

DRAFT Tasmanian Drinking Water Quality Guidelines

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Tasmanian Drinking Water Quality Guidelines

Public Health Act 1997

DRAFT for Consultation

May 2014

Note

- (1) This Guideline is a draft for the purposes of consultation. As such, various drafting notes still appear throughout the document.
 - (2) References to sections of the *Public Health Act 1997* that appear in this Guideline are references to the proposed 'marked up' version of the *Act*, released for consultation in December 2013. If the proposed changes to the *Act* are not passed by Parliament, this Guideline will be amended accordingly.
 - (3) A number of terms have been shown in italics to denote that they have specific meaning as defined in the Public Health Act or in Clause 3 of these Guidelines.
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Issuing Statement and Version Date

[drafting note –DPH issue statement and Version Date]

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PART I INTRODUCTION AND DEFINITIONS

1. Introduction

- (1) This Guideline is concerned with the quality and safety of *drinking water* from a health point of view and is designed to facilitate the protection of *public health*.
- (2) It supports the principles, management practices, preventive measures and guideline values contained in the Australian Drinking Water Guidelines.
- (3) This Guideline is issued by the *Director of Public Health* under the *Public Health Act 1997*. It is a legal requirement to comply with this Guideline and a failure to do so may attract penalties under the *Act*.

2. Application of this Guideline

- (1) This Guideline applies to suppliers of *drinking water* in Tasmania. Suppliers are responsible for the management of *drinking water* in accordance with Part 6 of the *Act* and this Guideline.
- (2) In Tasmania, *drinking water* is supplied by:
 - (a) a *regulated entity* (also known as a water and sewerage corporation);
 - (b) *private drinking water suppliers* (supplying water from a *private water source*); and
 - (c) *water carriers* (supplying drinking water by carting it in tanks).
- (3) This Guideline does not apply to:
 - (a) private household *drinking water supply systems*; or
 - (b) suppliers of packaged water (ie bottled water and packaged ice). Packaged water is regulated by the *Australia New Zealand Food Standards Code* and the *Tasmanian Food Act 2003*.

3. Definitions

- (1) A word or phrase used in this Guideline and defined in the Act has the meaning given to it in the Act. At the time of issuing this Guideline, such words or phrases include:

Agency	public health
approved	private water source
authorised officer	registered
Director	threat to public health
guidelines	vehicle

- (2) In this Guideline -

accredited laboratory	means a laboratory accredited by the National Association of Testing Authorities or a laboratory approved in writing by the <i>Director</i>
Act	means the Tasmanian <i>Public Health Act 1997</i>
ADWG	means the <i>Australian Drinking Water Guidelines</i> published by the National Health and Medical Research Council and the Natural Resource Management Ministerial Council as in force from time to time
audit report	means the report by a <i>water quality auditor</i> required under clause 10 of this Guideline
audit schedule	means the schedule of planned audits required under clause 9 of this Guideline
boil water alert	means a warning issued under section 128 of the <i>Act</i> that <i>drinking water</i> cannot be safely consumed unless it is first boiled
Compliance Plan	means a Compliance Plan required by clause 11 of this Guideline
Compliance Report	means a Compliance Report required by clause 12 of this Guideline
council	means a council within the meaning of the <i>Local Government Act 1993</i>

Departmental Officer	means the person(s) holding the position(s) within Public and Environmental Health Service, Department of Health and Human Services (Tasmania) listed in Appendix A to this Guideline
drinking water	means water intended for human consumption
Drinking Water Quality Management Plan	means the Drinking Water Quality Management Plan required by clause 7 of this Guideline
drinking water recipient	means the person in charge of the premises to which a <i>water carrier</i> supplies, or seeks to supply, <i>drinking water</i>
drinking water supply system	means a system, or part thereof, used to supply <i>drinking water</i> including, but not limited to, source waters, storage reservoirs and tanks, intakes, treatment systems, service reservoirs, bulk distribution systems and reticulation systems
enHealth rainwater tank guideline	means the <i>Guidance on Use of Rainwater Tanks</i> published by the Environmental Health Standing Committee as in force from time to time
free chlorine	means the concentration of available chlorine to inactivate disease causing organisms (ie disinfection)
private drinking water recipient	means the person in charge of the premises to which <i>drinking water</i> obtained from a <i>private water source</i> is supplied or sought to be supplied
private drinking water supplier	means a person who supplies <i>drinking water</i> obtained from a <i>private water source</i> to a premise that is used for – <ul style="list-style-type: none"> (a) commercial purposes (for example, a hotel, motel, bed and breakfast or private water scheme); (b) health purposes (for example, a nursing home, hospital or hospice); (c) educational purposes (for example, a school, school camp or community camp); or (d) imprisonment or detention purposes

