National Measurement Amendment Regulations 2007 (No. 1)[1]

Select Legislative Instrument 2007 No. 147

I, PHILIP MICHAEL JEFFERY, Governor-General of the Commonwealth of Australia, acting with the advice of the Federal Executive Council, make the following Regulations under the *National Measurement Act 1960*.

Dated 7 June 2007

P. M. JEFFERY
Governor-General

By His Excellency's Command

BOB BALDWIN
Parliamentary Secretary to the Minister for Industry, Tourism and Resources

1 Name of Regulations

These Regulations are the *National Measurement Amendment Regulations 2007 (No. 1)*.

2 Commencement

These Regulations commence on 1 July 2007.

3 Amendment of *National Measurement Regulations 1999*

Schedule 1 amends the *National Measurement Regulations 1999*.

Schedule 1 Amendments

(regulation 3)

[1] Regulation 3, definition of *certification*

substitute

certification means:

(a) for a measuring instrument (except a measuring instrument to which paragraph (b) applies) — certification of the instrument under regulation 37; and

(b) for a measuring instrument in use for trade — certification of the instrument under the relevant State or Territory trade measurement legislation; and

(c) for a reference material — certification of the material under regulation 48.

[2] Regulation 3, after definition of *defence equipment*

insert

Inspectors' Class 1 standard means a reference standard of measurement that has been verified in accordance with regulation 13 and that complies with the requirements of regulations 27 and 32 for the maximum permissible uncertainty and the maximum permissible variation of an Inspectors' Class 1 standard.

Inspectors' Class 2 standard means a reference standard of measurement that has been verified in accordance with regulation 13 and that complies with the requirements of regulations 28 and 33 for the maximum permissible uncertainty and the maximum permissible variation of an Inspectors' Class 2 standard.

Inspectors' Class 3 standard means a reference standard of measurement that has been verified in accordance with regulation 13 and that complies with the requirements of regulations 29 and 34 for the maximum permissible uncertainty and the maximum permissible variation of an Inspectors' Class 3 standard.

[3] Regulation 3, definition of *maximum permissible error*

substitute

maximum permissible error, for a material measure or measuring instrument, means the maximum limit of error that:

(a) if a certificate is issued on or after 1 July 2007 for the material measure or measuring instrument — is mentioned in the certificate; or

(b) otherwise — is mentioned in Schedule 12 for a material measure or measuring instrument of that kind.

[4] Regulation 3, after definition of *maximum permissible error*

insert

recertification, for a measuring instrument or reference material, means certification of the instrument or material after the initial certification of the instrument or material.

reverification, for a standard of measurement or a measuring instrument, means verification of the standard or instrument after the initial verification of the standard or instrument.

[5] Regulation 3, after definition of *SI*

insert

State secondary standard means a reference standard of measurement that has been verified in accordance with regulation 13 and that complies with the requirements of regulation 25 for the maximum permissible uncertainty of a State secondary standard.

State tertiary standard means a reference standard of measurement that has been verified in accordance with regulation 13 and that complies with the requirements of regulation 26 for the maximum permissible uncertainty of a State tertiary standard.

[6] Regulation 3, after definition of *time*

insert

variant means a change made to the pattern of an instrument, subject to the arrangement of the components of the instrument and the measuring element being substantially of the same design as that of the approved pattern.

[7] Regulation 3, definition of *verification*

substitute

verification means:

(a) for a standard of measurement — verification of the standard under regulation 13; and

(b) for a measuring instrument in use for trade — verification of the instrument under the relevant State or Territory trade measurement legislation.

[8] Regulation 19, note

omit

24,

[9] Sub-regulation 77 (2)

omit

regulation 20 or subregulation 24 (2).

insert

regulation 20.

[10] Subparagraph 87 (d) (ii)

substitute

(ii) maximum permissible errors mentioned in Division 1 of Part 3 of Schedule 12.

[11] Regulation 90B

substitute

90B Fees

(1) For paragraph 20 (1) (l) of the Act, the fees for activities undertaken by the Commonwealth are set out in Schedule 13.

(2) In Schedule 13, level 1 applies to:

(a) the following kinds of measuring instruments:

(i) volume measuring instruments of the following kinds:

(A) simple liquor measures or dispensers;

(B) simple indicators or counters for flow;

(C) driveway flowmeter fuel dispenser consoles (excluding computer-based systems);

(D) pulse counters and pulse generators;

(E) milk tanks;

(F) vehicle and other tanks;

(ii) weighing and dimensional measuring instruments of the following kinds:

(A) class 3 and 4 weighing instruments ≤100 kg;

(B) simple instruments or counters for weighing;

(C) pulse counters and pulse generators; and

(b) examination and certification, under mutual recognition agreements, of patterns of measuring instruments of the following kinds:

(i) simple instruments with one or two variants;

(ii) load cells with 1 or 2 variants.

