

South Australia

Public and Environmental Health (Legionella) Regulations 2008

under the *Public and Environmental Health Act 1987*

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1—Short title

These regulations may be cited as the *Public and Environmental Health (Legionella) Regulations 2008*.

2—Commencement

- (1) Subject to subregulations (2) and (3), these regulations will come into operation on 1 October 2008.
- (2) Regulation 7 will come into operation on 1 April 2009.
- (3) Regulations 8 and 10 (other than subregulation (3)) will come into operation on 1 October 2009.

3—Interpretation

In these regulations, unless the contrary intention appears—

Act means the *Public and Environmental Health Act 1987*;

AS/NZS 3666.1 means AS/NZS 3666.1 *Air-handling and water systems of buildings—Microbial control Part 1: Design, installation and commissioning* published jointly by Standards Australia and Standards New Zealand, as in force from time to time;

AS/NZS 3666.2 means AS/NZS 3666.2 *Air-handling and water systems of buildings—Microbial control Part 2: Operation and maintenance* published jointly by Standards Australia and Standards New Zealand, as in force from time to time;

AS/NZS 3666.3 means AS/NZS 3666.3 *Air-handling and water systems of buildings—Microbial control Part 3: Performance-based maintenance of cooling water systems* published jointly by Standards Australia and Standards New Zealand, as in force from time to time;

AS/NZS 3896 means AS/NZS 3896 *Waters—Examination for legionellae including Legionella pneumophila* published jointly by Standards Australia and Standards New Zealand, as in force from time to time;

automatic biocide dosing device means a device that automatically discharges a measured amount of biocide to a cooling water system using a feedback control loop or timer;

biocide means a substance capable of killing micro-organisms, including Legionella;

Building Code has the same meaning as in the *Development Act 1993*;

clean has the same meaning as in AS/NZS 3666.1;

cooling tower has the same meaning as in AS/NZS 3666.1;

cooling water system means a heat exchange system that consists of a heat-generating plant, a heat-rejection plant, interconnecting water recirculating pipework and associated pumps, valves and controls, and includes a cooling tower or evaporative condenser;

Department means the administrative unit of the Public Service that is, through the Minister, responsible for the administration of the Act;

drift eliminator means a device that is designed to remove water droplets from cooling tower air passing through the device;

evaporative condensor has the same meaning as in AS/NZS 3666.1;

high risk manufactured water system or *system* means a cooling water system or warm water system;

Legionella means bacteria of the genus *Legionella*;

NATA accredited laboratory means laboratory that is accredited by the National Association of Testing Authorities of Australia for microbiological testing of waters for Legionella;

prescribed decontamination procedure—

- (a) in relation to a cooling water system—means the decontamination procedure set out in Schedule 3 Part 1 of the document published by the Minister entitled *Guidelines for the Control of Legionella in Manufactured Water Systems in South Australia*, as in force from time to time; or
- (b) in relation to a warm water system—means decontamination by means of the "pasteurisation method" or "chlorination method" set out in Schedule 3 Part 2 of that document;

SAA/SNZ HB32 means SAA/SNZ HB32 *Control of microbial growth in air-handling and water systems of buildings* published jointly by Standards Australia and Standards New Zealand, as in force from time to time;

warm water means water that is not more than 60°C and not less than 30°C;

warm water system means a reticulated water system that distributes or recirculates warm water through the majority of its branches at a nominal temperature of 45°C by means of a temperature controlling device.

Note—

For definition of divisional penalties (and divisional expiation fees) see Appendix.

4—Application of regulations

These regulations do not apply in relation to a high risk manufactured water system installed in—

- (a) a Class 1A, 4 or 10 building under the *Building Code*; or
 - (b) a sole-occupancy unit in a Class 2 building under the *Building Code*,
- provided that it is not a warm water system that serves more than 1 dwelling.