private water scheme	means the supply of <i>drinking water</i> by a <i>private drinking water supplier</i> to multiple <i>premises</i> via one <i>drinking water supply system</i> that is not under the management or control of a <i>regulated entity</i>
public authority	means any body corporate established under an enactment having jurisdiction limited to a district, locality or part of the State; or any body corporate established under an enactment or in the exercise of prerogative rights of the Crown to administer or control any department, business, undertaking or public institution on behalf of the State (for the avoidance of doubt and for the purposes of this Guideline, <i>public authority</i> does not include a <i>council</i>);
public health alert	means a warning issued under section 128 of the <i>Act</i> that <i>drinking water</i> cannot be safely consumed
water carrier	means a person who supplies <i>drinking water</i> in bulk, other than pre-packaged <i>drinking water</i> or pre-packaged ice, via transportation in a <i>water tank</i> , whether or not for fee or reward
water quality auditor	means a person approved as a <i>water quality auditor</i> under the <i>Act</i>
water tank	means a receptacle, designed or used for the carriage of liquids in bulk, that is attached to, situated in, or situated on a vehicle

PART 2 REGULATED ENTITY

4. Water quality monitoring

- (1) Pursuant to sections 131(2) and (3) of the *Act*, the *Director* requires a *regulated entity* to take, in accordance with the *ADWG* and *AS/NZS 5667* series (which relates to location, techniques, handling and preservation of water quality sampling), a representative sample(s) of *drinking water* from each *drinking water supply system* under its management or control and:
 - (a) for a *drinking water supply system* that is used to supply more than 1,000 consumers, ensure a sample is tested at an *accredited laboratory* for *Escherichia coli* in accordance with the sampling frequency recommended for *Escherichia coli* in the *ADWG* or at such other frequency as required by the *Director*; and
 - (b) for a *drinking water supply system* that is used to supply less than 1,000 consumers, ensure a sample is tested at an *accredited laboratory* for *Escherichia coli* once per week or at such other frequency as required by the *Director*; and
 - (c) ensure a sample is tested for non-bacteriological characteristics at an *accredited laboratory* in accordance with the monitoring program set out in the *regulated entity's Drinking Water Quality Management Plan* or at such other frequency as required by the *Director*.

5. Notifying a threat to public health

- (1) For the purposes of section 128(1A) of the *Act*, a *regulated entity*, on becoming aware that the quality of *drinking water* that it manages or controls is, or is likely to become, a *threat to public health* must notify the *Director* in accordance with the procedures set out at clause 3 below.
- (2) For the purposes of section 46 of the *Act*, a *regulated entity* must, in respect of *drinking water* under its management or control, notify the *Director*, in accordance with the procedures set out at clause 3 below, of the presence or occurrence, or suspected presence or occurrence, of:
 - (a) any microorganism, contaminant or substance for which a health guideline value is set under the *ADWG*, if the amount of the microorganism, contaminant or substance exceeds the relevant health guideline value;

- (3) The notification procedure is as follows:
- (a) The *regulated entity* must make immediate telephone contact with a *Departmental Officer*.
 - (b) Upon making contact as above, the *regulated entity* must inform the *Departmental Officer* of the circumstances relating to the *threat to public health* and the action being undertaken to remove, correct, prevent and monitor that threat, including the date for re-sampling of the *drinking water*.
 - (c) The *regulated entity* must provide to the *Departmental Officer* written confirmation of the matters at clause (b) above by email within twenty-four (24) hours after the initial telephone contact under clause (a).

Note:

Contact details for *Departmental Officers* are contained in Appendix A to this Guideline

6. Warnings and Information

- (1) In this clause 6 (Warnings and Information), ‘public’ includes *water carriers* approved by the *regulated entity* to access *drinking water* from the *regulated entity’s drinking water supply system*.

Issuing alerts:

- (2) For the purposes of section 128(4) of the Act, a *regulated entity*, on becoming aware that the quality of *drinking water* it manages or controls is, or is likely to become, a *threat to public health*, must issue warning(s) and information to the *public* about the safe use or risk of using *drinking water* under its management or control.