(3) In Schedule 13, level 2 applies to:

(a) the following kinds of measuring instruments:

(i) volume measuring instruments of the following kinds:

(A) multi-liquor measuring systems;

(B) driveway flowmeters fuel dispensers (except liquefied petroleum gas flowmeters and multiproduct pumps);

(C) tank level gauges (excluding volume conversion devices);

(D) electronic flowmeter indicators or calculators;

(E) milk meters;

(F) computer operated consoles for fuel dispensers;

(G) mass flowmeters;

(ii) weighing and dimensional measuring instruments of the following kinds:

(A) class 1 and 2 weighing instruments;

(B) class 3 and 4 weighing instruments >100 kg;

(C) overhead-track weighing instruments;

(D) semi-automatic multi-dimensional measuring instruments;

(E) static wheel weighers;

(F) length measuring instruments;

(G) area measuring instruments; and

(b) examination and certification, under mutual recognition agreements, of patterns of measuring instruments of the following kinds:

(i) simple instruments with 3 or 4 variants;

(ii) load cells with three or four variants;

(iii) instruments with integral printers;

(iv) fuel dispensers.

(4) In Schedule 13, level 3 applies to:

(a) the following kinds of measuring instruments:

(i) volume measuring instruments of the following kinds:

(A) milk metering systems;

(B) bulk flowmeters (including mass flowmeters);

(C) controllers and indicator calculators with conversion or linearisation functions for flow;

(D) multi-product fuel dispensers and driveway and bulk flowmeters for liquefied petroleum gas;

(ii) weighing and dimensional measuring instruments of the following kinds:

(A) belt weighers;

(B) weighing-in-motion systems for trains and road vehicles;

(C) catchweighers;

(D) totalising hopper weighers;

(E) controllers and indicator calculators with conversion or linearisation functions for weighing;

(F) automatic multi-dimensional measuring instruments; and

(b) examination and certification, under mutual recognition agreements, of patterns of measuring instruments of the following kinds:

(i) simple instruments with 5 variants;

(ii) automatic instruments; and

(c) examination and certification of patterns of measuring instruments other than those covered by mutual recognition agreements.

(5) In Schedule 13, level 3 also applies to examination and certification, under mutual recognition agreements, of simple instruments with more than 5 variants, subject to each variant in excess of 5 variants attracting an additional extra or miscellaneous fee as set out in the column headed 'Level 3 Fee' in item 2 in table 3 in Part 3 of Schedule 13.

[12] Schedule 2, Part 1, table, after item 1.8

insert

1.9	concentration	Degrees Brix	°Bx	concentration in grams of solute per 100g of an aqueous solution of pure sucrose, having the same density as a sugar solution at the same temperature

1.10	concentration	Degrees Z	°Z	concentration equivalent to 0.26g of sucrose per 100g of an aqueous solution of pure sucrose
1.11	concentration	Pol	Pol	concentration in grams of solute per 100g of an aqueous solution of pure sucrose having the same optical rotation as a sugar solution at the same temperature

[13] Schedule 2, Part 2, table, after item 2.8

insert

2.9	Degrees Brix	measurements of sugar concentration
2.10	Degrees Z	measurements of sugar concentration
2.11	Pol	measurements of sugar concentration

[14] Schedule 12

substitute

Schedule 12 Maximum permissible errors

(regulation 3, definition of ***maximum permissible error***)

Part 1 Interpretation

1 In this Schedule:

verification does not include reverification.

2 In Part 5 of this Schedule:

certification does not include recertification.

Part 2 Material measures

Division 1 Length

Table 1 Measures of Length

Item	Lengths	Maximum permissible error from zero to any scale mark for certification, verification or reverification
1	not more than 500 mm	±0.5 mm
2	more than 500 mm but not more than 2 m	±1 mm
3	more than 2 m but not more than 100 m	±0.05%

Division 2 Weight

Table 2 Non-ferrous weights marked 'A'

Item	Denomination	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
1	1 mg	+0.1	−0.05	+0.1
2	2 mg	+0.2	−0.1	+0.2
3	5 mg	+0.3	−0.15	+0.3
4	10 mg	+0.4	−0.2	+0.4
5	20 mg	+0.6	−0.3	+0.6
6	50 mg	+0.9	−0.45	+0.9
7	100 mg	+1.3	−0.65	+1.3
8	200 mg	+2	−1	+2
9	500 mg	+3	−1.5	+3
10	1 g	+4	−2	+4
11	2 g	+5.5	−2.75	+5.5
12	5 g	+9	−4.5	+9
13	10 g	+12.5	−6.25	+12.5

Item	Denomination	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
14	20 g	+18	−9	+18
15	50 g	+28	−14	+28
16	100 g	+40	−20	+40
17	200 g	+60	−30	+60
18	500 g	+90	−45	+90
19	1 kg	+130	−65	+130
20	2 kg	+220	−110	+220
21	5 kg	+280	−140	+280
22	10 kg	+400	−200	+400
23	20 kg	+560	−280	+560