5—Duty to register high risk manufactured water system

- (1) All high risk manufactured water systems installed in premises situated in the area of the authority must be registered with the authority.
- (2) If—
 - (a) a high risk manufactured water system installed before the commencement of this regulation is unregistered more than 6 months after that commencement; or
 - (b) a high risk manufactured water system installed after the commencement of this regulation is unregistered more than 1 month after the system is brought into service,

the owner of the premises in which the system is installed is guilty of an offence.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

- (3) The authority must, on application made in a manner and form approved by the authority and payment of the registration fee specified in Schedule 1 to the authority, register the high risk manufactured water system to which the application relates.
- (4) An application for registration of a high risk manufactured water system must contain a nomination of the person responsible for the operation and maintenance of the system.
- (5) Registration of a high risk manufactured water system remains in force for a period of 12 months and may be renewed for successive periods of 12 months on application made before the expiry of registration.
- (6) The authority must, on application made in a manner and form approved by the authority and payment of the renewal fee specified in Schedule 1 to the authority, renew the registration of the high risk manufactured water system to which the application relates.

6—Register of high risk manufactured water systems

- (1) The authority must establish and maintain a register of high risk manufactured water systems installed on premises situated in its area.
- (2) The register will be kept in a manner and form determined by the authority.
- (3) The register must include, in relation to each high risk manufactured water system on the register—
 - (a) the type of water system; and
 - (b) the address of the premises on which the water system is installed; and
 - (c) the location of the water system on the premises; and
 - (d) the full name and residential and business addresses of the owner of the premises; and
 - (e) the full name, residential and business addresses, and residential and business telephone numbers, of the person nominated by the owner of the premises as being responsible for the operation and maintenance of the water system,and may include such other information as the authority thinks fit.
- (4) The owner of premises on which a high risk manufactured water system registered with the authority is installed must, within 1 month after any change in the particulars registered in relation to the system, notify the authority of the change.

Maximum penalty: Division 10 fine.

Expiation fee: Division 10 fee.

- (5) If a high risk manufactured water system registered with the authority is permanently decommissioned or removed, the owner of the premises on which the system is or was installed must notify the authority of the decommissioning or removal within 1 month after that event.

Maximum penalty: Division 10 fine.

Expiation fee: Division 10 fee.

7—Cooling water systems to be fitted with automatic biocide dosing devices

The owner of premises on which a cooling water system is installed must ensure that an automatic biocide dosing device is fitted to the system and is operating effectively at all times while the system is in operation.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

8—Cooling water systems to be fitted with drift eliminators

(1) *Unless the Minister determines otherwise, the owner of premises on which a cooling water system is installed must ensure that every cooling tower in the system is fitted with a drift eliminator that—*

- (a) *covers the full exhaust air stream so as to prevent air by-pass; and*
- (b) *is capable of keeping drift loss below the maximum specified in clause 4.4 of AS/NZS 3666.1; and*
- (c) *is designed for in situ cleaning or is capable of being removed for cleaning or inspection without damage.*

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

(2) *The Minister may determine that cooling towers in a particular cooling water system need not be fitted with a drift eliminator that complies with subregulation (1).*

Note—

Regulation 8 had not come into operation at the date of the publication of this version.

9—Commissioning of high risk manufactured water systems

The owner of premises on which a cooling water system is installed must ensure that clause 4.7 of AS/NZS 3666.1 is complied with in relation to the system before it is brought into service.

Maximum penalty: Division 7 fine.

Expiation fee: Division 7 fee.

10—Plans and manuals relating to high risk manufactured water systems to be kept readily accessible etc

Note—

Subregulations (1), (2) and (4) had not come into operation at the date of the publication of this version.

(1) *The owner of premises on which a high risk manufactured water system is installed must ensure that plans for the system that comply with subregulation (2) are kept on the premises in a readily accessible place and are made available for inspection on request by an authorised officer.*

Maximum penalty: Division 8 fine.

Expiation fee: Division 8 fee.

- (2) *Plans for a high risk manufactured water system must show—*
- (a) *in the case of plans for a system installed before the commencement of this regulation—the location of all major components of the system;*
 - (b) *in any other case—the location of all parts of the system.*
- (3) The owner of premises on which a high risk manufactured water system is installed must ensure that operating and maintenance manuals for the system that comply with clause 2.6.1 of AS/NZS 3666.2 are kept on the premises in a readily accessible place and are made available for inspection on request by an authorised officer.

Maximum penalty: Division 8 fine.

Expiation fee: Division 8 fee.

- (4) *In this regulation—*

major components of a high risk manufactured water system includes cooling towers, condensers, filtration devices, automatic biocide dosing devices, drift eliminators, water inlets, waste outlets and discharge points, water heating devices and water storage facilities.

