



Water Fluoridation Act 2008

Water Fluoridation Regulation 2020

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Queensland

Water Fluoridation Regulation 2020

Contents

		Page
Part 1	Preliminary	
1	Short title	3
2	Definitions	3
Part 2	Fluoride forms and concentrations	
3	Forms of fluoride—Act, s 12	3
4	Fluoride concentrations—Act, s 12	4
Part 3	Adding fluoride compounds	
Division 1	Preliminary	
5	Application of part	4
Division 2	Quality of fluoride compounds	
6	Analysis certificates for supplied fluoride compounds	5
7	Impurities affecting public health	5
Division 3	Automatic fluoride dosing equipment and operators	
8	Using automatic fluoride dosing equipment for fluoride compounds	6
9	Notice if automatic fluoride dosing equipment not in operation ..	6
10	Notice if automatic fluoride dosing equipment resumes operation	6
11	Keeping fluoride compounds and equipment	7
12	Qualified persons to operate automatic fluoride dosing equipment	7
Part 4	Adding naturally occurring fluoride	
Division 1	Preliminary	
13	Application of part	7
Division 2	Water blending equipment and operators	
14	Using water blending equipment for naturally occurring fluoride .	8
15	Notice if water blending equipment not in operation	8
16	Notice if water blending equipment resumes operation	8
17	Qualified persons to operate water blending equipment	9
Part 5	Water analyses, record keeping and reporting	

Contents

18	Purpose of part	9
19	Prescribed testing by water suppliers	9
20	Monthly laboratory testing	9
21	Chief executive may require additional test	10
22	Daily recording of fluoride compound information	10
23	Reporting fluoridation information	11
Part 6	Miscellaneous	
24	Supporting information for fluoridation notice	12
25	Prescribed entity—Act, s 73	13
26	Forms	13
Part 7	Repeal	
27	Repeal	13
Schedule 1	Fluoride concentrations for local government areas	14
Schedule 2	Impurities affecting public health	18
Schedule 3	Dictionary	19

Water Fluoridation Regulation 2020

Part 1 Preliminary

1 Short title

This regulation may be cited as the *Water Fluoridation Regulation 2020*.

2 Definitions

The dictionary in schedule 3 defines particular words used in this regulation.

Part 2 Fluoride forms and concentrations

3 Forms of fluoride—Act, s 12

- (1) For section 12(a) of the Act, the following forms of fluoride are prescribed—
 - (a) fluorosilicic acid (H_2SiF_6);
 - (b) sodium fluoride (NaF);
 - (c) sodium fluorosilicate (Na_2SiF_6);
 - (d) naturally occurring fluoride contained in water.
- (2) A form of fluoride mentioned in subsection (1)(a), (b) or (c) is a *fluoride compound*.
- (3) A form of fluoride mentioned in subsection (1)(d) is *naturally occurring fluoride*.

4 Fluoride concentrations—Act, s 12

- (1) For section 12(b) of the Act, the following fluoride concentrations must be maintained in the public potable water supply by the public potable water supplier—
 - (a) if the water supply is located in a local government area listed in schedule 1, part 1—0.6mg/L;
 - (b) if the water supply is located in a local government area listed in schedule 1, part 2—0.7mg/L;
 - (c) if the water supply is located in a local government area listed in schedule 1, part 3—0.8mg/L.
- (2) The fluoride concentration mentioned in subsection (1) for the public potable water supply includes the concentration of naturally occurring fluoride in the water supply.
- (3) The public potable water supplier complies with subsection (1) if the measured fluoride concentration for the public potable water supply for each day, averaged over a quarter, is within 0.1mg/L of the fluoride concentration mentioned in subsection (1) for the water supply.
- (4) In this section—

measured fluoride concentration, for a public potable water supply, means the fluoride concentration measured by a prescribed test of fluoridated water from the water supply.

Part 3 Adding fluoride compounds

Division 1 Preliminary

5 Application of part

This part applies in relation to a public potable water supplier adding a fluoride compound to a public potable water supply.

