



New South Wales

Water Management (General) Amendment (Metering) Regulation 2018

under the

Water Management Act 2000

His Excellency the Governor, with the advice of the Executive Council, has made the following Regulation under the *Water Management Act 2000*.

NIALL BLAIR, MLC
Minister for Regional Water

Explanatory note

The object of this Regulation is to amend the *Water Management (General) Regulation 2018* as follows:

- (a) to include as a general dealing the amendment of an access licence to nominate a specified extraction point as a means by or from which water may be taken,
- (b) to extend Essential Energy's area of operations as a water supply authority to cover the Broken Hill Pumping Station and land from the Broken Hill Pumping Station to Broken Hill on which the Broken Hill pipeline is situated,
- (c) to impose mandatory conditions on water supply work approvals and certain access licences requiring water taken using water supply works to be recorded if metering equipment is not installed,
- (d) to impose mandatory conditions requiring metering equipment to be installed, used and properly maintained in connection with certain water supply works for which an approval is not required and in relation to holders of licences and entitlements continuing under the former *Water Act 1912*,
- (e) to impose mandatory conditions on water supply work approvals and certain access licences and other entitlements that are the subject of mandatory metering equipment conditions to require specified information regarding the taking of water to be recorded,
- (f) to provide for the staged implementation of the mandatory metering equipment conditions,
- (g) to set out requirements for persons who install or carry out work on metering equipment,
- (h) to specify standards for metering equipment,
- (i) to provide for the circumstances in which a person may take water from a metered work while it is faulty,
- (j) to provide for the review, after 5 years, of regulations relating to metering equipment,
- (k) to specify additional offences for which penalty notices may be issued,
- (l) to make other minor amendments.

This Regulation is made under the *Water Management Act 2000*, including sections 17 (e), 91I (3), 91IA (b), 91J, 115, 115A, 115B, 283 (the definition of *area of operations*), 365 and 400 (the general

regulation-making power) and the Dictionary (the definitions of *duly qualified person* and *general dealing*).

Water Management (General) Amendment (Metering) Regulation 2018

under the

Water Management Act 2000

1 Name of Regulation

This Regulation is the *Water Management (General) Amendment (Metering) Regulation 2018*.

2 Commencement

This Regulation commences on 1 December 2018 and is required to be published on the NSW legislation website.

Schedule 1 Amendment of Water Management (General) Regulation 2018

[1] Clause 3 Definitions

Omit the definition of *Department's website* from clause 3 (1). Insert instead:

Department's website means a publicly available website maintained by the Department.

[2] Clause 12 Nomination of water supply works and extraction points

Insert after clause 12 (4):

- (5) For the purposes of paragraph (j) of the definition of *general dealing* in the Dictionary to the Act, the amendment of an access licence to nominate a specified extraction point as a means by or from which water credited to the licence may be taken, as referred to in section 71W of the Act, is prescribed as a general dealing in an access licence.

[3] Clause 116 Essential energy

Insert at the end of clause 116 (1) (d):

- , and
- (e) the land on which the Broken Hill Pumping Station is situated, and
- (f) the land from the Broken Hill Pumping Station to Broken Hill on which the Broken Hill pipeline is situated.

[4] Part 10

Insert after Part 9:

Part 10 Metering equipment

Division 1 Preliminary

228 Interpretation

- (1) In this Part:

application day for the mandatory metering equipment condition imposed on an authority means the day that condition applies to the authority.

approved manner means the manner approved by the Minister and notified on:

- (a) the Department's website, or
- (b) if approved by the Minister, on a publicly available website maintained by WaterNSW.

approved work means a water supply work for which a water supply work approval has been granted.

AS 4747 means Australian Standard AS 4747—2013, *Meters for non-urban water supply*, as in force from time to time.

authority means a water supply work approval, an access licence or a licence or other entitlement under the former 1912 Act.

mandatory metering equipment condition means a condition imposed on a water supply work approval by section 101A (1) of the Act or on another authority under clause 229.

open channel means a channel or conduit used for conveying water that is not enclosed.

- (2) For the purposes of this Part, an authority applies to a work if:
 - (a) the authority authorises the use of the work, or
 - (b) the work is or may be used to take water that is permitted to be taken under the authority.

