Decontamination of high risk manufactured water systems

South Australian Public Health (Legionella) Regulations 2013

Regulation 17 of the Public Health (Legionella) Regulations (the Legionella Regulations) prescribes the mandatory responses to the detection of Legionella in high risk manufactured water systems (cooling water systems and warm water systems). When Legionella is detected at specified concentrations 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 (pending decontamination) or immediately decontaminate the system in accordance with a prescribed decontamination procedure or an alternative decontamination procedure approved by the Minister.

This fact sheet summarises when and how regulated high risk manufactured water systems must be decontaminated.

When must a high risk manufactured water system be decontaminated?

Control strategies and remedial action must be employed when Legionella is detected, as specified in the Legionella Regulations and Schedule 4 of the Guidelines for the Control of Legionella in Manufactured Water Systems in South Australia (the Legionella Guidelines). Control strategies (including the detailed decontamination procedure) must be documented in the system’s operation and maintenance manuals. Legionella detection results and responses must be documented in the system’s log book.

Cooling water systems

> Must be immediately shut down (pending decontamination) or decontaminated immediately, and the relevant authority (usually the local council) notified within 24 hours, upon the receipt of a report (verbal or written) indicating the presence of Legionella at a concentration of 1000 or more cfu/mL in a water sample collected from a cooling water system.

Warm water systems

> Must be routinely decontaminated at least every 6 months.

> Must be immediately shut down (pending decontamination) or decontaminated immediately, and the relevant authority (usually the local council) notified within 24 hours, upon the receipt of a report...
(verbal or written) indicating the presence of *Legionella* at a concentration of 10 or more cfu/mL in a water sample collected from a warm water system.

Must be decontaminated if the relevant authority issues a notice requiring a decontamination procedure to be conducted.

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### How to decontaminate a high risk manufactured water system

#### Cooling water systems

- A system decontamination procedure must be performed as prescribed in Part 1 of Schedule 3 of the Legionella Guidelines.

**Note:** The prescribed decontamination procedure requires the entire system to be shut-down and fully drained. Alternatively, the system owner can apply for approval from the Minister to use an alternative decontamination procedure.

#### Warm water systems

- A system decontamination procedure must be performed as prescribed in Part 2 of Schedule 3 of the Legionella Guidelines.

**Note:** The prescribed decontamination procedures require chlorination or pasteurisation of the system. Alternatively, the system owner can apply for approval from the Minister to use an alternative decontamination procedure.

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### How to apply for approval of an alternative decontamination procedure

The system owner must complete an application form and submit it to SA Health with the relevant application fee.

The most up to date schedule of fees is published on SA Health’s Legionella website along with the relevant application form and a fact sheet providing more information on applying for an approval from the Minister:


**Note:** An approval may be subject to conditions. It is an offence to contravene or not comply with a condition of an approval, which may result in expiation, prosecution and/or revocation of the approval.

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### System operation and maintenance manuals and log books

Up-to-date system operation manuals, maintenance manuals and log books must be kept on the premises in a readily accessible place and made available for inspection on request by an authorised officer.