Table 3 Non-ferrous weights not marked 'A'

Item	Denomination	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
1	1 g	+60	−30	+60
2	2 g	+60	−30	+60
3	5 g	+60	−30	+60
4	10 g	+120	−60	+120
5	20 g	+120	−60	+120
6	50 g	+120	−60	+120
7	100 g	+120	−60	+120
8	200 g	+170	−85	+170
9	500 g	+270	−135	+270
10	1 kg	+380	−190	+380
11	2 kg	+650	−325	+650
12	5 kg	+850	−425	+850

Item	Denomination	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
13	10 kg	+1 200	−600	+1 200
14	20 kg	+1 700	−850	+1 700

Table 4 Iron Weights

Item	Denomination	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
1	100 g	+240	−120	+240
2	200 g	+340	−170	+340
3	500 g	+540	−270	+540
4	1 kg	+760	−380	+760
5	2 kg	+1 300	−650	+1 300
6	5 kg	+1 700	−850	+1 700
7	10 kg	+2 400	−1 200	+2 400
8	20 kg	+3 400	−1 700	+3 400

Table 5 Metric carat weights

Item	Denomination (CM)	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
1	0.005	+0.1	−0.05	+0.1
2	0.01	+0.1	−0.05	+0.1
3	0.02	+0.1	−0.05	+0.1
4	0.05	+0.1	−0.05	+0.1
5	0.1	+0.1	−0.05	+0.1
6	0.2	+0.15	−0.075	+0.15
7	0.5	+0.2	−0.1	+0.2

Item	Denomination (CM)	Maximum permissible error (mg)		
		Certification or verification	Reverification	
			Deficiency	Excess
8	1	+0.2	−0.1	+0.2
9	2	+0.3	−0.15	+0.3
10	5	+0.5	−0.25	+0.5
11	10	+0.7	−0.35	+0.7
12	20	+1	−0.5	+1
13	50	+2	−1	+2
14	100	+2	−1	+2
15	200	+3	−1.5	+3
16	500	+5	−2.5	+5

Division 3 Volume

Table 6 Conical measures

Item	Capacity (L)	Maximum permissible error (mL)	
		Certification or verification	Reverification
1	0.5	+5	±5
2	1	+6	±6
3	2	+10	±10
4	4	+15	±15
5	5	+20	±20
6	10	+30	±30
7	20	+45	±45

Table 7 Cylindrical line measures

Item	Capacity (L)	Maximum permissible error (mL)		
		Certification or verification	Reverification	
			Glass measures	Metal Measures
1	0.5	±5	±5	±10
2	1	±10	±10	±20
3	2	±15	±15	±30
4	5	±30	±30	±60
5	10	±45	±45	±90
6	20	±70	±70	±140

Table 8 Cylindrical brim measures made of glass or metal for alcoholic liquor

Item	Capacity (mL)	Maximum permissible error (mL)			
		Certification or verification	Reverification		
			Glass measures		Metal Measures
			Deficiency	Excess	
1	15	+1	0	+1	±1
2	30	+2	0	+2	±2
3	60	+3.5	0	+3.5	±3.5

Table 9 Cylindrical line measures made of metal for special purposes

Item	Capacity (L)	Purpose	Maximum permissible error (mL)	
			Certification or verification	Reverification
1	12	Ice cream	±50	±100
2	45	Milk	±150	±300

Table 10 Portable measures for potable liquids – line measures

Item	Type	Maximum permissible error (mL)		
		Certification or verification	Reverification	
			Glass measures	Metal Measures
1	line measure	±3%	±3%	±6 %

Table 11 Portable measures for potable liquids – brim measures

Item	Type	Maximum permissible error (mL)			
		Certification or verification	Reverification		
			Glass measures		Metal Measures
			Deficiency	Excess	
1	brim measure	+6%	0	+6%	±6 %

Division 4 Dispensing measures including pharmaceutical measures

Table 12 Conical dispensing measures

Item	Scale Mark (mL)	Maximum permissible error at each scale mark (mL) for certification, verification or reverification
1	1	±0.08
2	2	±0.12
3	3	±0.16
4	4	±0.20
5	5	±0.25
6	6, 7, 8	±0.3
7	9	±0.4
8	10	±0.4
9	15	±0.5
10	20	±0.6
11	30	±0.8

Item	Scale Mark (mL)	Maximum permissible error at each scale mark (mL) for certification, verification or reverification
12	40, 50	±1.0
13	60, 70, 80, 90	±1.5
14	100, 120, 140	±2.0
15	160, 180, 200	±3.0

Table 13 Beaker dispensing measures

Item	Capacity (mL)	Maximum permissible error at each scale mark on a particular measure (mL) for certification, verification or reverification
1	500	±5
2	1000	±7

Table 14 Lubricating oil measures

Item	Capacity (L)	Maximum permissible error (mL) for certification, verification or reverification
1	0.5	+20
2	1	+30