11—High risk manufactured water systems to be operated and maintained by competent persons

The owner of premises on which a high risk manufactured water system is installed must ensure that the person responsible for the operation and maintenance of the system is knowledgeable in the operation and maintenance of the system and sufficiently competent to ensure that the system is operated and maintained as required by these regulations.

Maximum penalty: Division 8 fine.

12—Maintenance of cooling water systems

The owner of premises on which a cooling water system is installed must ensure that the system is maintained in accordance with—

- (a) the requirements set out in—
 - (i) Section 2.5 of AS/NZS 3666.2; or
 - (ii) Section 3 of AS/NZS 3666.3; or
- (b) a program approved by the Minister.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

13—Maintenance of warm water systems

The owner of premises on which a warm water system is installed must ensure that—

- (a) water in storage areas of the system is kept at a temperature of at least 60°C at all times while the system is in operation; and
- (b) the temperature of water in storage areas and throughout the distribution system of the system is measured at least once every month and recorded in the maintenance log book kept in relation to the system; and

- (c) a physical inspection of the system is carried out at least once every month to examine the cleanliness and mechanical condition of the system; and
- (d) the system is thoroughly cleaned whenever an inspection reveals sludge, slime, scale, foam, rust, dirt, dust or other impurities or foreign material present in the system; and
- (e) decontamination of the system is carried out at least every 6 months in accordance with—
 - (i) a prescribed decontamination procedure; or
 - (ii) a decontamination procedure approved by the Minister.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

14—Maintenance log books

- (1) The owner of premises on which a high risk manufactured water system is installed must ensure that—
 - (a) an up-to-date log book is kept setting out—
 - (i) the particulars referred to in clause 2.6.2 of AS/NZS 3666.2; and
 - (ii) all microbiological test results of samples of water taken from the system; and
 - (iii) in the case of a cooling water system—the type and quantity of biocide used to dose the system and the frequency of biocide dosing; and
 - (b) the log book is kept on the premises in a readily accessible place; and
 - (c) the log book is made available for inspection on request by an authorised officer.

Maximum penalty: Division 8 fine.

Expiation fee: Division 8 fee.

- (2) The owner of premises on which a high risk manufactured water system is installed must retain a log book relating to the system for a period of at least 5 years after the last entry in the log book is made.

Maximum penalty: Division 8 fine.

Expiation fee: Division 8 fee.

15—Annual inspection and microbiological testing

- (1) Subject to subregulation (2), the authority must, at least once in every 12 months—
 - (a) cause an inspection of each high risk manufactured water system registered with the authority to be carried out; and
 - (b) arrange for a NATA accredited laboratory to conduct microbiological testing, in accordance with AS/NZS 3896—
 - (i) of at least 1 sample of water taken from each cooling water system; and

- (ii) of at least 2 samples of water taken from each warm water system, to determine the presence and number of colony forming units of Legionella in the water.
- (2) The authority is not required to comply with subregulation (1) if the authority, at least once in every 12 months, gives the owner of each of the premises on which a high risk manufactured water system registered with the authority is installed written notice—
 - (a) requiring the owner, within the period specified in the notice—
 - (i) to cause an inspection of the water system to be carried out by a competent person (not being the owner or person responsible for the operation and maintenance of the system); and
 - (ii) to arrange for a NATA accredited laboratory to conduct microbiological testing, in accordance with AS/NZS 3896—
 - (A) of at least 1 sample of water taken from a cooling water system; and
 - (B) of at least 2 samples of water taken from a warm water system, to determine the presence and number of colony forming units of Legionella in the water; and
 - (b) requiring the owner to submit to the authority written reports setting out the findings of the inspection and the results of the microbiological testing within 1 month of receiving the reports.
- (3) In subregulation (2)(a)(i) a reference to a *competent person* is a reference to a person who—
 - (a) is knowledgeable in the operation and maintenance of high risk manufactured water systems; and
 - (b) is sufficiently competent to ensure that high risk manufactured water systems are operated and maintained as required by these regulations; and
 - (c) has qualifications or training in water treatment of high risk manufactured water systems.
- (4) A person to whom a notice is given under this regulation must not, without reasonable excuse, fail to comply with the requirements of the notice.
Maximum penalty: Division 6 fine.
Expiation fee: Division 6 fee.

