

Safe Drinking Water Regulations 2005

S.R. No. 88/2005

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STATUTORY RULES 2005

S.R. No. 88/2005

Safe Drinking Water Act 2003

Safe Drinking Water Regulations 2005

The Governor in Council makes the following Regulations:

Dated: 19 July 2005

Responsible Minister:

BRONWYN PIKE
Minister for Health

RUTH LEACH
Acting Clerk of the Executive Council

PART 1—PRELIMINARY

1. Objective and outline

- (1) The objective of these Regulations is to make further provision for the supply of safe drinking water.
- (2) In outline these Regulations—
 - (a) set out the further matters to be addressed in risk management plans and the risks to be specified in risk management plans;
 - (b) describe the documents that are to be available for inspection in a risk management plan audit;
 - (c) prescribe the form of audit certificates to be given to the person who has commissioned a risk management plan audit at the completion of the audit;

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Part 1—Preliminary

- (d) set out the risk management plan auditor approval criteria;
- (e) set out drinking water quality standards;
- (f) set out requirements relating to the frequency of collection of samples of water for analysis;
- (g) empower the Secretary to—
 - (i) divide areas supplied by water suppliers into water sampling localities;
 - (ii) specify locations within a water sampling locality at which samples of water are to be collected;
 - (iii) vary the frequency of collection for samples of water in certain circumstances;
 - (iv) approve persons to be approved water analysts;
- (h) require all samples of water collected to be analysed by an approved water analyst and a summary of the results of the analyses to be given to the Secretary;
- (i) specify the issues relating to the quality of drinking water and regulated water, in an annual report in respect of every financial year to be given to the Secretary by a water supplier and water storage manager;
- (j) set out details to be included in an annual report to the Secretary referred to in sub-regulation (2)(i).

2. Authorising provision

These Regulations are made under section 56 of the **Safe Drinking Water Act 2003**.

3. Definitions

In these Regulations—

"approved water analyst" means a person approved under regulation 14;

"emergency" and **"emergency management"** have the same meanings as in the **Emergency Management Act 1986**;

"geographic co-ordinate" includes—

- (a) a meridian of longitude by itself; and
- (b) a parallel of latitude by itself;

"hazard" means a biological, chemical, physical or radiological agent that has the potential to cause harm;

"NATA" means National Association of Testing Authorities, Australia, ACN 004 379 748;

"relevant sampling frequency", in relation to a parameter specified in column 1 of the Table set out in Schedule 2, means—

- (a) the frequency specified in column 2 of that Table opposite that parameter; or
- (b) if there is a notice under regulation 11(3) in force, the frequency specified in that notice in respect of that parameter;

"the Act" means the **Safe Drinking Water Act 2003**;

"water sampling locality" means an area specified by the Secretary under regulation 4;

"water sampling point" means a location within a water sampling locality specified by the Secretary under regulation 5.

4. Water sampling localities

- (1) The Secretary, by notice published in the Government Gazette, may specify an area that is supplied with drinking water by a water supplier to be a water sampling locality for the purposes of these Regulations.
- (2) In specifying an area as a water sampling locality under sub-regulation (1), the Secretary may have regard to—
 - (a) the nature and design of the distribution system used by the water supplier to supply drinking water generally and in that area; and
 - (b) the sources of the drinking water supplied to the water supplier for supply by it generally or in that area; and
 - (c) any other matter that the Secretary considers relevant.
- (3) The area of a water sampling locality specified under sub-regulation (1) must be described by reference to its boundaries.
- (4) The boundaries of an area of water sampling locality specified under sub-regulation (1) may be described—
 - (a) using geographic co-ordinates; or
 - (b) by reference to any one or more of the following—
 - (i) a freeway, highway, road, street or other thoroughfare;
 - (ii) a railway line;
 - (iii) a municipal boundary;
 - (iv) a physical feature of terrain;

- (v) a waterway;
- (vi) a property boundary.