Division 2 Metering equipment conditions

229 Mandatory metering equipment conditions

- (1) For the purposes of section 115 of the Act, it is a mandatory condition of an access licence that metering equipment is installed, used and properly maintained in connection with a water supply work that is or may be used to take water under the licence if:
 - (a) the work is exempt from the requirement for a water supply work approval because of section 4.41 or 5.23 of the *Environmental Planning and Assessment Act 1979* or because it is part of a transitional Part 3A project under that Act, or
 - (b) the work is used for the purpose of prospecting or fossicking for minerals or petroleum under the *Mining Act 1992* or the *Petroleum (Onshore) Act 1991*.
- (2) For the purposes of section 115A of the Act, it is a mandatory condition of a licence or other entitlement under the former 1912 Act that metering equipment is installed, used and properly maintained in connection with a work that is or may be used to take water under the licence or entitlement.
- (3) The holder of an authority is taken to have complied with a particular aspect of the condition imposed by this clause if the holder has complied with the applicable requirements (if any) set out in this Regulation.

230 Temporary exemptions from mandatory metering equipment condition

- (1) The mandatory metering equipment condition is not required to be complied with in respect of the following works before the day specified below for the works:
 - (a) for a work that takes or may be used to take water from a water source to which any of the following water sharing plans (as in force on the commencement of this clause) apply, 1 December 2020:
 - Water Sharing Plan for the Barwon-Darling Unregulated and Alluvial Water Sources 2012,*
 - Water Sharing Plan for the Castlereagh River Unregulated and Alluvial Water Sources 2011,*
 - Water Sharing Plan for the Gwydir Regulated River Water Source 2016,*
 - Water Sharing Plan for the Gwydir Unregulated and Alluvial Water Sources 2012,*
 - Water Sharing Plan for the Intersecting Streams Unregulated and Alluvial Water Sources 2011,*
 - Water Sharing Plan for the Lower Gwydir Groundwater Source 2003,*
 - Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003,*

Water Sharing Plan for the Macquarie and Cudgegong Regulated Rivers Water Source 2016,

Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012,

Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012,

Water Sharing Plan for the North Western Unregulated and Fractured Rock Water Sources 2011,

Water Sharing Plan for the NSW Border Rivers Regulated River Water Source 2009,

Water Sharing Plan for the NSW Border Rivers Unregulated and Alluvial Water Sources 2012,

Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008,

Water Sharing Plan for the NSW Great Artesian Basin Shallow Groundwater Sources 2011,

Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011,

Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Groundwater Sources 2011,

Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010,

Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2003,

Water Sharing Plan for the Upper Namoi and Lower Namoi Regulated River Water Sources 2016,

- (b) for a work that takes or may be used to take water from a water source to which of any of the following water sharing plans (as in force on the commencement of this clause) apply, 1 December 2021:

Water Sharing Plan for the Belubula Regulated River Water Source 2012,

Water Sharing Plan for the Lachlan Regulated River Water Source 2016,

Water Sharing Plan for the Lachlan Unregulated and Alluvial Water Sources 2012,

Water Sharing Plan for the Lower Lachlan Groundwater Source 2003,

Water Sharing Plan for the Lower Murray Groundwater Source,

Water Sharing Plan for the Lower Murray Shallow Groundwater Source 2012,

Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources 2011,

Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003,

Water Sharing Plan for the Murray Unregulated and Alluvial Water Sources 2011,

Water Sharing Plan for the Murrumbidgee Regulated River Water Source 2016,

Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012,

- Water Sharing Plan for the New South Wales Murray and Lower Darling Regulated Rivers Water Sources 2016,*
- (c) for a work that takes or may be used to take water from a water source to which any of the following water sharing plans (as in force on the commencement of this clause) apply, 1 December 2023:
- Water Sharing Plan for the Bega and Brogo Rivers Area Regulated, Unregulated and Alluvial Water Sources 2011,*
- Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008,*
- Water Sharing Plan for the Brunswick Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the Central Coast Unregulated Water Sources 2009,*
- Water Sharing Plan for the Clarence River Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the Clyde River Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the Coffs Harbour Area Unregulated and Alluvial Water Sources 2009,*
- Water Sharing Plan for the Deua River Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources 2011,*
- Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011,*
- Water Sharing Plan for the Hunter Regulated River Water Source 2016,*
- Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources 2009,*
- Water Sharing Plan for the Lower North Coast Unregulated and Alluvial Water Sources 2009,*
- Water Sharing Plan for the Macleay Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the Murrumbidgee Area Unregulated and Alluvial Water Sources 2010,*
- Water Sharing Plan for the Nambucca Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources 2016,*
- Water Sharing Plan for the North Coast Fractured and Porous Rock Groundwater Sources 2016,*
- Water Sharing Plan for the Paterson Regulated River Water Source 2007,*
- Water Sharing Plan for the Richmond River Area Unregulated, Regulated and Alluvial Water Sources 2010,*
- Water Sharing Plan for the Snowy Genoa Unregulated and Alluvial Water Sources 2016,*
- Water Sharing Plan for the South Coast Groundwater Sources 2016,*
- Water Sharing Plan for the Towamba River Unregulated and Alluvial Water Sources 2010,*

Water Sharing Plan for the Tuross River Unregulated and Alluvial Water Sources 2016,

Water Sharing Plan for the Tweed River Area Unregulated and Alluvial Water Sources 2010.

