigate a temperature monitoring regime to determine the frequency and take precautionary measures as determined by the findings of this monitoring regime.	Annually

Continued next page….

Service	Task	Frequency
Cold Water Tanks	Inspect cold water storage tanks and carry out remedial work where necessary	Annually
	Check the tank water temperature remote from the ball valve and the incoming mains temperature. Record the maximum temperatures of the stored and supply water recorded by fixed maximum/minimum thermometers where fitted.	Annually
	Disinfect CWS tanks and services in accordance with L8, BS EN 806 & DWI (Drinking Water Inspectorate) Guidance Document	Annually
Cold Water Services	Take temperatures at a representative selection of other points to confirm they are below 20 °C to create a temperature profile of the whole system over a defined time period. Peak temperatures or any temperatures that are slow to fall should be an indicator of a localised problem.	Annually
	Check thermal insulation to ensure it is intact and consider weatherproofing where components are exposed to the outdoor environment.	Annually
TMV's	Risk assess whether the TMV fitting is required, and if not, remove where needed, inspect, clean, descale and disinfect any strainers or filters associated with TMVs to maintain protection against scald risk (fail-safe check), TMVs require regular routine maintenance carried out by competent persons in accordance with the manufacturer's instructions.	Annually or on a frequency defined by the risk assessment, taking account of any manufacturer's recommendations
Strainers	Dismantle, clean and (de-scale if necessary). Remove all debris / particulate matter which can provide nutrients.	Annually

Section 12

Remedial Works

Record all plumbing works completed by in-house maintenance or external contractors such as:

- **Removal of deadlegs & blind ends**
- **Replacement of TMV's, Showerheads, Flexi Hoses etc**
- **Addition of new assets**

****All plumbing contractor worksheets should be kept here***

Remedial Works

Date	Works Completed	Location	Completed by *(if contractor, request worksheet)*

Remedial Works

Date	Works Completed	Location	Completed by (if contractor, request worksheet)

Section 13

Sample Results

UKAS Certificate of Analysis

Permitted Bacterial Levels

Health Care Premises – Domestic Water Services

Actions to be taken following legionella sampling in hot and cold-water systems in healthcare premises with susceptible patients

Legionella bacteria (cfu/l)	Recommended actions
Not detected or up to 100 cfu/l	In healthcare, the primary concern is protecting susceptible patients, so any detection of legionella should be investigated and, if necessary, the system resampled to aid interpretation of the results in line with the monitoring strategy and risk assessment
>100 cfu/l and up to 1,000 cfu/l	Either: • if the minority of samples are positive, the system should be resampled. If similar results are found again, review the control measures and risk assessment to identify any remedial actions necessary or • if the majority of samples are positive, the system may be colonised, albeit at a low level. An immediate review of control measures and a risk assessment should be carried out to identify any other remedial action required. Disinfection of the system should be considered
>1,000 cfu/l	The system should be resampled, and an immediate review of the control measures and risk assessment carried out to identify any remedial actions, including possible disinfection of the system. Retesting should take place a few days after disinfection and at frequent intervals thereafter until a satisfactory level of control is achieved
Microbiological Result	**Action**
TVC (Total Viable Count)	TVC @ 22°C - less than 1,000 cfu / ml TVC @ 37°C - less than 100 cfu / ml

The following Bacteria should be absent:

Total Coliform, Faecal Coliform, E Coli, Faecal Streptococci, Sulphite Reducing Clostridia

General Domestic Water Services

Any water system outside of Healthcare setting

Legionella bacteria (cfu/l)	Recommended actions
>100 cfu/l and up to 1,000	Either: • if the minority of samples are positive, the system should be resampled. If similar results are found again, a review of the control measures and risk assessment should be carried out to identify any remedial actions necessary or • if the majority of samples are positive, the system may be colonised, albeit at a low level. An immediate review of the control measures and risk assessment should be carried out to identify any other remedial action required. Disinfection of the system should be considered
>1000 cfu/l	The system should be resampled, and an immediate review of the control measures and risk assessment carried out to identify any remedial actions, including possible disinfection of the system. Retesting should take place a few days after disinfection and at frequent intervals afterwards until a satisfactory level of control is achieved.
Microbiological Result	**Action**
TVC (Total Viable Count)	TVC @ 22°C - less than 1,000 cfu / ml TVC @ 37°C - less than 100 cfu / ml

The following Bacteria should be absent:

Total Coliform, Faecal Coliform, E Coli, Faecal Streptococci, Sulphite Reducing Clostridia

Spa Pools

Aerobic colony count (or total viable count) TVC

Microbiological Result	Action
Aerobic or total colony count at 37 °C >10 cfu/ml	If the colony count is >10 cfu/ml and is the only unsatisfactory microbiological result, and residual disinfectant and pH values are within recommended ranges, the water should be resampled and retested
Aerobic or total colony count at 37 °C >100 cfu/ml	• Check treatment system and manual testing results records immediately • Implement any remedial action as required • Resample and retest

Coliforms and E coli

Microbiological Result	Action
Coliforms and E coli present >1 cfu/100 ml	Occasional positive samples may occur if the spa pool has been sampled immediately after a contamination event before the disinfection system had time to be effective. A repeat sample should be taken whenever coliforms have been detected
Coliforms ≤10 cfu/100 ml	A coliform count of up to 10 cfu/100 ml is acceptable provided that the residual disinfectant and pH values are within recommended ranges, there are no E coli present and the aerobic colony count is <10 ml
Coliforms present on repeat test or if >10 cfu/100 ml at any time	• Indicates that disinfectant regime is ineffective • Close spa pool • Shock dose the spa pool with 50 mg/l free chlorine circulating for 1 hour or equivalent • Drain, clean and disinfect • Review control measures and risk assessment • Carry out remedial actions identified • Refill, disinfect and adjust pH to recommended range; and retest next day and 2-4 weeks later

Pseudomonas aeruginosa

Microbiological Result	Action
P aeruginosa present 10–50 cfu/100 ml with or without raised coliform, *E coli* or colony count	• Take a repeat sample for testing • Scrub walls of balance tank, if any, and cleanse the filter • Chlorinate to 10 mg/l free chlorine, circulate and flush • If repeat sample contains *P aeruginosa* the filtration and disinfection processes should be examined to determine where the organism has been multiplying
P aeruginosa present >50 cfu/100 ml with or without raised coliform, E coli or colony count	• *Close spa pool* • *Shock dose the spa pool and balance tank, if any, with 50 mg/l free chlorine circulating for 1 hour or equivalent and flush through* • *Drain, clean and disinfect* • *Review control measures and risk assessment* • *Carry out remedial actions identified* • *Refill, disinfect and adjust pH to recommended range; retest next* • *day and 2–4 weeks later*

Legionella

Microbiological Result	Action
<100 cfu/l	Under control but maintain control measures
>100 cfu/l and up to 1,000 cfu/l	• Resample and keep under review • Review control measures and risk assessment • Carry out remedial actions identified as necessary
>1,000 cfu/l	• Immediate closure of pool and exclude public from pool area • Shut down spa pool • Shock dose the spa pool with 50 mg/l free chlorine circulating for 1 hour or equivalent • Drain, clean and disinfect • Review control measures and risk assessment • Carry out remedial actions identified • Refill and retest next day and 2–4 • weeks later

Section 20

Contractor LCA Certificate