Table 15 Graduated measuring cylinders

Item	Capacity (mL)	Maximum permissible error at each scale mark on a particular measure (mL) for certification, verification or reverification
1	5	±0.1
2	10	±0.2
3	25	±0.5
4	50	±1
5	100	±1
6	250	±2
7	500	±5
8	1000	±10
9	2000	±20

Part 3 Measuring instruments

Division 1 Length-measuring instruments

Table 1 Length-measuring instruments

Item	Type of indication	Maximum permissible error	
		Certification or verification	Reverification
1	analog	±0.5 %	±1 %
2	digital	±0.5 % + 0.5 scale interval	±1 % + 1 scale interval

Division 2 Area-measuring instruments

Single-measurement error — instruments with analog indication

Table 2 Instruments with analog indication

Item	Area of template(s) (dm^2)	Maximum permissible error (dm^2)	
		Certification or verification	Reverification
1	Not exceeding 25	±0.5	±1.0
2	Exceeding 25	±(0.5 + 1 dm^2 for each additional 50 dm^2 or part)	±(1 + 2 dm^2 for each additional 50 dm^2 or part)

Single-measurement error — instruments with digital indication

1 For instruments with digital indication add 0.5 scale interval to the maximum permissible error for an analog instrument.

Mean error

2 On analog and digital instruments the mean of 20 measurements must not differ from the denominated value of the template by more than half the maximum permissible error mentioned in table 2.

Note The test templates for measuring instruments with digital indication must have values that are an integral number of square decimetres.

Division 3 Farm milk tanks

The maximum permissible error for all scale marks on the dipsticks for certification, verification or reverification is ±1 scale interval.

Table 3 Farm milk tanks

Item	Maximum capacity (L)	Maximum scale interval (L)
1	≤ 1 000	2
2	1 000 ≤ 2 500	5
3	2 500 ≤ 5 000	10
4	5 000 ≤ 10 000	20
5	10 000 ≤ 25 000	50

Division 4 Vehicle tanks

Tanks used only for sullage

1 The maximum permissible error for certification, verification or reverification for each scale mark on a sight tube is ±0.5 scale interval.

Vehicle tanks except for sullage

2 The maximum permissible error applicable to a vehicle tank for certification, verification or reverification is:

(a) for a tank with a capacity mark — ±0.2% of the indicated volume; and

(b) for a tank with a dipstick — ±0.5 scale interval for each scale mark on the dipstick.

Division 5 Liquid-measuring systems

Accuracy classes

1 Liquid-measuring systems are classified into 5 accuracy classes as set out in table 4.

Table 4 Liquid-measuring systems — Accuracy classes

Item	Accuracy Class	Field of application
1	0.3	Measuring systems on pipeline
2	0.5	All measuring systems if not differently stated elsewhere in this table, in particular: (a) fuel dispensers for motor vehicles (except LPG dispensers); and (b) measuring systems on road tankers for liquids of low viscosity; and (c) measuring systems for the unloading of ships' tanks and rail and road tankers; and (d) measuring systems for milk; and (e) measuring systems for loading ships; and (f) measuring systems for refuelling aircraft
3	1.0	Measuring systems (except LPG dispensers) for liquefied gases under pressure measured at a temperature equal to or above −10°C LPG dispensers for motor vehicles Measuring systems normally in class 0.3 or 0.5 but used for liquids: (a) the temperature of which is less than −10°C or greater than 50°C; or (b) the dynamic viscosity of which is higher than 1 000 mPa.s; or (c) the maximum volumetric flow rate of which is not higher than 20 L/h

Item	Accuracy Class	Field of application
4	1.5	Measuring systems for liquefied carbon dioxide Measuring systems (except LPG dispensers) for liquefied gases under pressure measured at a temperature below −10°C
5	2.5	Measuring systems for liquids at a temperature below −153°C

Maximum permissible errors

2 For volumes equal to or greater than 2 L, and subject to clauses 4 and 5, the maximum permissible error on volume indications are set out in table 5.

Table 5 Volumes equal to or greater than 2 L

Item	Accuracy class	Maximum permissible error		
		Certification, verification or reverification excluding conversion device	A	Conversion device
1	0.3	±0.2%	±0.3%	±0.1%
2	0.5	±0.3%	±0.5%	±0.2%
3	1.0	±0.6%	±1.0%	±0.4%
4	1.5	±1.0%	±1.5%	±0.5%
5	2.5	±1.5%	±2.5%	±1.0%

3 For volumes less than 2 L, and subject to clauses 4 and 5, the maximum permissible errors, positive or negative, on volume indications are set out in table 6.