- (2) The mandatory metering equipment condition is not required to be complied with in respect of the following works that are or may be used to take water under a licence or entitlement under the former 1912 Act before the day specified below for the works:
 - (a) for a work authorised under a licence or entitlement with a number that begins with 80, 85 or 90, 1 December 2020,
 - (b) for a work authorised under a licence or entitlement with a number that begins with 40, 50, 57, 60 or 70, 1 December 2021,
 - (c) for a work authorised under a licence or entitlement with a number that begins with 10, 20 or 30, 1 December 2023,
 - (3) Despite subclauses (1) and (2), if a work is a pump for surface water that is 500 mm or greater or is the subject of an authority that applies to a work of that kind, the mandatory metering equipment condition is required to be complied with on and from 1 December 2019.
 - (4) An exemption under this clause ceases to apply to a work if:
 - (a) it was a condition of an authority applying to the work, as in force on 1 April 2019, that an extraction measurement device, a flow measurement device or other metering equipment be installed in connection with the work and the device or equipment is replaced, or first installed, on or after 1 April 2019, or
 - (b) it is a condition of an authority applying to the work, issued after 1 April 2019, that an extraction measurement device, a flow measurement device or other metering equipment be installed in connection with the work and the device or equipment is installed on or after 1 April 2019.
- Note.** An exemption under this clause does not prevent a person:
- (a) from having to comply with a direction given under section 326 of the Act, or
 - (b) from complying with a condition relating to metering equipment imposed under a provision of the Act other than section 101A.

231 Permanent exemptions from mandatory metering equipment condition

- (1) The mandatory metering equipment condition is not required to be complied with in respect of a work to which an authority applies if any of the following circumstances apply:
 - (a) an exemption is granted by the Minister under clause 233 and the exemption has not been revoked,
 - (b) the work is a pump for surface water and the use of 1 pump of not more than 99 mm is permitted under the authority,
 - (c) the work is a water bore for groundwater and the use of 1 water bore with a diameter of not more than 199 mm is permitted under the authority or, if the authority does not specify the diameter, the water bore has a diameter of not more than 199 mm,
 - (d) the work is solely used to take water pursuant to a basic landholder right,
 - (e) in the case of an approved work, the work is used only in circumstances where the holder of the approval is exempt from the requirement to hold an access licence for the taking of water using the work,

- (f) the work is solely used to take water under a floodplain harvesting (regulated river) access licence or a floodplain harvesting (unregulated river) access licence.
- (2) The mandatory metering equipment condition is not required to be complied with in respect of 2 or more pumps for surface water to which the same authority applies, or that are situated on the same landholding and to which different authorities apply, if one of the following applies:
 - (a) there are no more than 2 pumps, and the use of pumps of not more than 74 mm is permitted by the applicable authorities,
 - (b) there are no more than 3 pumps, and the use of pumps of not more than 49 mm is permitted by the applicable authorities,
 - (c) there are no more than 4 pumps, and the use of pumps of not more than 39 mm is permitted by the applicable authorities.
 - (3) The mandatory metering equipment condition is not required to be complied with in respect of 2 or more water bores for groundwater to which the same authority applies, or that are situated on the same landholding and to which 2 or more authorities apply, if one of the following applies:
 - (a) there are no more than 2 water bores and the use of water bores having a diameter of not more than 159 mm is permitted by the applicable authorities or, if an applicable authority does not specify the diameter, the diameter of the water bore is not more than that size,
 - (b) there are no more than 3 water bores and the use of water bores having a diameter of not more than 129 mm is permitted by the applicable authorities or, if an applicable authority does not specify the diameter, the diameter of the water bore is not more than that size,
 - (c) there are no more than 4 water bores and the use of water bores having a diameter of not more than 119 mm is permitted by the applicable authorities or, if an applicable authority does not specify the diameter, the diameter of the water bore is not more than that size.
 - (4) Subclauses (1) (b) and (c), (2) and (3) do not apply to a water supply work if:
 - (a) it was a condition of the authority that applies to the work, as in force on the commencement of this clause, that an extraction measurement device, a flow measurement device or other metering equipment be installed in connection with the work, or
 - (b) the work is authorised to take water from a water source described in Schedule 9, or
 - (c) it is a condition of an authority that applies to the work, issued after the commencement of this clause, that metering equipment be installed in connection with the work.
 - (5) Subclauses (2) and (3) do not apply to a water supply work if it is a work that is authorised to be used only if another work to which the same authority applies is not capable of being used because of a mechanical or electrical failure.