Content of alerts:

- (3) Before issuing warning(s) and information to the *public* about the safe use or risk of using *drinking water* under its management or control, a *regulated entity* must obtain approval from a *Departmental Officer*, of the:
- (a) content of the warning(s) and information; and
 - (b) means of communicating the warning(s) and information and
 - (c) frequency and duration of the warning(s).
- (4) In relation to a warning that *drinking water* cannot be safely consumed unless it is first boiled; e.g. for bacteriological reasons (a *boil water alert*), the warning must contain the information referred to in the generic boil water advisory template in the ADWG.
- (5) In relation to a warning that *drinking water* cannot be safely consumed e.g. for non-bacteriological reasons (a *public health alert*), the warning must contain such information as required by the *Director* or *Departmental Officer*.

Frequency of alerts:

- (6) A *regulated entity* must reissue a *boil water alert* at least every three months from the date of the initial *boil water alert*, or at such other frequency as directed by the *Director* or *Departmental Officer*, until such time as the *boil water alert* is lifted in accordance with this Guideline.
- (7) A *regulated entity* must reissue a *public health alert* at least every three months from the date of the initial *public health alert*, or at such other frequency as directed by the *Director* or *Departmental Officer*, until such time as the *public health alert* is lifted in accordance with this Guideline.

Lifting alerts:

- (8) A regulated entity may lift (ie, withdraw) a *boil water alert* or a *public health alert* only when it has received written approval to do so from the *Director* or *Departmental Officer*.

Subsequent information:

- (9) As soon as practicable after lifting a *boil water alert*, a regulated entity must give such information to the public about the safe use of water as referred to in the generic template for rescinding a boil water advisory in the ADWG.
- (10) As soon as practicable after lifting a *public health alert*, a regulated entity must give information to the public advising that the water can be safely consumed.

Note:

Approval for the lifting of a *boil water alert* or a *public health alert* will be on a case-by-case basis, however prior to approving the lifting of a short-term (temporary) *boil water alert* issued in connection with *Escherichia coli* the *Director* will generally seek to be satisfied that:

EITHER

- (a) the level of chlorine residual in the affected *drinking water supply* system is acceptable; and
- (b) one bacteriological sample taken from the affected *drinking water supply* system and tested at an *accredited laboratory* satisfies the relevant bacteriological health guideline value(s) contained in the ADWG;

OR

- (c) two consecutive bacteriological samples taken from the affected *drinking water supply* system, sampled from the same location over a period acceptable to the *Director*, and tested at an *accredited laboratory*, satisfy the relevant bacteriological health guideline value(s) contained in the ADWG.

7. Drinking Water Quality Management Plan

- (1) Pursuant to section 129B of the *Act*, a *regulated entity* must, in respect of *drinking water* under its management or control and prior to using the related *drinking water supply system*, undertake a risk assessment and identify management practices to implement in accordance with Elements 1-12 inclusive of the Framework for the Management of Drinking Water Quality contained in the *ADWG*. This is to be known as the *Drinking Water Quality Management Plan*.
- (2) A *Drinking Water Quality Management Plan* may relate to one or more sources, or bodies, of *drinking water*.
- (3) A *regulated entity* must provide to the *Director*, prior to using the *drinking water supply system*, a copy of the *Drinking Water Quality Management Plan* and a written endorsement of the plan by the *regulated entity's* Chief Executive Officer (or equivalent).
- (4) A *regulated entity* must, at least once per annum, or at such other frequency as required by the *Director*, review the *Drinking Water Quality Management Plan* and revise the plan:
 - (a) if it can be improved; or
 - (b) if it ought to be amended to take into account an alteration to:
 - i. the characteristics of the water to which the plan relates;
 - ii. the equipment or processes used or to be used to monitor or treat the water; or
 - iii. any other matter that may affect the quality of the water.
- (5) A *regulated entity* must provide to the *Director* within four weeks of revising a *Drinking Water Quality Management Plan*, a copy of the revised plan and a written endorsement of the plan by the *regulated entity's* Chief Executive Officer (or equivalent).
- (6) A *regulated entity* must take all reasonable steps to ensure the *Drinking Water Quality Management Plan* is implemented at all times.
- (7) The *Director* may require a *regulated entity* to vary the provisions of a *Drinking Water Quality Management Plan*.