Table 6 Volumes less than 2 L

Item	Measured quantity	Maximum permissible errors
1	≥ 1 L, < 2 L	Value fixed in table 5, applied to 2 L
2	≥ 0.4 L, < 1 L	2 × the value fixed in table 5

Item	Measured quantity	Maximum permissible errors
3	≥ 0.2 L, < 0.4 L	2 × the value fixed in table 5, applied to 0.4 L
4	≥ 0.1 L, < 0.2 L	4 × the value fixed in table 5
5	< 0.1 L	4 × the value fixed in table 5, applied to 0.1 L

4 However, whatever the measured quantity may be, the magnitude of the maximum permissible error is the greater of the following 2 values:

(a) the absolute value of the maximum permissible error in table 5 or table 6;

(b) the minimum specified volume deviation under clause 5.

5 For minimum measured quantities equal to or greater than 2 L, the minimum specified volume deviation (E_{min}) is calculated using the formula:

$$E_{min} = 2 \times V_{min} \times \frac{A}{100}$$

where:

$\boldsymbol{V_{min}}$ is the minimum measured quantity.

A is the maximum permissible error specified in the column headed 'A' of table 5 for the accuracy class of the measuring system.

6 For minimum measured quantities less than 2 L, the minimum specified volume deviation is twice the value set out in table 6 and related to the column headed 'A' in table 5.

Note The minimum specified volume deviation is an absolute maximum permissible error.

Accuracy of associated measuring instruments

7 Associated measuring instruments must exhibit an accuracy at least as good as the values set out in tables 7A, 7B and 7C for the accuracy class of the measuring system.

Table 7A Associated measuring instruments — Temperature

Item	Accuracy classes of the measuring system	Maximum permissible error on measuring temperature
1	0.3	±0.3°C
2	0.5, 1.0 and 1.5	±0.5°C
3	2.5	±1°C

Table 7B Associated measuring instruments — Pressure

Item	Accuracy classes of the measuring system	Maximum permissible error on measuring pressure	
1	0.3, 0.5, 1.0, 1.5 and 2.5	Less than 1 MPa:	±50 kPa
		between 1 and 4 MPa:	±5%
		more than 4 MPa:	±200 kPa

Table 7C Associated measuring instruments — Density

Item	Accuracy classes of the measuring system	Maximum permissible error on measuring density
1	0.3, 0.5, 1.0, 1.5 and 2.5	±10 kg/m3

Price computing devices

8 The price indicated must equal the price calculated for the volume and unit price indicated within the following maximum permissible errors as set out in table 8.

Table 8 Price computing devices

Item	Unit Price	Maximum permissible error for certification, verification and reverification
1	Not more than $1 per litre	± 0.9 cent
2	More than $1 per litre but not more than $2 per litre	± 1 cent

Item	Unit Price	Maximum permissible error for certification, verification and reverification
3	More than $2 per litre but not more than $5 per litre	± 2.5 cents
4	More than $5 per litre but not more than $10 per litre	± 5 cents

Beverage dispensers

Table 9 Beverage dispensers for alcoholic liquor

Item	Capacity (mL)	Maximum permissible error (mL)		
		Certification or verification	Reverification	
			Deficiency	Excess
1	10	±0.5 mL	−0.5 mL	+1.0 mL
2	15	±0.6 mL	−0.6 mL	+1.2 mL
3	30	±1.0 mL	−1.0 mL	+2.0 mL
4	60–100	±1.5 mL	−1.5 mL	+3.0 mL
5	> 100	±1.5% of quantity dispensed	−1.5% of quantity dispensed	+3.0% of quantity dispensed

Division 6 Weighing instruments

Class 1, 2, 3 or 4 non-automatic instruments

1 The maximum permissible errors for increasing and decreasing loads, expressed in terms of verification scale interval (e), with an instrument adjusted to zero with ±0.25 e at no load, are set out in table 10.

Table 10 Class 1, 2, 3 or 4 non-automatic instruments

Item	Load				Maximum permissible error
	Class 1	Class 2	Class 3	Class 4	
1	0 to 50 000 e	0 to 5 000 e	0 to 500 e	0 to 50 e	±0.5 e
2	> 50 000 e, ≤ 200 000 e	> 5 000 e, ≤ 20 000 e	> 500 e, ≤ 2 000 e	> 50 e, ≤ 200 e	±1 e
3	> 200 000 e	> 20 000 e	> 2 000 e	> 200 e	±1.5 e

2 For digital indication or printing, a permissible error does not include the positive or negative error arising from rounding up or down to the nearest whole number of scale intervals.

Unclassified even-arms scales

Table 11 Unclassified even-arm scales

Item	Capacity	Maximum permissible error			
		Balances	Beam scales		Counter scales
			Class B	Class C	
1	5 g	±4 mg	±10 mg	-	-
2	25 g	±6 mg	±15 mg	±60 mg	-
3	50 g	-	±20 mg	-	-
4	100 g	-	±30 mg	-	-
5	250 g	-	±60 mg	±240 mg	-
6	500 g	±12 mg	±100 mg	±400 mg	±1.5 g
7	1 kg	-	±150 mg	±600 mg	±2.5 g
8	2 kg	-	±250 mg	±1 g	±3.5 g
9	5 kg	±70 mg	±500 mg	±2 g	±6 g
10	10 kg	-	± 1 g	±4 g	±8 g
11	15 kg	-	±1.5 g	±6 g	±10 g
12	25 kg	±120 mg	±2.5 g	±10 g	±15 g
13	50 kg	-	±4.5 g	±20 g	±25 g

3 The maximum permissible error for even-arm scales must be half the amount specified in table 11 for loads not more than half capacity and the whole amount specified for loads more than half to maximum capacity.