Note. An exemption under this clause does not prevent a person:

- (a) from having to comply with a direction given under section 326 of the Act, or
- (b) from complying with a condition relating to metering equipment imposed under a provision of the Act other than section 101A.

232 Inactive water supply works

- (1) This clause commences on 1 April 2019.
- (2) The mandatory metering condition is not required to be complied with in respect of an approved work or a work that is or may be used to take water under an access licence if:
 - (a) the work is or may be used to take surface water, and
 - (b) the approval or access licence under which the work is or may be used to take water indicates that the work is inactive, and
 - (c) the approval or access licence is subject to conditions that prohibit the work from being used to take water while it is inactive and from being capable of taking water from a water source while it is inactive, and
 - (d) all conditions applying to an inactive work under that approval or access licence are complied with.

233 Exemptions by Minister

- (1) The Minister may, at the Minister's discretion or on the application of the holder of an authority, exempt the holder, or a class of holders, from complying with the mandatory metering equipment condition.
- (2) The Minister may grant an exemption only if the Minister is satisfied that it is not possible for water taken using the work to be measured by metering equipment.
- (3) An exemption may be unconditional or granted subject to conditions.
- (4) The Minister is to notify an exemption, or the revocation or amendment of an exemption, for a class of holders on the Department's website.
- (5) The Minister may revoke or amend an exemption at any time.

234 Existing metering conditions

- (1) For the purposes of this clause, an *inconsistent metering condition* is a condition of an authority that:
 - (a) relates to an extraction measurement device, a flow measurement device or other metering equipment for a work to which the authority applies that is subject to a mandatory metering equipment condition, and
 - (b) is wholly or partly inconsistent with the mandatory metering equipment condition or any requirements for metering equipment under this Regulation.
- (2) An authority that is subject to an inconsistent metering condition is taken to be amended by removing the condition on the application day.

Division 3 Metering equipment standards

235 Mandatory requirements for metering equipment

The requirements set out in Schedule 8 are applicable requirements for the purposes of section 101A (2) of the Act and clause 229 (3).

236 Duly qualified persons

- (1) In this clause:
- certified meter installer** means a person who holds a current certification as a meter installer issued by Irrigation Australia Ltd.
- certified practising hydrographer** means a person who is listed as a certified practising hydrographer in the register of certified professionals kept by the Australian Hydrographers Association.
- maintenance specifications** means the specifications made under clause 2 (4) of Schedule 8.
- metering system designer** means a person who:
- holds a current certification as an irrigation designer or irrigation professional issued by Irrigation Australia Ltd, or
 - holds a vocational education and training qualification in irrigation management, the installation of irrigation equipment or the design of irrigation equipment issued by a registered training organisation, or
 - holds an engineering qualification issued by an Australian university and who has not less than 2 years experience in designing water management systems.
- registered training organisation** means a training organisation that is listed as a registered training organisation on the National Register established under the *National Vocational Education and Training Regulator Act 2011* of the Commonwealth.
- telemetry technician** means a person who:
- holds a current electrical licence, or
 - holds a communications engineering qualification issued by an Australian university, or
 - holds a telecommunications engineering qualification issued by an Australian university, or
 - holds a vocational education and training qualification in radio communications or in electronics and communications issued by a registered training organisation.
- (2) For the purposes of the definition of **duly qualified person** in the Dictionary to the Act, a person has the prescribed qualifications, skills and experience to carry out work in connection with metering equipment if the person is specified for the work by this clause.
- (3) The following persons are specified for designing metering equipment installed in connection with an open channel:
- a certified meter installer,
 - a metering system designer.
- (4) A certified meter installer is specified for installing metering equipment other than telemetry.
- (5) The following persons are specified for installing, maintaining (including maintenance activities under the maintenance specifications) and repairing telemetry:
- a certified meter installer,
 - a telemetry technician,
 - a certified practising hydrographer.