5. Water sampling points

- (1) For the purpose of ensuring that samples of drinking water collected within a water sampling locality in accordance with these Regulations are, so far as practicable, representative of the drinking water supplied in that locality, the Secretary may, in writing, specify as a water sampling point—
 - (a) a tap connected to the water supplier's system of supply within a water sampling locality that is designed solely for the purpose of collecting samples of water; or
 - (b) if there is no tap of the kind referred to in paragraph (a), another tap connected to the water supplier's system of supply within a water sampling locality.
- (2) The number of taps specified as water sampling points for each water sampling locality—
 - (a) must not be a number that is less than a number that is reasonably necessary to ensure that samples of drinking water collected within the water sampling locality in accordance with these Regulations are, so far as practicable, representative of the drinking water supplied in that locality; and
 - (b) in any case, must not exceed 100.
- (3) The Secretary must establish and maintain a register of water sampling points and ensure that the register is available for inspection by any person at the principal office of the Department of Human Services at all reasonable times.

PART 2—MANAGEMENT OF RISKS TO WATER SUPPLY

6. Risk management plan

- (1) For the purposes of section 9(1)(e) of the Act, a risk management plan must contain the following matters—
- (a) the names and contact details of, and the positions held by, the persons responsible for managing hazards and risks to the quality of the water identified in the risk management plan; and
 - (b) details of the activities undertaken, and measures taken, to manage hazards and risks to the quality of the water identified in the risk management plan, including the method by which the effectiveness of these activities and measures is verified; and
 - (c) details of the features of the system of supply designed to assist in the management of risks to the quality of the water identified in the risk management plan, including the method by which the effectiveness of these features is verified; and
 - (d) in the case of a water supplier, details of the procedures for consultation with water storage managers and other water suppliers for the purpose of achieving agreement on the hazards and risks to quality of the water supplied—
 - (i) to the water supplier by water storage managers or other water suppliers; and
 - (ii) by the water supplier to other water suppliers; and

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- (e) details of procedures and management systems for—
 - (i) ensuring that the amount and purity of chemicals added to drinking water does not adversely affect the quality of that water or pose a risk to human health; and
 - (ii) controlling any residue or chemical by-products imparted to drinking water as a result of the addition of chemicals to water supplied for drinking purposes; and
 - (f) details of emergency management arrangements and procedures for dealing with an incident, event or emergency that may adversely affect the quality or safety of drinking water, or result in water being supplied that poses a risk to human health, including—
 - (i) the names and contact details of, and the positions held by, the persons responsible for dealing with such an incident, event or emergency; and
 - (ii) methods for communicating or disseminating information to the public in relation to any such incident, event or emergency.
- (2) For the purposes of section 9(2) of the Act, a risk management plan must address the following risks—
- (a) the risk to human health that arises from the presence in water of—
 - (i) pathogenic micro-organisms; and
 - (ii) inorganic chemicals, including inorganic disinfection by-products; and
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- (iii) organic chemicals, including pesticides, pesticide residues and organic disinfection by-products; and
 - (iv) radiological parameters; and
 - (v) algal toxins; and
- (b) the risks arising from an incident or event that may cause the organisms, substances and matters referred to in paragraph (a) to enter or be present in the system of supply of the water supplier or the water supplied by the water storage manager (as the case requires); and
- (c) the risk of transfer of the organisms, substances and matters referred to in paragraph (a) in water being supplied by the water supplier or water storage manager (as the case requires).

7. Risk management plan audits

For the purposes of section 10(2) of the Act, the specified documents are—

- (a) the risk management plan; and
 - (b) any document or operating manual, procedure or protocol created pursuant to the risk management plan or containing material relating to the content of the risk management plan; and
 - (c) any training and competency manual relating to the responsibilities of the staff of the water supplier or water storage manager (as the case requires) to manage and deal with—
 - (i) risks identified in the risk management plan; and
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- (ii) emergencies, incidents or events that may adversely affect the quality of—
 - (A) in the case of a water supplier, drinking water;
 - (B) in the case of a water storage manager, the water supplied or to be supplied.

8. Audit certificate

For the purposes of section 12(2) of the Act, a risk management plan audit certificate must be in the form of Schedule 1.

9. Approval of risk management plan auditors

- (1) For the purposes of section 13(2) of the Act, the auditor approval criteria are that the applicant for approval—
 - (a) holds an accreditation by an institution which, in the opinion of the Secretary, makes the applicant suitable for approval as a risk management plan auditor; or
 - (b) demonstrates to the Secretary that he or she has the experience, qualifications and skills necessary to independently conduct audits of risk management plans.
- (2) In addition, the applicant for approval must provide to the Secretary a written declaration that he or she has no conflict of interest that would impinge on their ability to objectively conduct an audit of a risk management plan.