Other unclassified instruments

4 The maximum permissible errors for self-indicating weighing instruments and graduated non-self-indicating weighing instruments, with an instrument adjusted to zero within ±0.25 scale interval at no load must be:

(a) ±0.5 scale interval for the first 500 scale intervals; and

(b) ±1 scale interval for more than 500 but not more than 2 000 scale intervals; and

(c) ±1.5 scale intervals for more than 2 000 scale intervals.

Belt weighers

Table 12 Belt weighers

Item	Class	Maximum permissible error for certification or verification	Maximum permissible error for reverification
1	0.5	±0.25%	±0.5%
2	1.0	±0.5%	±1.0%
3	2.0	±1.0%	±2.0%

Catch weighers

5 The maximum permissible error for any load equal to or greater than the minimum capacity and equal to or less than the maximum capacity in automatic operation is set out in table 13.

Table 13 Catch weighers

Item	Load (*m*) expressed in verification scale intervals (e)		Maximum permissible error for class Y (a) or Y (b) instruments — certification, verification or reverification
	Class Y (a)	Class Y (b)	
1	$0<m \leq 500$	$0<m \leq 50$	±1.5 e
2	$500<m \leq 2\,000$	$50<m \leq 200$	±2 e

Item	Load (*m*) expressed in verification scale intervals (e)		Maximum permissible error for class Y (a) or Y (b) instruments — certification, verification or reverification
	Class Y (a)	Class Y (b)	
3	2 000<*m* ≤ 10 000	200<*m* ≤ 1 000	±2.5 e

Division 7 Automatic rail-weighbridges

Accuracy classes

1 Automatic rail-weighbridges are divided into the following 4 accuracy classes:

(a) 0.2;

(b) 0.5;

(c) 1;

(d) 2.

2 An instrument may be in an accuracy class for wagon weighing that is different from that for train weighing.

Maximum permissible errors — Weighing in motion

Table 14 Maximum permissible errors for weighing in motion

Item	Accuracy class	Percentage of weight of single wagon or total train, as appropriate	
		Certification or verification	Reverification
1	0.2	±0.10%	±0.2%
2	0.5	±0.25%	±0.5%
3	1	±0.50%	±1.0%
4	2	±1.00%	±2.0%

Wagon weighing

3 The maximum permissible error for coupled or uncoupled wagon weighing is the greatest of the following values:

(a) the value calculated according to table 14, rounded to the nearest scale interval *d*;

(b) the value calculated according to table 14, rounded to the nearest scale interval for the weight of a single wagon equal to 35% of the maximum wagon weight (as inscribed on the descriptive markings);

(c) 1 *d*.

Train weighing

4 The maximum permissible error for train weighing is the greatest of the following values:

(a) the value calculated according to table 14, rounded to the nearest scale interval *d*;

(b) the value calculated according to table 14 for the weight of a single wagon equal to 35% of the maximum wagon weight (as inscribed on the descriptive markings) multiplied by the number of reference wagons in the train (not exceeding 10 wagons) and rounded to the nearest scale interval;

(c) 1 *d* for each wagon in the train, but not exceeding 10 *d*.

Maximum permissible errors — Static weighing

5 The maximum permissible errors on static weighing for increasing or decreasing loads must be the appropriate values set out in table 15.

Table 15 Static weighing

Item	Maximum permissible errors	Load (*m*) expressed in numbers of scale intervals
1	±0.5 *d*	$0 \leq m \leq 500$
2	±1.0 *d*	$500 < m \leq 2\,000$
3	±1.5 *d*	$2\,000 < m \leq 10\,000$

Minimum capacity

6 The minimum capacity must not be less than 1 t, and not greater than the value of the result of the minimum wagon weight divided by the number of partial weighing.

Minimum wagon weight

7 The minimum wagon weight must not be less than 50 *d*.

Division 8 Grain protein measuring instruments

The maximum permissible errors at verification, certification or reverification are:

(a) wheat — ±0.4% at 11% moisture; and

(b) barley — ±0.5% at 0% moisture.