- (6) A certified meter installer who has experience in using intrusive and non-intrusive flow measurement testing equipment is specified for validating metering equipment (other than equipment installed in connection with an open channel).
- (7) The following persons are specified for validating metering equipment installed in connection with an open channel:
 - (a) a certified meter installer who has experience in using intrusive and non-intrusive flow measurement testing equipment,
 - (b) a certified practising hydrographer who is trained in the use of testing equipment.
- (8) A certified meter installer who has experience in using intrusive and non-intrusive flow measurement testing equipment is specified for volumetric or simulated testing (in situ accuracy testing) for metering equipment (other than equipment installed in connection with an open channel).
- (9) The following persons are specified for volumetric testing (in situ accuracy testing) of metering equipment installed in connection with an open channel using in situ volumetric measurement procedures specified in AS 4747:
 - (a) a certified meter installer who has experience in using intrusive and non-intrusive flow measurement testing equipment,
 - (b) a certified practising hydrographer who has experience in using intrusive and non-intrusive flow measurement testing equipment.
- (10) A certified meter installer is specified for maintenance activities that are required to be carried out annually or at more frequent intervals under the maintenance specifications in relation to metering equipment (other than metering equipment installed in connection with open channels).
- (11) The following persons are specified for maintenance activities that are required to be carried out annually or at more frequent intervals under the maintenance specifications in relation to metering equipment installed in connection with open channels:
 - (a) a certified meter installer,
 - (b) a certified practising hydrographer.
- (12) The following persons are specified for maintenance activities that are required to be carried out every 5 years under the maintenance specifications in relation to metering equipment (other than metering equipment installed in connection with open channel):
 - (a) a certified meter installer,
 - (b) a telemetry technician.
- (13) The following persons are specified for maintenance activities that are required to be carried out every 5 years under the maintenance specifications in relation to metering equipment installed in connection with open channel:
 - (a) a certified meter installer,
 - (b) a certified practising hydrographer.
- (14) The following persons are specified for maintenance activities for the purpose of repairing faulty metering equipment:
 - (a) a certified meter installer,
 - (b) a certified practising hydrographer.

237 Obligations of duly qualified persons

- (1) A duly qualified person who certifies the design of metering equipment for an open channel for the purposes of clause 2 (3) of Schedule 8 must give a certificate, in the approved form, to the person who obtained the certification.
- (2) A duly qualified person who validates metering equipment in accordance with clause 7 of Schedule 8 must give the person for whom the validation is done a certificate, in the approved form:
 - (a) confirming that the metering equipment complies or does not comply with the matters required to be checked for validation, and
 - (b) if matters checked do not comply with the requirements of AS 4747, specifying the reasons why the equipment does not comply and the modifications that are required for compliance or that the equipment cannot be modified to enable compliance.
- (3) A duly qualified person who checks metering equipment for accuracy under clause 9 of Schedule 8 must give the person for whom the check is done a certificate, in the approved form, certifying whether or not the maximum permissible error of the metering equipment does or does not exceed plus or minus 5% in the field.
- (4) A duly qualified person who installs metering equipment or who carries out other work on metering equipment must notify the Minister in the approved form and manner if the person knows or reasonably suspects that the equipment has been tampered with.
- (5) A duly qualified person must not fail to comply with this clause.
Maximum penalty: 20 penalty units.

238 Metering records

- (1) For the purposes of section 91J of the Act, the following metering records must be kept, for a period of 5 years, by a person who is subject to a mandatory metering equipment condition:
 - (a) a certificate provided to the person under clause 237 (1) or (2) by a duly qualified person,
 - (b) a copy of a record made under clause 244 (2),
 - (c) a copy of a report given to the Minister under clause 8 or 9 of Schedule 8,
 - (d) a copy of a written certification given to the Minister under clause 9 (2) (b) of Schedule 8.
- (2) It is a condition of each authority that is the subject of a mandatory metering equipment condition that the holder of the authority must give the Minister a copy of a certificate provided under clause 237 (1) or (2) within 28 days of receiving the certificate.
- (3) A condition imposed by this clause is a mandatory condition for the purposes of sections 115 and 115A (b) of the Act.

Division 4 Defences for metering offences

239 Commencement of Division

This Division commences on 1 April 2019.

240 Definitions

In this Division:

faulty, in relation to metering equipment, means metering equipment that is not operating properly or is not operating.

metered work means a water management work in connection with which metering equipment has been installed.

241 Reporting faulty metering equipment

For the purposes of section 91IA (b) of the Act, notice that metering equipment is faulty is to be given to the Minister in the approved form and is to contain the following particulars:

- (a) the person's name and contact details,
- (b) the type and location of the metered work,
- (c) any relevant approval or access licence numbers,
- (d) the purposes for which the water taken from the metered work is used,
- (e) a description of the method to be used to determine the quantity of water taken while the metering equipment is faulty.

242 Records to be kept when metering equipment faulty

- (1) For the purposes of section 91I (3) of the Act, a person who takes water by means of a metered work while its metering equipment is faulty must comply with this clause.
- (2) The person must record the following information:
 - (a) the purposes for which the water taken from the metered work is used,
 - (b) if a pump is being used to take water, the size of the pump, the maximum extraction rate of the pump and the dates and times during which the pump is operating,
 - (c) if the water taken from the metered work is being used for irrigation, the area of land that is irrigated with the water,
 - (d) the last available reading of the metering equipment before it became faulty and the first available reading after it is repaired,
 - (e) any other information that the Minister, by notice in writing to the person, directs the person to record.
- (3) The information must be recorded in the approved form and manner.
- (4) The person must, if directed to do so by the Minister, use an alternative means specified by the Minister to determine the quantity of water taken and must record that information in the approved form and manner.
- (5) The person must:
 - (a) give a copy of the records required to be made under this clause to the Minister in the approved manner not later than 28 days after the metering equipment is repaired, and
 - (b) keep the records for a period of not less than 5 years.