Division 2 Quality of fluoride compounds

6 Analysis certificates for supplied fluoride compounds

- (1) This section applies if a quantity of the fluoride compound to be added to the public potable water supply is not accompanied by a batch analysis certificate issued by an accredited laboratory.
- (2) The public potable water supplier must ask the manufacturer, importer or supplier of the fluoride compound for a copy of a batch analysis certificate for the fluoride compound issued by an accredited laboratory.
- (3) If the manufacturer, importer or supplier of the fluoride compound does not comply with the request, the public potable water supplier must—
 - (a) send a sample of the fluoride compound to an accredited laboratory for analysis to determine the concentrations of any impurities in the fluoride compound; and
 - (b) obtain the results of the analysis.

7 Impurities affecting public health

The public potable water supplier must not add the fluoride compound to the public potable water supply if a batch analysis certificate for a sample of the fluoride compound indicates—

- (a) an impurity of a type mentioned in column 1 of the table in schedule 2 exists in the fluoride compound; and
- (b) the concentration of the impurity exceeds the stated concentration for the fluoride compound mentioned in column 2, 3 or 4 of the table in schedule 2 opposite the type of impurity.

Division 3 Automatic fluoride dosing equipment and operators

8 Using automatic fluoride dosing equipment for fluoride compounds

The public potable water supplier must use automatic fluoride dosing equipment that—

- (a) has the rate of feed of the fluoride compound paced to the flow of water into the public potable water supply; and
- (b) has at least 2 devices that independently monitor the flow of the water, at least 1 of which measures the rate of flow of the water; and
- (c) is designed in a way that ensures if part of the equipment fails, the fluoride compound is not added to the water supply.

9 Notice if automatic fluoride dosing equipment not in operation

- (1) The public potable water supplier must give the chief executive a notice if its automatic fluoride dosing equipment has not been in operation for a continuous period of 14 days.
- (2) The notice must be given in the approved form within 1 business day after the end of the period.

10 Notice if automatic fluoride dosing equipment resumes operation

- (1) The public potable water supplier must give the chief executive a notice if its automatic fluoride dosing equipment resumes operation after it has not been in operation for a continuous period of 14 days or longer.
- (2) The notice must be given in the approved form within 5 business days after the day the automatic fluoride dosing equipment resumes operation.

11 Keeping fluoride compounds and equipment

- (1) The public potable water supplier must keep its automatic fluoride dosing equipment in a building or room separated from other water treatment equipment.
- (2) The public potable water supplier must keep its fluoride compound—
 - (a) in a weatherproof building; and
 - (b) in a building or room separated from other substances used for water treatment.

12 Qualified persons to operate automatic fluoride dosing equipment

The public potable water supplier must ensure each person employed to operate its automatic fluoride dosing equipment is appropriately qualified.

Part 4 Adding naturally occurring fluoride

Division 1 Preliminary

13 Application of part

This part applies in relation to a public potable water supplier adding naturally occurring fluoride to a public potable water supply.

Division 2 Water blending equipment and operators

14 Using water blending equipment for naturally occurring fluoride

The public potable water supplier must use water blending equipment that—

- (a) has the rate of feed of naturally occurring fluoride paced to the flow of any other water used to dilute the naturally occurring fluoride; and
- (b) has a device designed to measure the rate of flow of the water; and
- (c) is designed in a way that ensures if part of the equipment fails, naturally occurring fluoride is not added to the public potable water supply.

15 Notice if water blending equipment not in operation

- (1) The public potable water supplier must give the chief executive a notice if its water blending equipment has not been in operation for a continuous period of 14 days.
- (2) The notice must be given in the approved form within 1 business day after the end of the period.

16 Notice if water blending equipment resumes operation

- (1) The public potable water supplier must give the chief executive a notice if its water blending equipment resumes operation after it has not been in operation for a continuous period of 14 days or longer.
- (2) The notice must be given in the approved form within 5 business days after the day the water blending equipment resumes operation.