8. Audit of Drinking Water Quality Management Plan

- (1) A *regulated entity* must take all reasonable steps to ensure that by the end of the *relevant period*:
 - (a) a *water quality auditor* has conducted, in accordance with the *Act* and this Guideline, an audit of:
 - i. the *regulated entity's Drinking Water Quality Management Plan*; and
 - ii. the management and control of the water to which the *Drinking Water Quality Management Plan* relates; and
 - (b) in relation to each such audit, a report, in accordance with this Guideline, has been provided to the *Director*.
- (2) For the purposes of clause (1) above, the *relevant period* is every two years from the date on which the *Drinking Water Quality Management Plan* is first endorsed by the *regulated entity's* Chief Executive Officer (or equivalent).
- (3) An audit of the *regulated entity's Drinking Water Quality Management Plan* is an examination of:
 - (a) the extent to which the plan complies with the requirements of the *Act* and this Guideline;
 - (b) the appropriateness of the plan, having regard to the *drinking water supply system*; and
- (4) An audit of the management and control of the water to which the *Drinking Water Quality Management Plan* relates is an examination:
 - (a) as to whether any provisions of the *Act* or this *Guideline* are being, or have been, contravened; and
 - (b) of the extent to which the plan is being implemented.

9. Audit schedule

- (1) A *regulated entity* must, by 31 March in each year, submit to the *Director* an *audit schedule* in accordance with this clause 9.
- (2) An *audit schedule* must contain the following information:
 - (a) the location of each of the sources of water to which the *regulated entity's Drinking Water Quality Management Plan* relates; and
 - (b) each of the dates by which an audit required under this Guideline is to be undertaken; and
 - (c) when known, the name and contact details of the *water quality auditor* who is to conduct the audit.

10. Audit report

- (1) A *water quality auditor* must provide to the *Director* an *audit report*, in accordance with this clause 10, setting out the results of each audit carried out by the *water quality auditor*.
- (2) An *audit report* is to:
 - (a) be in the *approved* form; and
 - (b) be submitted to the *Director* within:
 - i. 14 days after the completion of the audits required under clause 8 of this Guideline; or
 - ii. such longer period as approved by the *Director*.
- (3) An *audit report* in relation to an audit of a *regulated entity's Drinking Water Quality Management Plan* is to contain:
 - (a) details relating to each of the matters contained in clause 8(3) of this Guideline; and
 - (b) recommendations as to any action that, in the opinion of the *water quality auditor*, is required to be taken to ensure that:
 - i. the *regulated entity's Drinking Water Quality Management Plan* complies with the requirements of the *Act* and this Guideline; and

- ii. the *Drinking Water Quality Management Plan* is appropriate, having regard to the *regulated entity's drinking water supply system*.

- (4) An *audit report* in relation to the management and control of the water to which the *regulated entity's Drinking Water Quality Management Plan* relates is to contain:
 - (a) details relating to each of the matters contained in clause 8(4) of this Guideline; and

 - (b) recommendations as to any action that, in the opinion of the *water quality auditor*, is required to be taken to ensure that:
 - i. any contraventions of the provisions of the *Act* or this Guideline cease to occur;
 - ii. the effects of any such contraventions are remedied; and
 - iii. the *regulated entity's Drinking Water Quality Management Plan* is fully implemented.

11. Compliance plan

- (1) A *regulated entity* must prepare a *Compliance Plan*, in accordance with this clause 11, if:
- (a) an *audit report* relating to the *regulated entity* contains recommendations as to any action that, in the opinion of the *water quality auditor*, is required to be taken to ensure that:
 - i. the *regulated entity's Drinking Water Quality Management Plan* complies with the requirements of the *Act* and this *Guideline*; and
 - ii. the *Drinking Water Quality Management Plan* is appropriate, having regard to the *regulated entity's drinking water supply system*;
 - iii. any contraventions of the provisions of the *Act* or this *Guideline* cease to occur;
 - iv. the effects of any such contraventions are remedied; or
 - v. the *regulated entity's Drinking Water Quality Management Plan* is fully implemented; or
 - (b) the *regulated entity* otherwise identifies that a requirement of the *Act* or this *Guideline* is being contravened.
- (2) A *Compliance Plan* must contain the following information:
- (a) the nature of the non-compliance with the *Act* or this *Guideline*;
 - (b) monitoring data and a risk assessment in relation to the non-compliance;
 - (c) the actual and proposed actions to correct the non-compliance, including:
 - i. an implementation timetable;
 - ii. proposed staff training relevant to the non-compliance; and
 - iii. proposed capital works associated with any corrective action; and
 - (d) other relevant information as required by the *Director* or *Departmental Officer*.
- (3) A *regulated entity* must, within 14 days of becoming aware of one of the matters in clause (1) above or such longer period as *approved* by the *Director*, provide a *Compliance Plan* to the *Director* for written *approval*.

