

Designing a Compliant Legionella Monitoring System

A practical guide to deciding whether your current monitoring approach is defensible

Why this briefing exists

Legionella compliance is often discussed in terms of checks, visits, and reports. What's discussed far less is whether the monitoring regime itself has ever been properly designed.

Many systems evolve over time. Buildings are altered, usage patterns change, and monitoring continues largely as it always has. Activity is recorded, but intent is rarely revisited.

This briefing sets out a simple, defensible way to think about Legionella monitoring — from first principles through to financial reality — so you can decide whether your current approach still makes sense.

The non-negotiable starting point

Everything starts with an accurate schematic drawing of the water system.

If the schematic is wrong or out of date:

- monitoring points are guessed rather than justified
- data (manual or automated) becomes misleading
- explaining decisions becomes difficult when systems change

This applies regardless of how monitoring is carried out. Technology does not compensate for poor understanding of the system.

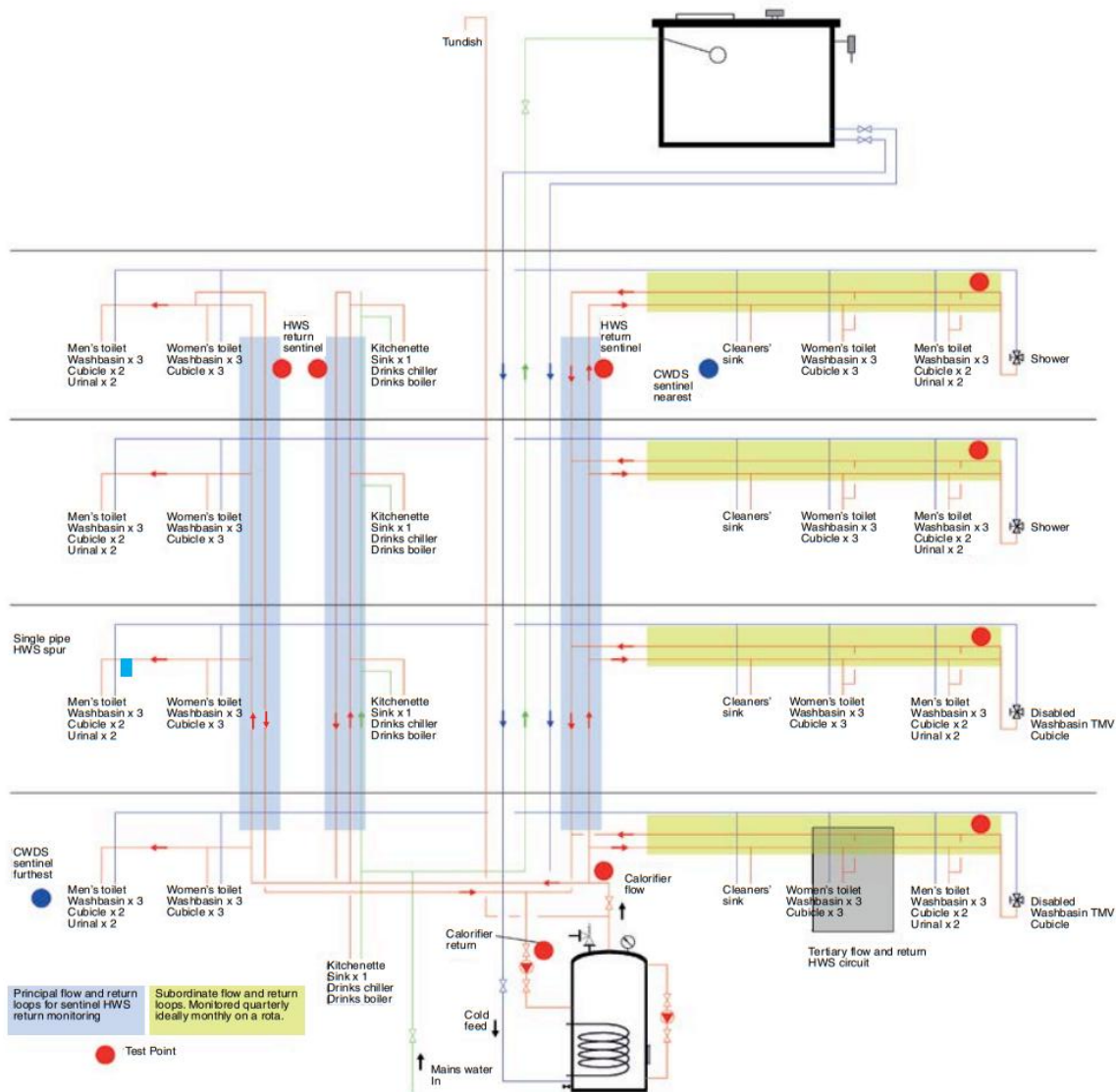
An accurate schematic is the reference point that links: the physical system, the risk assessment, and the monitoring regime.

What compliance actually expects

UK guidance (ACoP L8 and HSG 274 Part 2) is clear about where control must be demonstrated.

Using the schematic example in Appendix 4 of HSG 274 Part 2, this includes: incoming supplies, hot water generation, return loops, sentinel outlets, and higher-risk or low-use areas.

When these expectations are mapped properly onto an accurate schematic, the number of monitoring points required stops being subjective. **It becomes logical.**



From drawing to design

Once the schematic is correct and expectations are understood, monitoring can be designed rather than inherited.

At this point, you should be able to explain:

- why each monitoring point exists
- what part of the system it protects
- how it links back to risk

That is the difference between recording activity and managing risk.

Cost and ROI — before the conversation

If you understand how many monitoring points are genuinely required, you can calculate cost before speaking to anyone.

Not an estimate. Not a sales range. A real number.

Cost alone does not determine whether change is justified. The final step is to compare:

- current manual monitoring costs
- the cost of improved monitoring
- the cost of disruption when issues arise

If this does not show a saving, then change may not be appropriate — and that is a valid outcome.

<https://www.lcsltduk.com/legionella-watch-system-cost-calculator>

<https://www.lcsltduk.com/legionella-watch-return-on-investment-calculator>

The underlying principle

Legionella compliance is not something you complete and move on from. It is a continuous journey that must keep pace with how buildings change.

This briefing exists to help you decide — confidently and proportionately — how that journey should be managed.

<https://www.lcsltduk.com/>