

## NEW LAWS FOR PROPERTY AND BUSINESS OWNERS – COOLING TOWER SYSTEMS

### NEW *LEGIONELLA* CONTROLS FOR VICTORIA – 1 MARCH 2001

The Victorian Government has established a new regulatory framework for property and business owners who use cooling tower systems. From March 2001, new obligations under the **Building (*Legionella*) Act 2000** and new building, health and plumbing regulations will commence. These address the potential risks of cooling tower systems to the public as well as workplace safety issues. The new reforms will reduce the impact of Legionnaires' disease and address community concern about the public health risks of infection.

Property owners and business operators with cooling tower systems cannot be complacent about the appropriate maintenance requirements. No business can afford the potential cost associated with an outbreak of Legionnaires' disease.

#### **What is a Cooling Tower?**

Cooling towers are often associated with air-conditioning systems and industrial processes. Some industry usages include dry cleaning, plastic injection moulding and some dairy farming.

Cooling towers are heat-rejection or heat-exchange devices that use outdoor air to cool water. The cooled water is then piped through the system to cool an industrial process or a large air-conditioning system - usually located elsewhere on the site. Cooling towers, under the new legislation, include fan-forced or fan-induced devices that use recirculated water. While evaporative coolers are not 'cooling towers', evaporative condensers are.

If a cooling tower system is not properly maintained it will allow bacteria, including *Legionella*, to grow and multiply. The air discharged from the tower may then be contaminated by *Legionella* bacteria, potentially infecting susceptible passers by.

#### **What is Legionnaires' Disease?**

Legionnaires' disease is a rare form of pneumonia – contracted through the inhalation of aerosols containing *Legionella* bacteria. It usually takes five to six days for symptoms to appear. People who are at greatest risk include men over 50, heavy smokers, heavy drinkers, diabetics, and people with impaired immune systems.

Cases of Legionnaires' disease in Victoria have been associated with cooling towers, reticulated warm water systems and spas.

#### **New *Legionella* Controls – the Reform Package**

The Government has recognised the significant level of community concern about the health risks arising from *Legionella*. The Building (*Legionella*) Act tightens controls and maintenance standards of cooling tower systems and provides information and education

programs for property owners and business sectors. It is part of a package of reforms to ensure that cooling tower systems are managed to minimise risks to the public and workers.

The key elements include:

- The registration of all cooling tower systems by the property owner;
- The development of risk management plans for each cooling tower system;
- An annual audit of risk management plans;
- An inspection service by DHS technical staff; and
- Enhanced technical support to industry.

### **Cooling Tower Register**

The Building (*Legionella*) Act 2000 requires all cooling tower systems to be registered with the Building Control Commission. The Act defines a cooling tower system as consisting of one or more inter-connected cooling towers and the interconnecting pipes and pumps. Owners of an existing cooling tower system that is in working condition before the Act comes into force, will have six months to register. New cooling tower systems will not be able to operate unless the property owner has applied for registration. This application must also include a risk management plan.

The registration system will ensure that all cooling tower systems in Victoria are identified, to help track potential sources of Legionnaires' disease. The cooling tower register will target owners for technical and advisory information and education programs.

### **Risk Management Plans**

A risk management plan must be developed for every cooling tower system. These plans must set out a maintenance program to avert potential risks associated with the *Legionella* bacteria.

Risk management plans will be required for new installations. For existing systems, owners must develop risk management plans by the first annual renewal of registration in 2002.

A focus group of industry representatives has assisted DHS develop a framework and guidelines for use by property/business owners to prepare plans. The framework includes a template to evaluate the overall risk of a particular cooling tower system and suggest an appropriate maintenance program. This information is on the project web site.

Independent accredited auditors will audit risk management plans – to be recorded in the annual registration renewal process. DHS will be establishing the accreditation arrangements for prospective auditors in 2001. It is intended to open the accreditation arrangements to various technical and professional groups.

### **Plumbing Regulations**

At present, the plumbing regulations are being amended to include the AS/NZ 3666 to establish a standard of plumbing in relation to new installations of cooling towers. The standards will apply to all cooling towers regardless of whether they serve a building or plant.

A Compliance Certificate is now required for all plumbing work on cooling towers. This means that a licensed plumber is required to certify that the work complies with relevant plumbing standards and is safely installed.

### **Health (*Legionella*) Regulations 2001**

The new regulations prescribe procedures for maintaining and testing cooling tower and warm water systems and for appropriate record keeping. The regulations also include requirements to test cooling towers at least once a month for Heterotrophic Colony Counts (total bacteria counts). There are fines of up to \$10,000 for those who fail to comply with the provisions of the new regulations.

### **Enhanced Technical Support for Industry**

DHS has established an industry support team to assist with the implementation of the new arrangements. This team will provide information and educative materials to industry and business interests. This includes pamphlets and guidelines on how to comply with the new regulations and a risk management plan framework. An industry information line 1800 248 898 has also been set up.

### **GET MORE INFORMATION - JOIN THE MAILING LIST NOW!!**

To be kept informed of the new requirements and receive new guidelines and publications make sure your details are on the Department of Human Services mailing list by:

1. Visiting the project website: [www.dhs.vic.gov.au/phd/lrmp/index.htm](http://www.dhs.vic.gov.au/phd/lrmp/index.htm) and lodging your name and business details, or by
2. Telephoning the toll free information line on 1800 248 898

**Legionella Risk Management Project – a partnership initiative of the Department of Human Services, Building Control Commission and Plumbing Industry Commission**