Division 9 Water Vending Machines

Table 16 Water vending machines at all volumes vended

Item	Maximum permissible error		
	Certification or verification	Reverification	
		Deficiency	Excess
1	±1.5%	−1.5%	+3%

Part 4 Utility meters

Division 1 Water meters

Table 1 Maximum permissible errors for water meters

Item	Verification	Reverification
1	±5% in the flow rate range where the flow rate (Q) is greater than or equal to the minimum flow rate (Q_1)and less than the transitional flow rate (Q_2). ie: $Q_1 \leq Q < Q_2$ ±2% in the flow rate range if the flow rate (Q) is greater than or equal to the transitional flow rate (Q_2) and less than or equal to the maximum flow rate (Q_4). ie: $Q_2 \leq Q \leq Q_4$	±4% in the flow rate range if the flow rate (Q) is greater than or equal to 0.075 times the maximum continuous flow rate (Q_3) and less than or equal to the maximum flow rate (Q_4). ie: $0.075\ Q_3 \leq Q \leq Q_4$

Part 5 Legal Measuring instruments

Division 1 Evidential Breath Analysers

When comparing the error of an evidential breath analyser with the corresponding maximum permissible error, this maximum permissible error must be rounded to the value of the verification scale interval. The error of a reading indicated by an evidential breath analyser may be greater than the maximum permissible error by one least significant digit.

Table 1 Evidential Breath Analysers

Item	Mass concentration	Maximum permissible error for certification	Maximum permissible error for recertification
1	Not more than 0.08 g/210 litres	±0.004 g/210 litres	±0.006 g/210 litres
2	More than 0.08 g/210 litres but not more than 0.4 g/210 inclusive	±5% of measured concentration	±8% of measured concentration

Item	Mass concentration	Maximum permissible error for certification	Maximum permissible error for recertification
3	More than 0.4 g/210 litres	±20% of measured concentration	±30% of measured concentration

[15] Schedule 13

substitute

Schedule 13 Fees

(regulation 90B)

Part 1 Examination and certification of volume measuring instruments

Table 1 Examination and certification of volume measuring instruments

Item	Activity code	Activity	Level 1 Fee	Level 2 Fee	Level 3 Fee
1	AP	Application for examination	$264	$264	$264
2	IA	Initial assessment	$704	$1 056	$1 408
3	IP	Initial performance	$1 232	$1 584	$2 112
4	TT	Temperature test	$1 180	$1 888	$1 888
5	HU	Humidity test	$1 024	$1 024	$1 280
6	VT	Voltage test	$704	$880	$880
7	LB	Line-borne interference test	$1 416	$1 416	$1 416
8	SD	Static discharge test	$944	$1 652	$1 652
9	EMS	Electromagnetic susceptibility test	$3 912	$4 238	$4 890
10	ESS	Endurance span stability test	$944	$1 652	$3 776
11	EXT	Extra or miscellaneous test	$176	$880	$1 056
12	CHK	Checklist	$528	$1 056	$1 056
13	SR	Summary report	$264	$264	$352

Item	Activity code	Activity	Level 1 Fee	Level 2 Fee	Level 3 Fee
14	CP	Certificate preparation	$352	$880	$1 056
15	HRS	Consultations, performance and other tests	$176 per hour	$176 per hour	$176 per hour

Note Table 1 sets out three levels of fees that apply to the instruments described, respectively, by subparagraphs 90B (2) (a) (i), (3) (a) (i) and (4) (a) (i).

Part 2 Examination and certification of weighing and dimensional measuring instruments

Table 2 Examination and certification of weighing and dimensional measuring instruments

Item	Activity code	Activity	Level 1 Fee	Level 2 Fee	Level 3 Fee
1	AP	Application for examination	$264	$264	$264
2	IA	Initial assessment	$704	$880	$1 056
3	IP	Initial performance	$1 760	$3 520	$3 520
4	TT	Temperature test	$1 652	$2 360	$2 832
5	HU	Humidity test	$896	$1 024	$1 280
6	VT	Voltage test	$528	$704	$880
7	LB	Line-borne interference test	$708	$944	$1 180
8	SD	Static discharge test	$708	$708	$826
9	EMS	Electromagnetic susceptibility tests	$3 260	$3 586	$3 912
10	ESS	Endurance span stability test	$708	$944	$1 180
11	EXT	Extra or miscellaneous test	$616	$704	$1 056
12	CHK	Checklist	$1 144	$1 496	$1 760
13	SR	Summary report	$616	$968	$1 144

Item	Activity code	Activity	Level 1 Fee	Level 2 Fee	Level 3 Fee
14	CP	Certificate preparation	$352	$704	$1 232
15	HRS	Consultations, performance and other tests	$176 per hour	$176 per hour	$176 per hour

Note Table 2 sets out three levels of fees that apply to the instruments described, respectively, by subparagraphs 90B (2) (a) (ii), (3) (a) (ii) and (4) (a) (ii).