PART 3—DRINKING WATER QUALITY STANDARDS

10. Drinking water quality standards

For the purposes of section 17 of the Act, the quality standards specified for drinking water supplied within a water sampling locality are—

- (a) if the drinking water contains a parameter specified in column 1 of the Table in Schedule 2 that the parameter not exceed the standard set out in column 3 of that Table opposite that parameter;
- (b) if the drinking water contains an algal toxin, or any other pathogen, or any substance or chemical not specified in column 1 of the Table in Schedule 2, that the water not contain that toxin, pathogen, substance or chemical, whether alone or in combination with another toxin, pathogen, substance or chemical, in such amounts that may pose a risk to human health.

11. Frequency of sampling for drinking water

- (1) A water supplier must collect, or cause to be collected, a sample of drinking water at a relevant water sampling point located within each water sampling locality at the relevant sampling frequency.

Penalty: 20 penalty units.

- (2) In sub-regulation (1)—

"relevant water sampling point" means any water sampling point within a water sampling locality other than the water sampling point from which a sample of drinking water was last collected.

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- (3) The Secretary, on his or her own motion, or on the application of a water supplier, may, by notice published in the Government Gazette, vary the frequency at which samples of drinking water are to be collected at a water sampling point located within a water sampling locality in respect of a parameter specified in column 1 of the Table in Schedule 2.
- (4) In determining whether to vary the frequency at which a sample of drinking water is to be collected at a water sampling point located within a water sampling locality, the Secretary may have regard to—
- (a) the number of persons taking water from the water supplier's system of supply within the water sampling locality, including any difference in the number of persons taking water at different times in the year;
 - (b) the need to have a sufficient number of samples of drinking water to be collected to ensure that those samples are, so far as practicable, representative of the drinking water supplied in the water sampling locality;
 - (c) the chemicals and other substances used by the water supplier to disinfect or treat the drinking water being supplied to the relevant water sampling locality;
 - (d) any other matter the Secretary considers relevant.
- (5) A notice under sub-regulation (3) must specify—
- (a) the water supplier to whom the notice applies; and
 - (b) the relevant water sampling locality being supplied drinking water by the water supplier; and
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- (c) the parameter specified in column 1 of the Table in Schedule 2 in respect of which the frequency for the collection of samples of drinking water has been varied; and
- (d) the frequency at which samples of drinking water are to be collected in respect of the parameter specified in column 1 of the Table in Schedule 2; and
- (e) the period for which the frequency specified in the notice will apply; and
- (f) the date on which the notice takes effect.

12. Samples of drinking water must be analysed

- (1) A water supplier must cause every sample of drinking water collected in accordance with regulation 11 to be given to an approved water analyst for analysis.
Penalty: 20 penalty units.
- (2) A water supplier must ensure that every sample of drinking water given under sub-regulation (1) to an approved water analyst for analysis is analysed by that analyst to determine whether the drinking water supplied within the water sampling locality from which sample was collected contains—
 - (a) the parameter *Escherichia coli* or the parameter turbidity in excess of the standard specified by regulation 10(a) in respect of that parameter; and
 - (b) a relevant treatment parameter in excess of the standard specified by regulation 10(a) in respect of that parameter.

Penalty: 20 penalty units.

(3) In sub-regulation (2)—

"relevant treatment parameter" means, if the drinking water supplied within the water sampling locality from which the sample was collected has been disinfected or treated with—

- (a) ozone—bromate or formaldehyde;
- (b) chlorine based chemicals—chloroacetic acid, dichloroacetic acid, trichloroacetic acid or trihalomethanes;
- (c) aluminium based chemicals—aluminium.

13. Results of analysis of samples of drinking water must be given to the Secretary

- (1) A water supplier must ensure that a written summary of the results of every analysis of a sample of drinking water collected in accordance with these Regulations is given to the Secretary not later than the end of the first month after the month in which the sample was collected.

Penalty: 20 penalty units.

- (2) A water supplier must ensure that the summary of results given to the Secretary under sub-regulation (1) specifies the amount by which any of the parameters specified in column 1 of the Table in Schedule 2 have exceeded the standard set out in column 3 of that Table opposite that parameter.