243 Repairs to faulty metering equipment

- (1) For the purposes of section 91I (3) of the Act, a person who takes water by means of a metered work while its metering equipment is faulty must comply with this clause.

- (2) The person must repair the metering equipment, or cause it to be repaired, within 21 days of becoming aware that the metering equipment is faulty or within any further period permitted under this clause.
- (3) If the person becomes aware that the equipment cannot be repaired within that period, the person must notify the Minister in the approved form and manner and seek an extension of the period for repairs to be carried out.
- (4) An application for an extension must set out the reasons why the repair is not able to be carried out within the specified period and the date by which it is proposed to be repaired.
- (5) The Minister may, by notice in writing given to the person, extend the period for repairs by the period specified in the notice.
- (6) A person may make more than 1 application to extend the repair period.
- (7) The person must give the following information to the Minister in the approved form not later than 28 days after the faulty metering equipment is repaired:
 - (a) the date the metering equipment was repaired,
 - (b) a description of any repairs,
 - (c) evidence that the metering equipment has been repaired (which may include a statement from the person who repaired it),
 - (d) the name of the person who repaired it.

Division 5 Miscellaneous

244 Mandatory condition relating to other reporting

- (1) A condition imposed by this clause is a mandatory condition for the purposes of sections 115 and 115A (b) of the Act.
- (2) It is a condition of each authority that is the subject of a mandatory metering equipment condition that the holder of the authority must:
 - (a) record in the approved form and manner when water is taken using a work to which the authority applies under a basic landholder right or in other circumstances other than under an authority, and
 - (b) record, in the approved form, the means by which the holder confirmed water was taken in circumstances permitted by the authority and specified in the approved form, and
 - (c) record the information not later than 24 hours after water is taken as referred to in paragraph (a) or (b).
- (3) An authority that, immediately before the commencement of this clause, was subject to a condition requiring the holder to record information of a kind referred to in subclause (2) is taken to be amended by removing the condition and any other condition relating to keeping logbooks to record or report water that is taken.
- (4) For the purposes of subclause (3), it does not matter whether or not the condition relating to recording information or keeping logbooks also requires other information to be recorded.
- (5) This clause commences on 1 December 2019.

245 Mandatory conditions imposed on entitlements under former 1912 Act

A mandatory condition imposed on a licence or an entitlement under the former 1912 Act by this Part or clause 250 is taken to have been imposed on the licence or other entitlement under that Act.

246 Review of metering equipment regulations

- (1) The Minister is to review the operation of regulations made under section 115B of the Act as soon as possible after the period of 5 years from the date of commencement of the first regulations made under that section.
- (2) The Minister must publish the review on a website maintained by the Department that is publicly accessible.

247 Service of documents

A document that is required to be given to a person under this Part may be given to the person in the manner in which a document may be served under the Act, except as otherwise provided by this Part.

[5] Part 10 Miscellaneous

Renumber the Part as Part 11 and renumber clauses 228 and 229–237 as clauses 248 and 251–259, respectively, and amend any cross-references accordingly.

[6] Clauses 249 and 250

Insert after clause 248 (as renumbered by item [5]):

249 Management plans may contain savings and transitional provisions

For the purposes of section 17 (e) of the Act, a management plan may, in respect of a water management area or water source to which it applies, contain provisions for or with respect to matters of a savings or transitional nature consequent on the making, amendment, repeal or consolidation of a management plan.

250 Recording water taken where metering equipment not required to comply with mandatory conditions

- (1) For the purposes of sections 115 and 115A (b) of the Act, it is a mandatory condition of an authority under which a work may be used to take water that the holder of the authority must:
 - (a) record water taken using the work, and
 - (b) keep the record for a period of 5 years.
- (2) The record is to be made:
 - (a) not later than 24 hours after water is taken, and
 - (b) in an approved form and manner.
- (3) If an authority on which a condition is imposed under this clause is subject to an existing condition requiring the holder to record water taken, the authority is taken to be amended by removing the existing condition and any other existing condition relating to keeping logbooks to record or report water that is taken.
- (4) For the purposes of subclause (3), it does not matter whether or not the condition relating to recording water taken or keeping logbooks also requires other information to be recorded.