17 Qualified persons to operate water blending equipment

The public potable water supplier must ensure each person employed to operate its water blending equipment is appropriately qualified.

Part 5 Water analyses, record keeping and reporting

18 Purpose of part

This part prescribes requirements in relation to—

- (a) analysing a public potable water supply to which fluoride has been added by a public potable water supplier; and
- (b) recording and reporting the results of the analysis.

19 Prescribed testing by water suppliers

- (1) The public potable water supplier must each day—
 - (a) collect at least 1 sample of fluoridated water from the public potable water supply at a point where the fluoridated water has a consistent concentration of fluoride; and
 - (b) measure the concentration of fluoride in the fluoridated water using an approved method (a *prescribed test*).
- (2) The public potable water supplier must keep the results of a prescribed test for at least 5 years from the day the test was performed.

20 Monthly laboratory testing

- (1) The public potable water supplier must on 1 day of each month—

[s 21]

- (a) divide a sample collected under section 19(1)(a) into 2 parts; and
 - (b) measure the concentration of 1 part of the sample using an approved method; and
 - (c) send the other part of the sample to an accredited laboratory to measure the concentration of fluoride in the part using an approved method.
- (2) The public potable water supplier must obtain the results of the analysis performed under subsection (1)(c).
 - (3) The public potable water supplier must keep the results of the analysis for at least 5 years from the day the analysis was obtained by the water supplier.

21 Chief executive may require additional test

- (1) The chief executive may ask the public potable water supplier to—
 - (a) collect an additional sample of fluoridated water from the public potable water supply; and
 - (b) measure the concentration of fluoride in the fluoridated water using an approved method (the *additional test*) within 1 day of the request being made.
- (2) The public potable water supplier must—
 - (a) comply with the request under subsection (1); and
 - (b) notify the chief executive of the results of the additional test within 1 day of carrying out the test.

22 Daily recording of fluoride compound information

- (1) This section applies if the form of fluoride added to the public potable water supply is a fluoride compound.
- (2) The public potable water supplier must each day record—
 - (a) the volume of water to which the fluoride compound has been added; and

-
- (b) the amount of the fluoride compound the water supplier has added for the day, even if the amount is zero; and
 - (c) the calculated fluoride concentration of the fluoridated water; and
 - (d) the fluoride concentration of the fluoridated water, measured by a prescribed test.
- (3) The record must be made in the approved form before the end of the day to which the record relates.
- (4) For subsection (2)(c), the calculated fluoride concentration of fluoridated water is the concentration of the fluoridated water worked out using the following formula—

$$\frac{A}{B} + C$$

where—

A means the amount of the fluoride compound in milligrams that the public potable water supplier has added for the day.

B means the volume of water in litres to which the public potable water supplier has added the fluoride compound for the day.

C means the concentration of the naturally occurring fluoride measured in milligrams for each litre contained in the public potable water supply before the fluoride compound is added to the water supply for the day.

23 Reporting fluoridation information

- (1) The public potable water supplier must prepare a report for each quarter stating the following information for the quarter—
- (a) the number of samples of water taken for prescribed testing under section 19 by the water supplier;
 - (b) the average fluoride concentration of fluoridated water measured by prescribed tests performed by the water supplier;

[s 24]

- (c) the maximum fluoride concentration of fluoridated water measured by prescribed tests performed by the water supplier;
 - (d) the minimum fluoride concentration of fluoridated water measured by prescribed tests performed by the water supplier.
- (2) The report must be given to the chief executive in the approved form within 30 business days after the end of each quarter.
- (3) Subsection (4) applies if—
 - (a) the local government for the public potable water supply makes a decision under section 7(3) of the Act that fluoride not be added to the water supply; and
 - (b) the public potable water supplier ceases to add fluoride to the water supply during a particular quarter.
- (4) The requirement under subsection (1) to prepare a report continues to apply to the public potable water supplier for the particular quarter.

