

HydroChem Information Release

Warm Water Systems

Warm water systems distribute water to showers, hand basins and other outlets throughout facilities such as hospitals, hotels and aged care facilities. A system that stores or supplies water at a temperature between 30°C and 45 - 60°C is considered a warm water system.

The regulations that apply to the control of *Legionella* in warm water systems vary from State to State. Please contact your local HydroChem consultant to advise you of the specific requirements in your location.

Legionella Risks

Legionella is a common organism in the environment and can be found in very low concentrations in the drinking water supply. *Legionella* bacteria are able to multiply when exposed to a suitable environment.

Risk Management Plans

HydroChem recommends a risk management approach for the minimisation of risks associated with warm water systems. HydroChem's approach will be tailored to your installation and the relevant laws in your State.

In assessing the risks associated with *Legionella*, it is important to:

- Determine the potential for people to be exposed to respirable sized droplets
- Identify dead legs including those created by unused outlets
- Develop a clear plan on what you will do if *Legionella* is detected



UV Disinfection

Traditionally, it has been common to install UV disinfection units on warm water systems to minimise the growth of *Legionella*. However, such systems are of limited effectiveness as they rely on transmission of UV light through the water stream - the quartz tubing quickly becomes dirty which blocks transmission of the light.

Consultation with a HydroChem consultant will enable you to best assess the specific requirements of your installation to ensure best practice and legislative compliance.

HydroChem is recognised as the clear market leader in Australia's water services industry. For over 35 years we have successfully minimised the risks associated with water.

We are Australian owned and operated, employing over 180 people nationwide.

HydroChem focuses on innovation and is committed to continuous improvement in quality, service, efficiencies and client relationships.

1 300 558 788

info@hydrochem.com.au

www.hydrochem.com.au

www.industrialfiltration.com.au

June 2013

Water Sampling Strategy

HydroChem recommends that a warm water system *Legionella* sampling program be implemented at all high risk sites including hospitals and aged care facilities. Sampling frequency should be based on the size and nature of the facility. If *Legionella* is detected, action must be taken to disinfect the system.

Disinfection Package

In high risk facilities such as hospitals and aged care facilities, HydroChem recommends the installation of equipment to monitor and control disinfection parameters:

- Compact ORP Controller
- Industrial ORP probe
- Diaphragm metering pump (up to 16 bar)
- Chemical tank with matching bund



HydroChem's recommended package provides optimum control of disinfection levels, pulse frequency signal for pump control, alarm relay outputs for limit values and mA output signal for reporting to other devices. The system reduces the need for complete circuit flushing.

Maintenance

HydroChem recommends that a maintenance program be implemented to:

- Maintain and calibrate dosing equipment
- Replenish disinfection solution stocks
- Undertake *Legionella* sampling
- Report results to all stakeholders



Disinfection

If *Legionella* is detected, the system must be disinfected. Various methods of disinfection are available. Please speak to your HydroChem consultant to assist in implementing an appropriate method for your warm water system.

Further Considerations

Please speak to your HydroChem consultant about other factors including the maintenance and cleaning of ancillary equipment such as cold water storage tanks, thermostatic mixing valves (TMVs), water hammer arrestors and other water outlets.

HydroChem is recognised as the clear market leader in Australia's water services industry. For over 35 years we have successfully minimised the risks associated with water.

We are Australian owned and operated, employing over 180 people nationwide.

HydroChem focuses on innovation and is committed to continuous improvement in quality, service, efficiencies and client relationships.

1300 558 788

info@hydrochem.com.au

www.hydrochem.com.au

www.industrialfiltration.com.au

June 2013