

Cooling Towers or Warm Water Systems

High Risk Manufactured Water Systems

A high risk manufactured water system means a cooling water system or a warm water system that is deemed to be at high risk of developing and transmitting *Legionella* bacteria, the cause of Legionellosis or Legionnaire's Disease.

What is Legionella?

There are many different types of *Legionella* bacteria found in the environment. *Legionella pneumophila* is the most common type found in water, and causes Legionnaires' disease.

Legionella bacteria must be inhaled to cause illness. However, most people who are exposed to aerosols containing *Legionella* do not become ill. *Legionella* can infect the lungs, causing a disease known as legionellosis.

A **cooling water system** is a heat exchange system that consists of a heat-generating plant, a heat-rejection plant, interconnecting water reticulation pipework and associated pumps, valves and controls.

Examples include: **Cooling towers** and **evaporative condensers**.

A **warm water system** is a reticulated water system that distributes or recirculates warm water through the majority of its branches at a nominal temperature of 45°C by means of a temperature controlling device.

Under the *South Australian Public Health (Legionella) Regulations 2013* all high risk manufactured water systems must be registered with the local council within one month of installation or within one month of a change of property ownership. Failure to comply could result in penalties.



The following documents are required to register a High Risk Manufactured Water System with Council:

Cooling Water System Registration Form

[Click here](#)

Warm Water System Registration Form

[Click here](#)



Owners of cooling towers and warm water systems are issued with an annual notice from Council requiring that they engage in a competent third party auditor to inspect the system and undertake microbiological testing.

When *Legionella* is detected at specified concentrations (see below) in a water sample collected from a cooling water system or warm water system, the owner of the system must immediately shut down the system or decontaminate in accordance with a prescribed procedure/alternative decontamination procedure approved by the Minister. The owner must also notify Council by completing the relevant sections of the [Notification of Legionella detection in a water sample](#).

Specified concentrations:

- at or greater than 10cfu/ml in a warm water system
- at or greater than 1000cfu/ml in a cooling water system.