- (5) This clause does not apply if:
- (a) metering equipment that complies with Schedule 8 is installed in relation to a work used to take water, or
 - (b) the authority is subject to a mandatory metering equipment condition (within the meaning of Part 10), or
 - (c) the water supply work is used solely to take water pursuant to a basic landholder right, or
 - (d) the water supply work is used solely to take water under a floodplain harvesting (regulated river) access licence or a floodplain harvesting (unregulated river) access licence.
- (6) This clause commences on 1 December 2019.
- (7) In this clause, *authority* has the same meaning as in Part 10.

[7] Schedule 7 Penalty notice offences

Insert in appropriate order:

Section 91H (3)	\$750	\$1500
Section 91IA	\$750	\$1500

[8] Schedules 8 and 9

Insert after Schedule 7:

Schedule 8 Metering equipment

(Clause 235)

1 Interpretation

- (1) In this Schedule:
- approved data logging and telemetry specifications* means the data logging and telemetry specifications approved by the Minister under clause 10, as in force from time to time.
- (2) Words and expressions used in this Schedule have the same meaning as in Part 10.

2 Standards for installation, re-installation and maintenance

- (1) Metering equipment must be installed, or re-installed, in accordance with AS 4747 by a duly qualified person.
- (2) Metering equipment must be installed or re-installed so that it measures the flow of all water taken through the work.
- (3) Metering equipment installed in connection with an open channel on or after 1 April 2019 must be of a design that is certified by a duly qualified person as complying with the requirements of AS 4747.
- (4) Metering equipment must be maintained in accordance with the maintenance specifications approved by the Minister, as in force from time to time, and published in the Gazette.

3 Pattern approval

- (1) Subject to clause 9, the meter must be pattern approved under the *National Measurement Regulations 1999* of the Commonwealth in accordance with the following standards:
 - (a) *NMI M 10 Meters Intended for the Metering of Water in Full Flowing Pipes,*
 - (b) *NMI M 11 Meters Intended for the Metering of Water in Open Channels and Partially Filled Pipes.*
- (2) This clause does not apply to a meter installed in connection with an open channel.

4 Data loggers

- (1) Metering equipment must have a data logging capacity that enables it to collect, record and store the water take data at intervals of not more than 1 hour, including the time and date of each interval and the period or periods for which water was taken.
- (2) The metering equipment must retain the water take data for a period of not less than 5 years.
- (3) The data logging capacity of metering equipment must comply with the approved data logging and telemetry specifications.
- (4) Without limiting the matters that may be included in the approved data logging and telemetry specifications, the specifications may require metering equipment to collect, record and store the following data electronically:
 - (a) data relating to the operation of the metering equipment, including data relating to power inputs and whether a work is turned on or off,
 - (b) data relating to malfunctions or other events that indicate that the accuracy or other operation of metering equipment may be affected.
- (5) The data logging capacity for metering equipment may be provided by a device that is used in respect of more than one device for measuring the flow of water.
- (6) In this clause:
water take data means the flow rate and cumulative volume of water taken.

5 Seals and security

- (1) Metering equipment must have tamper evident seals, locks, controls or other devices sufficient to limit access to, and prevent tampering with, the equipment.
- (2) A tamper evident seal must:
 - (a) be capable of clearly showing whether the metering equipment has been interfered with, and
 - (b) not prevent the reading of metering equipment or affect the operation of the telemetry system for the equipment, and
 - (c) comply with AS 4747, if applicable.
- (3) Metering equipment must have a means of identifying whether interference has occurred with data readings or other electronic functions of the equipment (including telemetry).

6 Telemetry

- (1) This clause commences on 1 December 2019.
- (2) This clause does not apply to metering equipment used in conjunction with the following works:
 - (a) a pump used for surface water to which a water supply work approval that authorises the use of a pump of not more than 199 mm applies,
 - (b) a water supply work that is authorised to take water from a groundwater source.
- (3) Metering equipment must have a telemetry capacity to transmit data relating to water usage that complies with the approved data logging and telemetry specifications.
- (4) The telemetry capacity for metering equipment may be provided by a device that is used in respect of more than one device for measuring the flow of water.
- (5) Without limiting the matters that may be included in the approved data logging and telemetry specifications, the specifications may deal with the following:
 - (a) the person to whom the data is to be transmitted,
 - (b) the data that is required to be transmitted,
 - (c) the method by which the data is to be transmitted,
 - (d) the frequency with which data is to be transmitted,
 - (e) controls relating to limiting access to, and preventing tampering with, telemetry equipment.

7 Validation of metering equipment

- (1) Metering equipment (other than metering equipment installed in connection with an open channel) must be validated by a duly qualified person on installation, at intervals of not more than 5 years and in any other circumstances in which metering equipment is required by AS 4747 to be validated.
- (2) Metering equipment installed in connection with an open channel must be validated by a duly qualified person on installation, at intervals of not more than 12 months and in any other circumstances in which metering equipment is required by AS 4747 to be validated.
- (3) Metering equipment must be modified or replaced so as to meet the requirements for compliance specified with respect to AS 4747 by a duly qualified person in a certificate following a validation.
- (4) Metering equipment that has been modified or replaced in accordance with this clause must be validated by a duly qualified person.