16—Power of authority to require microbiological testing in other circumstances

- (1) If—
 - (a) the authority is investigating the occurrence of Legionellosis in the near vicinity of premises on which a high risk manufactured water system is installed; or

- (b) the authority has reason to believe that a high risk manufactured water system installed on premises situated in its area is not being maintained as required by these regulations,

the authority may give the owner of the premises written notice—

- (c) requiring the owner (either immediately or within a period specified in the notice) to arrange for a NATA accredited laboratory to conduct microbiological testing, in accordance with AS/NZS 3896, of water taken from the system, to determine the presence and number of colony forming units of Legionella in the water; and
 - (d) requiring the owner to submit to the authority a written report setting out the results of the microbiological testing within 24 hours of receiving the report.
- (2) A person to whom a notice is given under this regulation must not, without reasonable excuse, fail to comply with the requirements of the notice.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

17—Results of microbiological testing to be reported to authority within 24 hours in certain cases

- (1) If the owner of premises on which a cooling water system is installed receives a report of the results of microbiological testing of water taken from the system indicating the presence of 1 000 or more colony forming units of Legionella per millilitre of water, he or she must submit the report to the authority within 24 hours of receiving the report.

Maximum penalty: Division 7 fine.

Expiation fee: Division 7 fee.

- (2) If the owner of premises on which a warm water system is installed receives a report of the results of microbiological testing of water taken from the system indicating the presence of 10 or more colony forming units of Legionella per millilitre of water, he or she must submit the report to the authority within 24 hours of receiving the report.

Maximum penalty: Division 7 fine.

Expiation fee: Division 7 fee.

18—Power of authority to require information

- (1) The authority may, as may reasonably be required in connection with the administration or enforcement of these regulations, give the owner of premises in which a high risk manufactured water system is installed written notice requiring the owner to provide specified information to the authority within the period specified in the notice.
- (2) A person to whom a notice is given under this regulation must not, without reasonable excuse, fail to comply with the requirements of the notice.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

19—Power of authority to require immediate decontamination of high risk manufactured water systems

- (1) If the authority receives a report of the results of microbiological testing of water taken from a cooling water system indicating the presence of 1 000 or more colony forming units of *Legionella* per millilitre of water, the authority—
 - (a) must notify the Department of the results of the test within 24 hours of receiving the report; and
 - (b) may give the owner of the premises on which the system is installed written notice requiring the owner to immediately decontaminate the system in accordance with—
 - (i) a prescribed decontamination procedure; or
 - (ii) a decontamination procedure approved by the Minister.
- (2) If the authority receives a report of the results of microbiological testing of water taken from a warm water system indicating the presence of 10 or more colony forming units of *Legionella* per millilitre of water, the authority—
 - (a) must notify the Department of the results of the test within 24 hours of receiving the report; and
 - (b) may give the owner of the premises on which the system is installed written notice requiring the owner to immediately decontaminate the system in accordance with—
 - (i) a prescribed decontamination procedure; or
 - (ii) a decontamination procedure approved by the Minister.
- (3) A person to whom a notice is given under this regulation must not, without reasonable excuse, fail to comply with the requirements of the notice.

Maximum penalty: Division 6 fine.

Expiation fee: Division 6 fee.

20—Power of authority to require shut down or maintenance etc

- (1) If the authority is satisfied that a high risk manufactured water system installed on premises situated in its area is not being maintained as required by these regulations, the authority may give the owner of the premises written notice—
 - (a) requiring the owner to shut down the system immediately; or
 - (b) requiring the owner to take specified action (immediately or within a period specified in the notice) to do any 1 or more of the following:
 - (i) alter, repair, rectify or replace the system or components of the system;
 - (ii) service, maintain or clean the system or components of the system;
 - (iii) decontaminate the system in accordance with—
 - (A) a prescribed decontamination procedure; or
 - (B) a decontamination procedure approved by the Minister.

- (2) A person to whom a notice is given under this regulation must not, without reasonable excuse, fail to comply with the requirements of the notice.
Maximum penalty: Division 6 fine.
- (3) If the requirements of a notice given under this regulation are not complied with, the authority may cause the requirements to be carried out (and a person engaged by the authority to carry out the relevant work may enter land at any reasonable time for that purpose).
- (4) The authority may take action in a court of competent jurisdiction to recover costs and expenses reasonably incurred in exercising the power under subregulation (3) from the person who failed to comply with the notice, as a debt due to the authority.

