

MAINTENANCE SPECIFICATIONS 2019

under the

WATER MANAGEMENT (GENERAL) REGULATION 2018

I, Elizabeth Anne Livingstone, by delegation from the Minister administering the *Water Management Act 2000*, in pursuance of clause 2 (4) of Schedule 8 to the *Water Management (General) Regulation 2018* approve the following Maintenance Specifications for metering equipment.

Dated this 27th day of March 2019.

ELIZABETH ANNE LIVINGSTONE

Deputy Secretary Lands and Water Division
Department of Industry
By delegation

Explanatory note

This instrument is made under clause 2 (4) of Schedule 8 to the Regulation. The object of this instrument is to specify the mandatory requirements for maintenance of metering equipment to be complied with by holders of water supply work approvals, water access licences and *Water Act 1912* licences and entitlements that are subject to the mandatory metering equipment condition.

This instrument repeals and replaces the *Maintenance Specifications 2018* and clarifies that the maintenance requirements for open channel meters are to be carried out every 12 months or more frequently to ensure that metering equipment is operating accurately and correctly.

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WATER MANAGEMENT (GENERAL) REGULATION 2018

1 Name of this instrument

This instrument is the *Maintenance Specifications 2019*.

2 Commencement

This instrument commences 1 April 2019 or the date it is published in the NSW Government Gazette, whichever is later.

3 Repeal and replacement of Maintenance Specifications 2018

The *Maintenance Specifications 2019* repeal and replace the *Maintenance Specifications 2018*.

3 Interpretation

In this instrument:

Act means the *Water Management Act 2000*.

authority has the same meaning as it has in clause 228 (1) of the Regulation.

authority holder means a person who holds an authority which is subject to a mandatory metering equipment condition.

duly qualified person—see the Dictionary to the Act and clause 236 of the Regulation.

closed conduit metering equipment means metering equipment other than for an open channel.

mandatory metering equipment condition has the same meaning as it has in clause 228 (1) of the Regulation.

open channel has the same meaning as it has in the Regulation.

open channel metering equipment means metering equipment for an open channel.

Regulation means the *Water Management (General) Regulation 2018*.

4 Mandatory maintenance requirements

- (a) The requirements specified in Schedule 1 are the maintenance requirements applying to closed conduit metering equipment.
- (b) The requirements specified in Schedule 2 are the maintenance requirements applying to open channel metering equipment.
- (c) Each maintenance requirement specified in Column 1 of Schedule 1 or 2 that is adjacent to a tick (✓) in Column 2 of those Schedules must be carried out when necessary to ensure that the metering equipment is operating accurately and correctly, by:
- (i) the authority holder, except if the activity affects or will affect the metrology of the meter or requires the removal of a tamper evident seal, or
 - (ii) a duly qualified person.
- (d) Each maintenance requirement specified in Column 1 of Schedule 1 that is adjacent to a tick (✓) in Column 3 of that Schedule must be carried out every 5 years by a duly qualified person to ensure that the metering equipment is operating accurately and correctly.
- (e) Each maintenance requirement specified in Column 1 of Schedule 2 that is adjacent to a tick (✓) in Column 3 of that Schedule must be carried out every 12 months by a duly qualified person to ensure that the metering equipment is operating accurately and correctly.

Schedule 1

Mandatory maintenance requirements for closed conduit meters

Column 1	Column 2	Column 3
Maintenance Requirements	Frequency	
	At any time when necessary (by the authority holder or a duly qualified person)	Every 5 Years (by a duly qualified person)
1. General cleaning and housekeeping; suction clear, cleaning solar panel, clear away debris, excess soil, check for vermin issues/damage and check that site is weed free	✓	✓
2. Check meter, pipework and other fittings within the meter facility for structural integrity, check for leaks	✓	✓
3. Check that site is WHS compliant - ensure that the site is safe for employees, contractors or visitors to inspect or perform work at the metering site	✓	✓
4. Check integrity of the telemetry pole, antenna and the fence around it (if required)	✓	✓
5. When pump has started and water is flowing, check the correct operation of totaliser	✓	✓
6. Verify the meter seals integrity	✓	✓
7. Verify batteries/solar panel and change them as required and/or specified by the manufacturer (if required)	✓	✓

Column 1	Column 2	Column 3
Maintenance Requirements	Frequency	
	At any time when necessary (by the authority holder or a duly qualified person)	Every 5 Years (by a duly qualified person)
8. Meter display is clear and readable	✓	✓
9. Check condition of electrical cables	✓	✓
10. Record of meter reading	✓	✓
11. Complete any other inspections and basic maintenance as per the meter manufacturer's requirements (if specified)	✓	✓
12. Electronic validation - check software version, electronic check against internal reference source that is set at the time of calibration (as per manufacturer's requirements)		✓
13. Check Telemetry fault notification		✓
14. Check for signal transfer between transmitter, sensor and data logger		✓
15. Perform volumetric or simulated testing (in situ accuracy testing to ensure meter is operating within +/- 5 %)		✓
16. Produce a routine maintenance report that covers all items in this Schedule		✓
17. Complete the water meter validation certification form after completing all maintenance activities in this Schedule		✓

Schedule 2

Mandatory maintenance requirements for open channel meters

Column 1	Column 2	Column 3
Maintenance Requirements	Frequency	
	At any time when necessary (by the authority holder or a duly qualified person)	Every 12 months (by a duly qualified person)
1. General cleaning and housekeeping; cleaning solar panel, clear away debris, excess soil, check for vermin issues/damage and check that site is weed free	✓	✓
2. Check that site is WHS compliant - ensure that the site is safe for employees, contractors or visitors to inspect or perform work at the metering site	✓	✓
3. Meter display is clear and readable	✓	✓
4. Check integrity of the telemetry pole, antenna and the fence around it (if applicable)	✓	✓
5. Record of meter reading	✓	✓
6. Verify the meter seals integrity	✓	✓

7. Verify batteries/solar panel and change them as required and/or specified by the manufacturer (if required)	✓	✓
8. Check condition of electrical cables	✓	✓
9. Remove vegetation in flow measuring section	✓	✓
10. Remove vegetation and silt on the sensors or sensor system	✓	✓
11. Complete any other inspections and basic maintenance as per the meter manufacturer's requirements (if specified)	✓	✓
12. When pump has started and water is flowing, check the correct operation of totaliser	✓	✓
13. Check for signal transfer between transmitter, sensor and data logger		✓
14. Check software version and telemetry fault notification		✓
15. Check in stream discharge measurement and cross section survey		✓
16. Perform volumetric (in situ accuracy testing to ensure meter is operating within +/-5 %)		✓
17. Produce routine maintenance report that covers all items in this Schedule		✓
18. Complete the water meter validation certification form after completing all maintenance activities in this Schedule		✓

Note. Under clause 237 of the Regulation, a duly qualified person who validates metering equipment must provide the person for whom the validation is done with a certificate, in the approved form, to that effect.

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