The Journal of the Water Management Society

THE WATER MANAGEMENT SOCIETY

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Continuous Legionella Challenges in a Healthcare Setting

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- Controlling Legionnaires disease in Domestic Hot Water (DHW) Systems
- The Three Cs in Water Management - Hot and Cold Water Systems
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Council of Management and Officers

The Water Management Society is governed by a Council of Management which has the responsibility for the day-to-day supervision of operational and financial control. It meets bimonthly, and the executive officers meet more frequently.

There is continuing cooperation and liaison between the Council and the Secretariat.

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All Full members of the Society can apply for election to the Council. Elections are held at the AGM annually, and final selection is made by ballot if necessary. Additional members may be co-opted. It only remains to be pointed out that the responsibilities and obligations of Council members require a clear and definite commitment in terms of time and effort.

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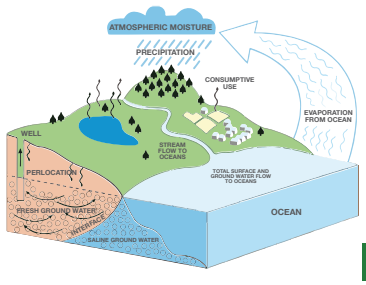

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Water Management Society
6, Sir Robert Peel Mill, Hoye Walk, Fazeley,
Tamworth, Staffordshire. B78 3QD

Telephone: 01827 289 558 | Fax: 01827 250 408

Email: admin@wmsoc.org.uk

www.wmsoc.org.uk | www.waterline.digital

@WMSoc1 | @WMSoc_Waterline

THE THREE Cs IN WATER MANAGEMENT – HOT AND COLD-WATER SYSTEMS

By Tomek Olesinski, Director, TWO Facilities Management Ltd (www.twofm.co.uk)

When considering water in light of the national H&S regs such as ACoP L8, HSG 274 or HTM 04-01 and other related, I often wonder if there is a robust and applicable way or formula to achieve the optimum results when working on water quality and water systems either in commercial or medical environments.

Based on my experience and water industry publications I have read, I am tempted to choose a path which should incorporate both basic and robust elements of generic risk management.

I would call these elements the 'three Cs': competency – control – consistency.

1. Competency
It is important that whoever has been appointed to be responsible for water management is a trained, assessed and experienced individual. I have come across so called 'Responsible Persons' (RPs) appointed by management whose knowledge of water-risk related issues and current water industry legislation could not be described as 'adequate'. This is not fair on either the business or the appointed individuals in question.

I always compare this with being on a plane – the very fact that I have been a passenger on a plane does not make me the pilot. For that I need training (and lots of it), personal aptitude, experience and to have passed many exams and assessments of my knowledge and skill.

The very fact that the appointment has been made because the individual may have been part of an FM team in the past, or has even had some dealings with water installations, does not necessarily mean that he/she possesses the necessary knowledge and experience in the control of legionella. There is much more to it than that.

I have recently come across FM managers who have been appointed to lead water management programs who thought that the statutory revision of the LRA should be carried out *every* two years (as per ACoP L8 Third edition 2000 and subsequent reprints in 2001, 2002, 2004 and 2006).

It seemed that their knowledge of H&S water regs was out of date considering that the latest revised edition of the published Approved Code L8 2014 regulates this particular statutory action as being done *regularly* (not strictly every two years). That was one of the major changes in the said regs. There are other indicative parameters which govern the revision of the LRA (ACoP L8 or HSG274 para.14) but, they are not driven by a strict time frame. The LRA is a live document and not just one-off paper exercise. This is the '*a-b-c*' in water management practices.

If the business does not have a person who meets this criterion, it should look outside the organisation and fill this appointment with an external specialist accredited/registered by suitable independent bodies (such as the Legionella Control Association). This is evident when dealing with Legionella Risk Assessments (LRAs) – specialist help (external) should be sought when in-house expertise does not cover this area sufficiently well.

On the other hand, I have met RPs who were very knowledgeable about the control of legionella who have made it a sheer pleasure to work with them.

