

## Legionella initiative – risk management

This updates the previous *Practice Note 2005-45* issued June 2005.

### 1. Summary

Strengthened regulatory frameworks now apply to maintenance standards for cooling towers and warm water systems to minimise the incidence of *Legionella* outbreaks and reduce the impact on the community of Legionnaires' disease.

Compliance with the new framework is the responsibility of the owner, but the legislation has created a new imperative for the relevant building surveyor (RBS) relating to issuing building and occupancy permits and maintenance of essential services.

Part A of this Practice Note explains the legislation relating to the work of an RBS.

Part B explains additional requirements the owner or responsible person<sup>1</sup> must comply with under the building and health regulations.

Part C explains the responsibilities of the owner of an existing cooling tower system.

Information in parts B and C is included in order that the RBS has an opportunity to be able to advise clients

### 2. Background

The *Building Act 1993* (the Act) as amended by the *Building (Legionella) Act 2000* was part of a reform package which also included the *Building (Legionella Risk Management) Regulations 2001*, the *Health (Legionella) Regulations 2001*, the *Plumbing (Cooling Tower) Regulations 2001* and the *Building (Cooling Tower System Register) Regulations 2001*.

The Act requires the registration of cooling tower systems and the development of a Risk Management Plan (RMP) for each cooling tower system. Each set of regulations prescribes specific processes:

- ▶ The *Building (Legionella Risk Management) Regulations 2001* specify the risks that an RMP must address.
- ▶ The *Health (Legionella) Regulations 2001*

prescribe maintenance, testing procedures and associated record keeping relating to cooling tower and warm water systems, that a responsible person must comply with.

- ▶ The *Plumbing (Cooling Tower) Regulations 2001* prescribe installation and maintenance procedures, in accordance with the AS/NZS 3666 suite of standards.
- ▶ The *Building (Cooling Towers Systems Register) Regulations 2001* prescribe matters relating to the registration of cooling tower systems.

### Part A: Responsibilities of the RBS

#### New building work incorporating a cooling tower system

##### Building permits

When evaluating an application for a building permit, the RBS assesses plans and documentation for compliance with the *Building Code of Australia* (the BCA). Clause F4.5 of the BCA requires a mechanical ventilation or air-conditioning system to comply with AS/NZS 3666.1 (and AS 1668.2), where installed in lieu of natural ventilation complying with Clause F4.6. Clause F2.7 of the BCA also requires hot water, warm water and cooling water systems to be installed in accordance with AS/NZS 3666.1. This does not apply to a system serving only a sole occupancy unit in a Class 2 or 3 building or Class 4 part.

Where a cooling tower system forms part of the mechanical ventilation system or air-conditioning system, it is necessary to specifically check the location of the cooling tower in relation to air intakes, air exhausts and drift control measures in accordance with AS/NZS 3666.1. Warm water systems should also be checked for compliance with AS/NZS 3666.1. Alternatively, the applicant may choose to provide a Form 13, "Certificate of Compliance – Design" from a suitably qualified building practitioner in relation to the system. It is important that compliance is verified at this stage, as the RBS may not be able to subsequently

<sup>1</sup> The Health (Legionella) Regulations 2001 defines the responsible person as; "the person who owns, manages or controls the cooling tower system"

issue a valid occupancy permit. This is explained in more detail below.

#### Occupancy permits

When issuing an occupancy permit, the RBS should consider the inclusion of a cooling tower — as part of an air-conditioning or mechanical ventilation system — in the nominated essential safety measures under Part 12 of the Regulations, and make a determination as to the level of performance required. Clause I1.2 of the BCA requires maintenance of a mechanical ventilation system in accordance with AS/NZS 3666.2.

It is an offence under the Act for the owner of a newly constructed cooling tower system to commission the system prior to registering the cooling tower system. It is also an offence to commission the cooling tower system prior to preparing an RMP. There are substantial penalties attached to these offences. A mechanical ventilation or air-conditioning system required by Clause F4.5 (b) of the BCA would need to be commissioned and in operation before the RBS could consider issuing an occupancy permit.

