

SS 9 - Mechanical Ventilation, Air Conditioning Systems & Cooling Towers

Address:			
Building Name:			
Provide by (name):			
	Make	Model	Location
1			
2			
3			
4			
5			
6			
Installation Standard:		<input type="checkbox"/> AS/NZS 3666.2: <input type="checkbox"/> AS 1851: (smoke control) <input type="checkbox"/> AS 1668.2: <input type="checkbox"/> Specifically Designed Alternate Solution <input type="checkbox"/> Other (Historical) _____	
Inspections & Maintenance Standard:		<input type="checkbox"/> Comp. Schedule Handbook and AS/NZS 3666.2: <input type="checkbox"/> Comp. Schedule Handbook and AS 1851: <input type="checkbox"/> AS 1668.2: <input type="checkbox"/> Specifically Designed Alternate Solution <input type="checkbox"/> Other (Historical) _____	
Frequency:		<input type="checkbox"/> Annually	<input type="checkbox"/> IQP
		<input type="checkbox"/> Six-Monthly	<input type="checkbox"/> Owner <input type="checkbox"/> IQP
		<input type="checkbox"/> Monthly	<input type="checkbox"/> Owner <input type="checkbox"/> IQP
		<input type="checkbox"/> Weekly	<input type="checkbox"/> Owner <input type="checkbox"/> IQP
Inspections & Maintenance:			
Minimum Maintenance and Testing as Specified in Compliance Schedule Handbook, to be performed in conjunction with maintenance required by applicable standard.			
Annual / Monthly Inspections Annual and monthly inspections should be carried out in conformance with the applicable standard selected above.			
Monthly / Weekly Inspections In addition to the maintenance required by the applicable standard selected above particular attention must be given to systems incorporating cooling towers or condensers in case organisms such as Legionella are present			

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Chemical Control

For cooling towers and evaporative condensers with automatic chemical dosing:

- bacteriological tests performed as detailed in Table 1

For cooling towers and evaporative condensers without automatic chemical dosing:

- weekly dipslide tests
- bacteriological tests performed as detailed in Table 1

When dipslide tests have a result greater than 10^5 cfu/ml, control strategies in AS/NZS 3666.3 Table 3.2 must be implemented.

Reporting:

The owner must keep records of all inspection, maintenance and repairs undertaken in the previous 24 months. The records must be kept on site and as a minimum, include:

- details of any inspection, test or preventative maintenance carried out, including dates, work undertaken, faults found, remedies applied, and the person who performed the work
- details of any other faults found or maintenance and repair work undertaken to maintain the system in working order, including dates, work undertaken, faults found, remedies applied and the person who performed the work

TABLE 1

Cooling Tower testing

Cooling tower with automatic chemical dosing	Time	Test method	Test result levels dosing and control strategies ²
Legionella	Monthly	AS/NZS 3896 ¹	AS/NZS 3666.32 Table 3.1
Heterotrophic microorganisms	Monthly	AS 4276.3.1 ¹	AS/NZS 3666.3 Table 3.2

Cooling tower without automatic chemical dosing

In addition to the testing above, cooling towers without automatic chemical dosing must also do the following test.

Heterotrophic microorganisms	Weekly	Dip slide	AS/NZS 3666.3 Table 3.2
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Note 1

- Tests to AS/NZS 3896 and AS 4276.3.1 shall be undertaken by an IANZ biologically accredited laboratory.

Note 2

- Legionella tests with results greater than or equal to 1000 cfu/ml should be notified within 48 hours to the local Medical Officer of Health at the Public Health Service of the District Health Board, and the Required Control Strategy from Table 3.1 of AS/NZS 3666.3 shall be implemented.

Note 3

- Industrial cooling towers are not required by the Building Act to be included on a compliance schedule. Testing for Legionella in these cooling towers is required by employers to ensure a safe working environment for their employees under the Health and Safety in Employment Act 1992.

The information above is used to help generate the compliance schedule. If you are unsure how to complete this form please consult an IQP who is registered for the system above.