Part 3 Examination and certification of patterns of measuring instruments

Table 3 Examination and certification of patterns of measuring instruments

Item	Activity code	Activity	Level 1 Fee	Level 2 Fee	Level 3 Fee
1	AP	Application fee	$264	$264	$264
2	EXT	Extra or Miscellaneous	$352	$528	$704
3	IA	Initial assessment	$1 144	$2 024	$2 904
4	SR	Summary report	$616	$616	$616
5	CP	Issue of certificate of approval	$704	$1 056	$1 056
6	HRS	Consultations, performance and other tests	$176 per hour	$176 per hour	$176 per hour

Note Table 3 sets out three levels of fees that apply to the instruments described, respectively, by:

(a) paragraph 90B (2) (b) — the level 1 fee; and

(b) paragraph 90B (3) (b) — the level 2 fee; and

(c) paragraph 90B (4) (b) and (c) and subregulation 90B (5) — the level 3 fee.

Part 4 Examination and certification of evidential breath analysers

Table 4 Examination and certification of evidential breath analysers

Item	Activity code	Activity	Fee
1	AP	Application fee	$264
2	IA	Initial assessment	$616
3	TT	Temperature test	$354
4	HU	Humidity test	$256
5	VT	Voltage test	$792
6	LB	Line-borne interference test	$2 124
7	SD	Static discharge test	$1 888
8	EMS	Electromagnetic susceptibility test	$22 820
9	MS	Mechanical shock	$352
10	ME	Magnetic effect	$616
11	HC	Hydrocarbons	$528
12	SF	Supply frequency	$176
13	HTS	High temperature storage	$236
14	DHC	Damp heat cyclic	$256
15	DCP	DC power supply	$3 060
16	DCR	Ripple on DC	$2 560
17	VB	Vibration	$8 140
18	DB	Durability	$3 168
19	EXT	Extra or miscellaneous	$704
20	CHK	Checklist	$880
21	SR	Summary report	$528
22	CP	Certificate preparation	$704
23	HRS	Consultations, performance and other tests	$176 per hour

Part 5 Examination and certification of grain protein measuring instruments

Table 5 Examination and certification of grain protein measuring instruments

Item	Activity code	Activity	Fee
1	AP	Application fee	$264
2	IA	Initial assessment	$616
3	IP	Initial performance	$1 408
4	TT	Temperature test	$4 248
5	HU	Humidity test	$1 664
6	VT	Voltage test	$264
7	LB	Line-borne interference test	$590
8	SD	Static discharge test	$708
9	EMS	Electromagnetic susceptibility test	$3 423
10	EXT	Extra or miscellaneous test	$704
11	CHK	Checklist	$704
12	SR	Summary report	$616
13	CP	Certificate preparation	$528
14	HRS	Consultations, performance and other tests	$176 per hour

Part 6 Examination and certification of utility meters

Table 6 Examination and certification of utility metres

Item	Activity code	Activity	Fee
1	AP	Application fee	$264
2	IA	Initial assessment	$1 496
3	SR	Summary report	$616

Item	Activity code	Activity	Fee
4	CP	Certificate preparation	$880
5	HRS	Consultations, performance and other tests	$176 per hour

Part 7 Verification of utility meters used for trade

Table 7 Verification of utility meters used for trade

Item	Activity code	Activity	Fee
1	VUM	Verification of utility meters	$1 000

Part 8 Additional fees for use of equipment in examination of instruments

Table 8 Additional fees for use of equipment in examination of instruments

Item	Activity code	Equipment used	Fee ($) per hour
1	LARLOA	Large load cell facility (capacity 600 kg to 50 000 kg)	60
2	SMALOA	Small load cell facility (capacity 50 kg to 500 kg)	60
3	LIQHYD	Liquid hydrocarbons test facility	150
4	LPG	Liquefied petroleum gas test facility	150
5	CNG	Compressed natural gas test facility	150
6	TEMP	Temperature controlled chamber	60
7	HUM	Humidity test chamber	80
8	REL	Reliability testing equipment	60
9	LINBOR	Line-borne interference test equipment	60
10	EMS	Electromagnetic susceptibility testing chamber	150

Item	Activity code	Equipment used	Fee ($) per hour
11	ESD	Electrostatic discharge test equipment	60
12	HRS	Consultations, performance and other tests	176

[16] Further amendments

Provision	*omit each mention of*	*insert*
paragraph 55 (e)	confidence limits	level of confidence
subregulation 57 (1)	confidence limits	level of confidence
Schedule 4, columns 2 and 3, headings	confidence interval	level of confidence
Schedule 5, columns 2, 3 and 4, headings	confidence interval	level of confidence
Schedule 6, columns 2 and 3, headings	confidence interval	level of confidence
Schedule 7, columns 2 and 4, headings	confidence interval	level of confidence
Schedule 8, column 2, heading	confidence interval	level of confidence
Schedule 9, columns 2, 4 and 6, headings	confidence interval	level of confidence
Schedule 10, column 2, heading	confidence interval	level of confidence

Note

1. All legislative instruments and compilations are registered on the Federal Register of Legislative Instruments kept under the *Legislative Instruments Act 2003*. See www.frli.gov.au.