It is suggested that the RBS advise clients of this fact, so that the owner is able to prepare an RMP and register the cooling tower system in a time frame that will allow commissioning of the system at an appropriate time relative to an application for an occupancy permit. In addition, a plumber's compliance certificate that relates to the cooling tower system will need to be sighted, before issuing an occupancy permit.<sup>2</sup>

Section 221ZH (1) of the Act prescribes the types of plumbing work for which a plumber's compliance certificate should be issued and includes:

“the construction, installation, alteration relocation or replacement of a cooling tower or any other part of a cooling tower system (including the installation or replacement of any associated device or equipment)”.

If a non-complying system is approved and installed, then a valid plumber's compliance certificate cannot be issued. Section 44 of the Act precludes an RBS from issuing an occupancy permit if, amongst other things, a compliance certificate required by section 221ZH has not been sighted. An occupancy permit issued on the basis of sighting an invalid compliance certificate would have no force or effect.

The owner is required to maintain a cooling tower system in accordance with the occupancy permit as issued by the RBS and complete an annual essential safety measures report.<sup>3</sup>

Both the occupancy permit and the annual essential safety measures report must be displayed in a location approved by the RBS and maintenance records kept available on-site, for inspection by the Municipal Building Surveyor or Chief Fire Officer.

#### Part B—Additional responsibilities of the owner

An owner constructing a building that includes the installation of a cooling tower system has a number of obligations under the legislation. Prior to commissioning or bringing into operation the cooling tower system, the owner must:

- ▶ Register the system with the Building Commission.
- ▶ Prepare an RMP.

The RMP must address the risks prescribed in the *Building (Legionella Risk Management) Regulations 2001*.

The owner of the land is also required to renew the registration each year. During each period of renewed registration, the owner is also required to:

- ▶ Have the RMP reviewed and updated (if necessary).
- ▶ Have the RMP audited by a person accredited by the Department of Human Services.

<sup>2</sup> In accordance with section 44 of the Act.

<sup>3</sup> Pursuant to Part 12 of the Regulations.

The *Health (Legionella) Regulations 2001* prescribe an additional minimum level of maintenance and testing of a cooling tower system.

It should be noted that the legislation applies not only to cooling towers that form part of 'building work', but all cooling tower systems including but not limited to those used for industrial processes, refrigeration and farming purposes.

Pursuant to Part 5C of the Act, an 'inspector', authorised by the Secretary of the Department of Human Services, has powers of entry<sup>4</sup> and powers to issue a notice on the owner. The Department also has powers of prosecution under the Act concerning all offences that relate to Legionella controls, including the failure to register a cooling tower system, prepare an RMP, or have it reviewed or audited.

### Part C – Existing cooling towers

Owners of land on which an existing building incorporates a cooling tower system were required to register the system by 31 August 2001. During this first registration period, owners were also required to prepare an RMP which must address the risks, as prescribed in the *Building (Legionella Risk Management) Regulations 2001*. Owners are only required to review or have the RMP audited in the second and subsequent periods of registration. As noted in Part B above, the *Health (Legionella) Regulations 2001* prescribe an additional level of maintenance and testing for cooling tower systems that the responsible person must also comply with.

#### Further information

##### Department of Human Services technical information

The Department has a Legionella Risk Management Project office, able to provide further technical information to owners and building surveyors. The project office is contactable through the website <http://www.legionella.vic.gov.au> / or by telephone on 1800 248898. RMP templates and guidelines can be downloaded from this website.

##### Building Commission registration information

The Building Commission has a Registrations Coordinator to assist with information relating to the registration of cooling towers. Application forms for the registration of cooling towers and a guide to making an application can be obtained by contacting the Registrations Coordinator by phone on 9285 6498. These can also be downloaded from the BC website at [www.buildingcommission.com.au](http://www.buildingcommission.com.au) Relevant material can also be found on the websites of the [Department of Human Services](#) and the [Plumbing Industry Commission](#).

<sup>4</sup> Under Division 2, of Part 13 of the Act