Part 6 Miscellaneous

24 Supporting information for fluoridation notice

- (1) Subsection (2) applies if a public potable water supplier for a public potable water supply gives a fluoridation notice to the chief executive under section 13(3)(a) of the Act.
- (2) The public potable water supplier must give the chief executive supporting information for the fluoridation notice about the way in which the water supplier intends to add fluoride or cease to add fluoride to the public potable water supply.
- (3) The supporting information must be given to the chief executive in the approved form with the fluoridation notice.

25 Prescribed entity—Act, s 73

For section 73(b) of the Act, NATA is the entity prescribed.

26 Forms

The chief executive may approve forms for use under this regulation.

Part 7 Repeal

27 Repeal

The Water Fluoridation Regulation 2008, SL No. 394 is repealed.

Schedule 1 Fluoride concentrations for local government areas

section 4(1)

Part 1 Fluoride concentration 0.6mg/L

Burke
Carpentaria
Cloncurry
Doomadgee
Kowanyama
McKinlay
Mornington

Part 2 Fluoride concentration 0.7mg/L

Aurukun
Banana
Barcaldine
Barcoo
Blackall-Tambo
Boulia
Bulloo
Burdekin
Cairns
Cassowary Coast
Central Highlands

Charters Towers
Cherbourg
Cook
Croydon
Diamantina
Douglas
Etheridge
Flinders
Gladstone
Hinchinbrook
Hope Vale
Isaac
Livingstone
Lockhart River
Longreach
Mackay
Mapoon
Mareeba
Mount Isa
Murweh
Napranum
Northern Peninsula Area
Palm Island
Paroo
Pormpuraaw
Quilpie
Richmond
Rockhampton

Tablelands
Torres
Torres Strait Island
Townsville
Whitsunday
Winton
Woorabinda
Wujal Wujal
Yarrabah

Part 3 **Fluoride concentration 0.8mg/L**

Balonne
Brisbane
Bundaberg
Fraser Coast
Gold Coast
Goondiwindi
Gympie
Ipswich
Lockyer Valley
Logan
Maranoa
Moreton Bay
Noosa
North Burnett
Redland
Scenic Rim

Somerset

South Burnett

Southern Downs

Sunshine Coast

Toowoomba

Western Downs

Schedule 2 Impurities affecting public health

section 7

Column 1	Column 2	Column 3	Column 4
	Fluorosilicic acid	Sodium fluoride	Sodium fluorosilicate
Impurity	mg/L	mg/kg	mg/kg
Antimony	47	130	180
Arsenic	160	440	590
Barium	32,000	30,000	20,000
Beryllium	950	2,600	3,600
Cadmium	32	88	120
Chromium (total)	790	2,200	3,000
Copper	32,000	30,000	20,000
Lead	160	440	590
Mercury	16	44	59
Nickel	320	880	1,200
Selenium	160	440	590
Uranium	270	750	1,000

Schedule 3 Dictionary

section 2

accredited laboratory means an Australian laboratory accredited by NATA as competent to perform the type of analyses required under this regulation.

approved form means a form approved by the chief executive under section 26.

approved method means—

- (a) SPADNS colorimetric method; or
- (b) ion-selective electrode method; or
- (c) ion chromatography.

automatic fluoride dosing equipment means mechanical equipment that automatically adds a fluoride compound to water.

batch analysis certificate, for a fluoride compound, means a certificate stating the concentration of impurities in the fluoride compound.

fluoridated water means water to which fluoride has been added.

fluoride compound see section 3(2).

NATA means the National Association of Testing Authorities, Australia ACN 004 379 748.

naturally occurring fluoride see section 3(3).

prescribed test see section 19(1)(b).

quarter means each of the following—

- (a) 1 January to 31 March of each year;
- (b) 1 April to 30 June of each year;
- (c) 1 July to 30 September of each year;
- (d) 1 October to 31 December of each year.

water blending equipment means equipment that blends naturally occurring fluoride with another source of water.