Penalty: 20 penalty units.

14. Approval of water analysts

- (1) A person may apply to the Secretary to be approved to conduct an analysis of samples of drinking water collected in accordance with regulation 11.

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Part 3—Drinking Water Quality Standards

- (2) An application under sub-regulation (1) must be—
 - (a) in writing; and
 - (b) accompanied by a written declaration that the person is not directly or indirectly engaged in any activity connected with the supply of drinking water that would conflict with that person's duty as an approved water analyst.
 - (3) On receipt of an application under sub-regulation (1), the Secretary may approve, in writing, that person.
 - (4) The Secretary must not approve a person under this regulation unless—
 - (a) the Secretary considers the person to be appropriately qualified to conduct analyses of samples of drinking water; and
 - (b) the person is employed by a person or body that operates a laboratory that is accredited by NATA to conduct analyses of, and report on, samples of drinking water in respect of the parameters specified in column 1 of the Table in Schedule 2; and
 - (c) the laboratory referred to in paragraph (b) is accredited by NATA to conduct analyses of, and report on, samples of drinking water in respect of the parameters for which the approval will be given.
 - (5) An approval may be given for such period (if any) as is determined by the Secretary and is specified in the approval.
 - (6) An approval under this regulation may be subject to such conditions as are determined by the Secretary.
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Part 3—Drinking Water Quality Standards

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- (7) Without limiting the generality of sub-regulation (6), the conditions of an approval may include—
- (a) a condition providing that the approval ceases if the person is not employed by a laboratory referred to in sub-regulation (4)(b);
 - (b) a condition limiting the approval to the conduct of analyses of drinking water in respect of a particular type or class of parameter.
- (8) Despite anything to the contrary in any conditions of approval, the Secretary—
- (a) may, at any time, vary the conditions of approval or revoke the approval;
 - (b) must, at the request of an approved water analyst, revoke the approval.
- (9) The Secretary must—
- (a) maintain a list of approved water analysts; and
 - (b) make sure that—
 - (i) the list is published; and
 - (ii) copies of the list are available for inspection by any person at the principal office of the Department of Human Services at all reasonable times.
- (10) A person is not prohibited from being an approved water analyst by reason only that he or she is employed by or on behalf of a government department to carry out analyses of water samples and that government department is engaged in any activity connected with the supply of water.
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PART 4—OTHER MATTERS

**15. Additional details to be included in annual reports
of water suppliers or water storage managers**

- (1) For the purposes of section 26(1) and (2) of the Act, the required contents of the annual report of a water supplier are—
 - (a) information evidencing compliance or non-compliance (as the case requires) with regulations 10, 11 and Schedule 2; and
 - (b) information about actions taken by the water supplier when a drinking water quality standard set out in regulation 10 and Schedule 2 has not been met; and
 - (c) information about actions taken by the water supplier in respect of each emergency, incident or event that has arisen that has affected—
 - (i) the quality of drinking water supplied generally; and
 - (ii) the quality of drinking water supplied where that supply posed a risk to human health; and
 - (d) any issues that may have arisen out of the actions referred to in paragraph (c); and
 - (e) an analysis of water sample information, data and results relating to the quality of drinking water supplied and a comparison of that information and data, and those results, with water sample information, data and results from the previous 2 financial years; and

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Part 4—Other Matters

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- (f) a summary of every—
- (i) variation in aesthetic standards approved under section 19 of the Act in respect of drinking water supplied by the water supplier and any conditions imposed under section 21 of the Act; and
 - (ii) exemption from a water quality standard approved under section 20 of the Act in respect of drinking water supplied by the water supplier and any conditions imposed under section 21 of the Act; and
 - (iii) written undertaking by the water supplier accepted by the Secretary under section 30 of the Act; and
- (g) a summary of complaints received by the water supplier relating to the quality of drinking water supplied, a summary of the responses and any analysis of the issues arising from the complaints; and
- (h) a summary of the process by which the drinking water supplied by the water supplier is disinfected or treated and any other processes applied to the water by the water supplier, and any issues arising out of the application of those processes; and
- (i) a list of all the chemicals and other substances, and any processes, used by the water supplier to disinfect or treat the drinking water supplied by it; and
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Part 4—Other Matters