21—Determinations and approvals

- (1) An application for a determination or approval under these regulations must—
 - (a) be made to the Minister in a manner and form approved by the Minister; and
 - (b) be accompanied by the appropriate application fee specified in Schedule 1.
- (2) An applicant must, if the Minister so requires, provide the Minister with specified information to enable the Minister to make a decision on the application.
- (3) A determination or approval under these regulations may be subject to such conditions as the Minister thinks fit.
- (4) A person must not contravene, or fail to comply with, a condition of a determination or approval under these regulations.
Maximum penalty: Division 7 fine.
Expiation fee: Division 7 fee.
- (5) If a condition of an approval is contravened or not complied with, the Minister may, by written notice given to the holder of the approval, revoke the approval.
- (6) In this regulation—
approval means approval of a maintenance program or decontamination procedure;
determination means a determination under regulation 8(2).

22—False or misleading statement

A person must not make a statement that is false or misleading in a material particular (whether by reason of the inclusion or omission of any particular) in any information provided under these regulations.

Maximum penalty: Division 6 fine.

23—Prescribed guidelines for local councils

Pursuant to section 47(2)(j) of the Act, the following documents as in force from time to time are prescribed as guidelines to assist local councils in the administration of the Act:

- (a) *Guidelines for the Control of Legionella in Manufactured Water Systems in South Australia* (other than Schedule 3) published by the Minister;
- (b) AS/NZS 3666.1 (other than clauses 4.4 and 4.7);

- (c) AS/NZS 3666.2 (other than Section 2.5 and clauses 2.6.1 and 2.6.2);
- (d) AS/NZS 3666.3 (other than Section 3);
- (e) SAA/SNZ HB32.

24—Fees

- (1) The owner of premises in which a high risk manufactured water system is installed is liable to pay to the authority the appropriate fee specified in Schedule 1 for each inspection of the system carried out by or on behalf of the authority.
- (2) The owner of premises in which a high risk manufactured water system is installed is liable to pay to the authority a fee equal to any expenses incurred by the authority in arranging for microbiological testing of water samples taken from the system, including the costs of collection and delivery of samples to the testing laboratory.
- (3) If a person is liable to pay a fee to the authority, the authority may give the person written notice requiring the person to pay the fee within the period specified in the notice.
- (4) The authority may refund, reduce or remit a fee payable to the authority under these regulations if satisfied that it is appropriate to do so in a particular case.
- (5) A fee payable to the authority under these regulations may be recovered by the authority by action in a court of competent jurisdiction as a debt due to the authority.

Schedule 1—Fees

1	On application for registration of a high risk manufactured water system—	
	(a) for registration of 1 system	\$30
	(b) for registration of each additional system installed on the same premises	\$20
2	On application to the authority for renewal of registration of a high risk manufactured water system (for each system)	\$15
3	For inspection of a high risk manufactured water system—	
	(a) for inspection of 1 system	\$120
	(b) for inspection of each additional system installed on the same premises	\$80
4	On application to the Minister for a determination or approval under these regulations	\$500

Legislative history

Notes

- In this version provisions that are uncommenced appear in italics.
- For further information relating to the Act and subordinate legislation made under the Act see the Index of South Australian Statutes or www.legislation.sa.gov.au.

Principal regulations

Year	No	Reference	Commencement
2008	238	<i>Gazette 28.8.2008 p4149</i>	1.10.2008 except r 7—1.4.2009 and except rr 8 & 10(1), (2) & (4)—1.10.2009: r 2

Appendix—Divisional penalties and expiation fees

At the date of publication of this version divisional penalties and expiation fees are, as provided by section 28A of the *Acts Interpretation Act 1915*, as follows:

Division	Maximum imprisonment	Maximum fine	Expiation fee
1	15 years	\$60 000	—
2	10 years	\$40 000	—
3	7 years	\$30 000	—
4	4 years	\$15 000	—
5	2 years	\$8 000	—
6	1 year	\$4 000	\$300
7	6 months	\$2 000	\$200
8	3 months	\$1 000	\$150
9	—	\$500	\$100
10	—	\$200	\$75
11	—	\$100	\$50
12	—	\$50	\$25

Note: This appendix is provided for convenience of reference only.