

# Safe access to cooling towers for inspection, cleaning and maintenance

## Public and Environmental Health (Legionella) Regulations 2008

This fact sheet provides the owners and operators of cooling towers with information on their occupational health, safety and welfare (OHS&W) responsibilities in relation to achieving and demonstrating compliance with the Public and Environmental Health (Legionella) Regulations 2008.

### The Legionella Regulations

The Public and Environmental Health (Legionella) Regulations 2008 (the Legionella Regulations) aim to reduce the incidence of potentially fatal community acquired legionellosis (Legionnaires' disease) through mandatory risk



management and preventative maintenance regimes for high risk manufactured water systems, such as cooling water systems fitted with cooling towers.

### Inspections, maintenance and cleaning

The Legionella Regulations require system owners to ensure monthly inspection of cooling water systems and periodic maintenance as prescribed. Cooling water systems must also undergo annual compliance inspections to ensure that they meet all relevant regulatory requirements.

Environmental Health Officers from the local public health authority (e.g. the local council) may inspect cooling towers at any time in relation to disease investigations, reports of non-compliance, Legionella bacteria detection or relevant complaints.

### Access to key components

Safe and ready access to key components of cooling towers (such as basins, fill, fans, drift eliminators, water distribution channels etc) is crucial in ensuring compliance with the Legionella Regulations.

### Tower access and safety risks

Many cooling towers are located in precarious locations, such as on roof tops. In addition, some key components requiring regular inspection, such as water distribution systems, drift eliminators and fans, are often located on top of cooling towers.

If safe access to all parts of the system is not provided, maintenance workers and inspectors cannot conduct their required duties without being exposed to unacceptable safety risks.

The primary risk in relation to safe access is falls from heights. However, in performing their work, maintenance workers and inspectors are often exposed to other risks including: confined spaces, slips, trips and exposure to chemicals, electricity and potentially harmful micro-organisms such as Legionella.

### Duty holder responsibilities

The South Australian Occupational Health, Safety and Welfare Regulations 2010 (the OHS&W Regulations) identify the duty holders responsible for the elimination, or if this is not reasonably practicable, the

minimisation of risks to the health and safety of any person associated with the manufacture, installation, operation, maintenance, inspection or testing of cooling towers. These are summarised as follows:

**Designers and manufacturers** must review the design and eliminate or, where this is not reasonably practicable, minimise risks to health and safety to any person associated with the plant arising from the design.

**Building owners** must provide a means of safe access and egress to the plant (typically this is by means of a range of fixed stairways, ladders and/or walkways) and provide relevant health and safety information and instruction for anyone involved in the operation, maintenance, testing or cleaning of the plant, so as to properly inform workers and contractors.

**Employers** of persons responsible for the operation, maintenance, cleaning, inspection or testing of cooling towers must ensure the health and safety of those involved by providing workers with information, instruction and training to ensure their health and safety, and by ensuring that safe work procedures are developed and used to minimise risks associated with their tasks.

### Action by the relevant authorities

In the case that safe access is not present or safe work procedures are not implemented to enable an authorised officer or independent inspector to conduct and complete a comprehensive inspection of all necessary components of a cooling tower, the local authority may take enforcement action as deemed necessary in the circumstances.

This may include the shut-down of the system until such time that safe access and safe work procedures are provided by the system owner.

If, as a result of an inspection or inspection report, an authorised officer suspects that a duty holder is not meeting their OHS&W responsibilities in relation to a cooling tower, the officer may report their concerns to SafeWork SA for further investigation.

Upon receipt of such a report, SafeWork SA would investigate the report and may prohibit workers from carrying out any inspection, testing or maintenance until such time as a safe means of access is provided and safe work procedures for all relevant activities are in place.

Should further investigations confirm wilful and ongoing non-compliance that exposes workers to significant risks to their health and safety, SafeWork SA may consider options for further legal action.

### Contact

Health Protection Programs  
Public Health, SA Health  
PO Box 6, Rundle Mall, Adelaide SA 5000  
Tel: 08 8226 7100  
Fax: 08 8226 7102  
Email: [legionella@health.sa.gov.au](mailto:legionella@health.sa.gov.au)

SafeWork SA  
Level 4, 33 Richmond Road,  
Keswick SA 5035  
GPO Box 465, Adelaide, SA 5001  
Help Centre  
Tel: 1300 365 255  
Email: [help@safework.sa.gov.au](mailto:help@safework.sa.gov.au)  
Web: [www.safework.sa.gov.au](http://www.safework.sa.gov.au)

Regional offices located at Berri, Mount Gambier, Port Lincoln, Port Pirie and Whyalla.

## For more information

**Health Protection Program  
Public Health  
PO Box 6, Rundle Mall  
Adelaide SA 5000  
Telephone: 08 8226 7100  
[www.sahealth.sa.gov.au](http://www.sahealth.sa.gov.au)**



**Government  
of South Australia**

SA Health