- (4) If the *Director* does not approve a *Compliance Plan*, the *regulated entity* must amend the *Compliance Plan*, having regard to the *Director's* reasons for refusing to approve the *Compliance Plan*.
- (5) The *regulated entity* must provide an amended *Compliance Plan* to the *Director* within 14 days of receiving reasons for the *Director's* refusal to approve the original *Compliance Plan*.
- (6) A *regulated entity* must implement an *approved Compliance Plan*.
- (7) A *regulated entity* that, of its own accord, amends an *approved Compliance Plan* must, within 7 days of amending the plan, provide the amended *Compliance Plan* to the *Director* for written *approval*.
- (8) An amended *Compliance Plan* does not replace an *approved Compliance Plan* until it is *approved* by the *Director*.

12. Compliance report

- (1) A *regulated entity* required under this Guideline to prepare a *Compliance Plan*, must prepare, in accordance with this clause 12, a *Compliance Report*.
- (2) A *Compliance Report* must be provided to the *Director* every 30 days from the date of the *Director* approving the *regulated entity's Compliance Plan* under clause 11 above, or such longer period as approved by the *Director*, until the *Compliance Plan* is fully implemented.
- (3) A *Compliance Report* must contain the following information:
 - (a) the extent to which corrective action identified in the *Compliance Plan* has been implemented;
 - (b) a timetable of corrective action implemented;
 - (c) available data to demonstrate compliance after implementation of the corrective action;
 - (d) staff training, relevant to the corrective action, that has occurred;
 - (e) the results of a risk assessment conducted after the corrective action has been implemented; and
 - (f) other relevant information as required by the *Director* or *Departmental Officer*.

13. Annual reporting

- (l) Pursuant to section 129B(3) of the Act, the Director requires a *regulated entity* to provide to the Director, by 30 September each year or such other date as approved by the Director, a report in relation to the immediately preceding financial year containing the following information in respect of *drinking water* under the *regulated entity's* management or control:
- (a) name of the associated *drinking water supply system*;
 - (b) source of the *drinking water*;
 - (c) number of connections and population serviced by the *drinking water supply system*;
 - (d) schematic of the *drinking water supply system* from catchment to reticulation (including fluoridation where relevant);
 - (e) details of any changes to the *drinking water supply system* from the immediately preceding reporting period;
 - (f) summary of capital investment in relation to the *drinking water supply system*;
 - (g) summary of planned capital investment in relation to the *drinking water supply system* for the next reporting period;
 - (h) an outline of the *drinking water* quality sampling and testing program;
 - (i) the type, locations and dates of *drinking water* quality sampling and testing undertaken;
 - (j) a tabulated presentation of *drinking water* quality test results from an *accredited laboratory* (including dates), highlighting non-compliances with the ADWG or this Guideline;
 - (k) the extent to which the sampling program for the *drinking water* complied with the bacteriological sampling frequency requirements of the ADWG;
 - (l) the extent to which the *drinking water* complied with bacteriological guideline values in the ADWG save and except in relation to *Escherichia coli*;
 - (m) in relation to *Escherichia coli*, the extent to which the *drinking water* complied with a 98 percent compliance rate measured over 12 months;
 - (n) the extent to which the sampling program for the *drinking water* complied with the non-microbiological sampling frequency requirements of the relevant *Drinking Water Quality Management Plan*;

- (o) the extent to which the *drinking water* complied with the relevant non-microbiological guideline values in the ADWG;
 - (p) a comparative analysis, for the preceding 5 years, of non-compliances with microbiological, and non-microbiological, ADWG guideline values;
 - (q) a summary of *drinking water* quality trends;
 - (r) a summary of events and issues that affected *drinking water* quality or caused a non-compliance with ADWG guideline values and details of corrective actions implemented (or to be implemented);
 - (s) a summary of all issued *boil water alerts* and *public health alerts*, including date of issue, duration and current status;
 - (t) a summary of public complaints received regarding *drinking water* quality;
 - (u) details of any third party audits of the *regulated entity's Drinking Water Quality Management Plan* undertaken during the reporting period;
 - (v) a summary of notifications made to the *Director* or *Departmental Officer(s)* under the *Act* and this *Guideline*; and
 - (w) such other information as required by the *Director*.
- (2) Accompanying the report, a *regulated entity* must provide a written endorsement of the report by the *regulated entity's* Chief Executive Officer (or equivalent).
- (3) A *regulated entity* must make copies of the report available to the public.

Note:

The *Director* may publish an annual report on *drinking water supply systems*.

