

There is a potential health risk with any open water cooling system – bacteria can breed in the water of a cooling unit if the proper precautions are not taken and, if untreated, may have hazardous consequences. Legal requirements for water cooling systems may be found in the Public Health Act 1991, Public Health (Microbial Control) Regulation 2000 and the Australian Standards AS3666 Parts 1, 2 & 3. Outlined below is a very basic summary of Council's requirements, which should be read in conjunction with the above.

Does a new water cooling system need to be approved by Council?

All water cooling systems are required to be approved before construction, usually subject to a Development Application lodged with Council's City Planning Division.

What if my water cooling system has already been constructed?

If the water cooling system is an existing one, Council's Health Officer will inspect the system to ensure it is in an appropriate location. If the system IS NOT satisfactory, any rectification work must be made and a satisfactory re-inspection by Council's Health Officer done BEFORE the system comes into operation.

Does my water cooling system have to be registered?

Council is required to register ALL water cooling systems and warm-water systems.

If you have a WARM WATER system, you are required to lodge a "Warm Water System Registration Form" with Council's Regulation and Enforcement Division so the system may be registered. There are no fees involved with this register, however, you are required by law to ensure the unit is being maintained in accordance with its Operation/Maintenance Manual and the Australian Standards (AS3666).

If you have a WATER COOLING system (or "cooling tower") you are required to lodge a "Water Cooling System Registration Form" with Council's Regulation and Enforcement Division so the system may be registered. The appropriate registration fee must be attached.

What do I need to do once my water cooling system is in operation?

Once the system is in operation, it must be maintained in accordance with AS3666 Pt 2 OR AS3666 Pt 3. If you choose to maintain it under AS3666 Pt 3, you MUST notify Council in writing that this is the case.

Requirements for ALL water cooling systems

- 1 Copies of the Operation and Maintenance Manuals are available in a readily accessible place, 24 hours a day, in the operation area where the system is installed. You are responsible for ensuring all records in your Maintenance Manual are secure, cover the past 7 years and are fully up-to-date. Council officers will review these manuals at each visit and may require an additional copy of the Maintenance Manual to be available on the premises.
- 2 An emergency contact name and phone number (during AND after office hours), with an alternative name and number, must be provided to Council. Any changes must be notified to Council in writing within one (1) month.
- 3 The system is equipped with a process designed to control microbial growth AT ALL TIMES.
- 4 The system is certified annually by a tertiary-qualified chemist, chemical engineer, engineer OR microbiologist who has expertise in this field. This is to certify that the system is being maintained by an effective process of disinfection, ie no sample taken has a level of more than 10 Leg. cfu/ml or a heterotrophic plate count of more than 100,000 cfu/ml. In cases where the system is not satisfactory (ie any test exceeds this level) the Certifier is to take remedial action.
- 5 A copy of the above certification is to be kept on site in the Maintenance Manual and must be done prior to 31 AUGUST each year. The certification will be inspected by Council's Health Officers.

Additional requirements for Maintenance under AS3666 Part 2

- 1 All water cooling systems must be cleaned at least every 6 months. A copy of the clean must be kept on site in the Maintenance Manual.
- 2 All other requirements under AS3666 Part 2 must be satisfied, including MONTHLY inspection, repair and preventative service. Again, all details must be kept on site in the Maintenance Manual, which is subsequently reviewed by Council's Health Officers.

Additional requirements for Maintenance under AS3666 Part 3

- 1 Remember: Council must be notified in writing if you choose to maintain the system under AS3666 Part 3.
- 2 Copies of monthly tests (ie Legionella and Heterotrophic Plate Count) must be kept on site in the Maintenance Manual, which is subsequently reviewed by Council's Health Officers.
- 3 All requirements under AS3666 Part 3 must be satisfied and copies kept on site in the Maintenance Manual.

Who can do the tests?

All tests must be carried out in a laboratory accredited by NATA – the National Association of Testing Authorities – for that purpose.

Who can do the cleans and monthly services?

These cleans must be done by competent personnel, ie someone with appropriate qualifications and experience. Council has a list of all contractors in the Wollongong area who have provided such details.

Who can do the annual certification?

ONLY a tertiary-qualified chemist, chemical engineer, engineer OR microbiologist may do the annual certification of the process of disinfection. Any chemical engineer or building service engineer who is a corporate member of the Institute of Engineers and registered on the National Professional Engineer Register will be accepted. Tertiary-qualified chemists and microbiologists submitting certification are required to submit relevant qualifications and experience to Council before issuing such certification.

What if I don't comply?

Council takes its role in minimising the risk of Legionnaires' disease through compliance with legislative requirements very seriously. If the legislative requirements have NOT been complied with, LEGAL ACTION WILL BE INSTIGATED IMMEDIATELY – NO EXCEPTIONS. You are required to ensure all records in your Maintenance Manual are secure, cover the past 7 years and are fully up-to-date. Pending an unsatisfactory inspection, Council's Health Officers may also re-inspect the water cooling system, manuals, take a sample and recover the associated costs.

What if the water cooling system isn't operating all the time?

Any water cooling system which is shut down on a seasonal basis, eg during winter, must be drained upon shutdown and fully cleaned and flushed before re-starting the system. It must still be maintained, whilst in operation, in accordance with the Regulations and AS3666.2 or AS3666.3 as outlined above and details of shutdown recorded in your Maintenance Manual.

Who can I talk to if I have more questions?

Council's Health Officers are quite happy to assist with any enquiries you may have. You can contact them on telephone 4227 7732.

Disclaimers

This Fact Sheet was believed to be correct at the date of its approval.

This Fact Sheet is for general information purposes only.