In terms of water management proficiency the ACoP L8 clearly stipulates that the RP *'should be suitably informed, instructed and trained and their suitability assessed'*. It is important for the appointed Responsible Person to have sufficient authority, **competence** and knowledge of the installation to ensure that operational procedures are carried out in a timely and effective manner (see ACoP L8 and HSG 274).

If this is not enough, the same publications (including HTM 04-01 for clinical environments) state that *'inadequate management, lack of training, poor communication, inappropriate maintenance and control procedures can be (not might be!) contributory factors in outbreaks of legionnaires' disease'*. That sounds serious enough to me to be not ignored or marginalised. That's why I make my personal and professional goal to refresh my knowledge of the quoted H&S regs by setting aside time every year to read them from cover to cover.

So, all in all – it is evident, that depending on the level of involvement in the whole water management process, when dealing with legionella, he/she/they should be competent and display clear evidence of appropriate and sufficient knowledge of the subject and water installations.

Both ACoP L8, HSG274 and HTM 04-01 clearly speak about the requirement of competency for appointed management roles because they carry accountability.

2. Control
It is clear that the current ACoP L8 and other related publications speak about the **control** of legionella in the water systems. As the matter of fact, in its introduction the ACoP L8 gives a statement/title *'Legionnaires' disease – the control of legionella bacteria in water systems'*.

Control is a key word.

The control is an essential part of the overall management strategy in monitoring for legionella. The strategy should identify all the elements of the water installation where the risk of pathogenic proliferation might be most relevant.

One needs to realise that we are dealing with a living organism which may and will appear here or there because it is a natural fact reserved to its existential cycle. Yes, it is not the 'friendliest' of living cells, therefore we need to take proactive steps in controlling it so it would not affect health or lives of people's lives.

Control has many facets – one of them is the application of the clearly identified maintenance tasks arising from the above-mentioned H&S publications and translated into a practical maintenance regime in the LRA which aims to maintain the water quality and the water installation in a fit for purpose condition.

Though sometimes those tasks might seem to feel mundane, nevertheless they can and will provide us with important data (like water temperature taking, also called temperature profiling) if e.g., there are any underlying engineering issues which may escalate into a potential deterioration in water quality.

The same applies to the regular flushing of little used taps/outlets and showers – this is essential in reducing the risk of water stagnation not only in the pipe work but also, when applicable, in the cold- water storage tank.

Other engineering solutions such as checking/servicing the TMVs, strainers, filters, expansion vessels, POU filters, cold water storage tanks, CALs, etc. should be incorporated into the overall strategy to maximise the controlling levels to keep both water quality and the water installation in a good and suitable condition.

3. Consistency

If you want to ride a bike, you need to peddle. That is especially relevant if you are trying to cycle up a hill.

If we are not consistent in keeping up the critical speed, sooner or later we will fall off the bike. We need to be **consistent** in keeping the bike in balance.

Consistency in the water management strategy is to follow/apply the controlling tasks (as per LRA) to be delivered by competent personnel. This way the program is set to attain the expected results.

Once the monitoring plan has evolved from the conceptual stage into practical application, we need to ensure that it is delivered, whether we feel like doing it or not. Otherwise, we may (or will!) fall, using our bicycle ride parallel.

Again, from my experience, I have seen good strategies devised for particular environments but a lack of consistent application has dampened the deliverables that were expected. Why?

There may be many reasons; however, one of the most frequently heard is that there is no available staff/skill to carry out basic maintenance tasks. Subsequently this is further explained by the popular 'cost cutting' demands.

These, and many others, might fall under the heading of what I would call the 'business behaviour or ethos' where the lack of willingness to achieve the set goals (progressing with the controlling program) will lead to a loss of consistency in keeping the water and the water systems in a safe working condition.

The effects of lack of consistency may not be immediately visible but, with time, they are bound to breed problems and challenges.

The current water industry regs and the recommendations from the LRA help us to map out what needs to be undertaken and when - so it would be very unwise to not be consistent with their guidance/ recommendations.

So, in summary, if it helps, the three Cs could provide initial steerage when it comes to our endeavours in managing risks in the area of water management, control of legionella.