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- (j) a summary of steps taken by the water supplier to manage the aesthetic characteristics of the drinking water supplied by it, including steps taken to manage the taste, odour, clarity and pH of the drinking water supplied; and
 - (k) details of any regulated water supplied by the water supplier and the declaration under section 6 of the Act in respect of that regulated water; and
 - (l) details of the steps taken in accordance with section 25 of the Act; and
 - (m) a summary of the findings of the most recent risk management plan audit and any issues that the approved auditor raised during the risk management plan audit.
- (2) For the purposes of section 26(1) and (2) of the Act, the required contents of the annual report of a water storage manager are—
- (a) information about actions taken by the water storage manager in respect of each emergency, incident or event that has arisen that has affected—
 - (i) the quality of the water supplied for drinking purposes generally; and
 - (ii) the quality of the water supplied where that supply posed a risk to human health; and
 - (b) any issues that may have arisen out of the taking of the actions referred to in paragraph (a); and
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Part 4—Other Matters

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- (c) a summary of every—
 - (i) exemption under section 8 of the Act and any condition imposed in relation to every exemption; and
 - (ii) written undertaking by the water storage manager accepted by the Secretary under section 30 of the Act; and
 - (d) a summary of the process by which the water supplied by the water storage manager is disinfected or treated and any other processes applied to the water by the water storage manager, and any issues arising out of the application of those processes; and
 - (e) a list of all the chemicals and other substances, and any processes, used by a water storage manager to disinfect or treat the water supplied, or to be supplied, by it for drinking purposes; and
 - (f) a summary of the findings of the most recent risk management plan audit and any issues that the approved auditor raised during the risk management plan audit.
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SCHEDULES

SCHEDULE 1

Regulation 8

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RISK MANAGEMENT PLAN AUDIT CERTIFICATE

Certificate Number: *(insert a number to specifically identify this certificate from any other audit certificate issued by the approved auditor)*

Audit period: *(insert period of audit relevant to this certificate)*

To: *(insert full name and address of person who commissioned the audit)*

Australian Business Number (ABN): *(insert the business number of the water supplier or water storage manager)*

I, *(print full name of approved auditor)*, after conducting a risk management plan audit of the water supplied by *(insert name of the water supplier or water storage manager)*, am of the opinion that—

(insert name of water supplier)* *has/has not complied with the obligations imposed by section 7(1) of the **Safe Drinking Water Act 2003 during the audit period.

(insert name of water storage manager)* *has/has not complied with the obligations imposed by section 8(1) of the **Safe Drinking Water Act 2003 during the audit period.

*The details of the reasons for non-compliance are—

**insert/attach the details of the reasons for non-compliance*

Signature of approved auditor:

Date:

* delete if not applicable

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Sch. 2

SCHEDULE 2

Regulation 10

DRINKING WATER QUALITY STANDARDS

TABLE

<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
Parameter	Relevant sampling frequency for each water sampling locality	Quality standard for each water sampling locality
Microbiological organisms		
<i>Escherichia coli</i>	one sample per week	at least 98% of all samples of drinking water collected in any 12 month period contain no <i>Escherichia coli</i> per 100 millilitres of drinking water
Chlorine based chemicals		
Chloroacetic acid	one sample per month	0.15 milligrams per litre of drinking water
Dichloroacetic acid	one sample per month	0.1 milligrams per litre of drinking water
Trichloroacetic acid	one sample per month	0.1 milligrams per litre of drinking water
Trihalomethanes	one sample per month	0.25 milligrams per litre of drinking water

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<i>Column 1</i>	<i>Column 2</i>	<i>Column 3</i>
Parameter	Relevant sampling frequency for each water sampling locality	Quality standard for each water sampling locality
Chemicals derived from disinfection or treatment with ozone		
Bromate	one sample per month	0.02 milligrams per litre of drinking water
Formaldehyde	one sample per month	0.5 milligrams per litre of drinking water
Aluminium based chemicals		
Aluminium	one sample per month	0.2 milligrams per litre of drinking water (acid-soluble)
Other parameters		
Turbidity	one sample per week	95% upper confidence limit of the mean of samples of drinking water collected in any 12 month period must be less than or equal to 5.0 Nephelometric Turbidity Units.