8 Transitional arrangements for validation of existing metering equipment

- (1) This clause applies to metering equipment that was installed in connection with a work before 1 April 2019 if the equipment was:
 - (a) validated by a duly qualified person in accordance with AS 4747 within 5 years before the application day for the equipment (in the case of metering equipment that is not installed in connection with an open channel) or within 12 months before the application day for the equipment (in the case of metering equipment that is installed in connection with an open channel) (the *existing validation*), and

- (b) found by the duly qualified person to comply with the matters required to be checked on validation.
- (2) For the purposes of the application of clause 7 to metering equipment that is:
 - (a) not metering equipment installed in connection with an open channel, the first interval of 5 years for validation after the application day is taken to end 5 years after the existing validation, or
 - (b) metering equipment installed in connection with an open channel, the first interval of 12 months for validation after the application day is taken to end 12 months after the existing validation.
- (3) A report must be given to the Minister by a person who intends to rely on this clause setting out the steps taken in relation to the metering equipment.
- (4) The report must be:
 - (a) given before the application day for the mandatory metering condition for the metering equipment, and
 - (b) given in the approved form and manner, and
 - (c) accompanied by any documents given by the duly qualified person to the person reporting and relating to the checks carried out by the duly qualified person.

9 Transitional arrangements for existing metering equipment that is not pattern approved

- (1) This clause applies to metering equipment that was installed in connection with a work before 1 April 2019 and was not pattern approved.
- (2) Metering equipment does not need to be pattern approved (as referred to in clause 3) if:
 - (a) the metering equipment is metering equipment to which clause 8 (1) applies, and
 - (b) the holder of the authority concerned provides written certification to the Minister from the manufacturer that the maximum permissible error of the metering equipment did not exceed plus or minus 2.5% after manufacture.
- (3) Metering equipment does not need to be pattern approved (as referred to in clause 3) or validated (as referred to in clause 7) if:
 - (a) within 5 years before the application day for the equipment (in the case of metering equipment that is not installed in connection with an open channel) or within 12 months before the application day for the equipment (in the case of metering equipment that is installed in connection with an open channel) the metering equipment is:
 - (i) checked for accuracy by a duly qualified person, and
 - (ii) checked again by a duly qualified person after that check at intervals of not more than 5 years (in the case of metering equipment that is not installed in connection with an open channel) or 12 months (in the case of metering equipment that is installed in connection with an open channel), and
 - (b) those checks determine that the maximum permissible error of the metering equipment does not exceed plus or minus 5% in the field.
- (4) A record must be kept of the way in which metering equipment is checked under subclause (3).

- (5) A report must be given to the Minister by a person who intends to rely on this clause setting out the steps taken in relation to the metering equipment.
- (6) The report must be:
 - (a) given to the Minister before the application day for the mandatory metering condition that applies to the metering equipment and as soon as practicable after each subsequent occasion on which a check is carried out under this clause, and
 - (b) given in the approved form and manner, and
 - (c) accompanied by any documents given by the duly qualified person to the person reporting and relating to the checks carried out by the duly qualified person.

10 Approved data logging and telemetry specifications

- (1) The Minister may, by notice published in the Gazette, approve data logging and telemetry specifications for the purposes of this Schedule.
- (2) The Minister may, by notice published in the Gazette, amend or revoke the data logging and telemetry specifications.

Schedule 9 Water sources requiring metering equipment for small water supply works

(Clause 231 (4) (b))

A water source to which one of the following water sharing plans applies (as in force on the commencement of this Schedule):

- (a) *Water Sharing Plan for the Lower Gwydir Groundwater Source 2003,*
- (b) *Water Sharing Plan for the Lower Lachlan Groundwater Source 2003,*
- (c) *Water Sharing Plan for the Lower Macquarie Groundwater Sources 2003,*
- (d) *Water Sharing Plan for the Lower Murray Groundwater Source,*
- (e) *Water Sharing Plan for the Lower Murrumbidgee Groundwater Sources 2003,*
- (f) *Water Sharing Plan for the NSW Great Artesian Basin Groundwater Sources 2008,*
- (g) *Water Sharing Plan for the Upper and Lower Namoi Groundwater Sources 2003.*

The Belubula Valley Alluvial Groundwater Source as described in the *Water Sharing Plan for the Lachlan Unregulated and Alluvial Water Sources 2012.*

The Upper Lachlan Alluvial Groundwater Source as described in the *Water Sharing Plan for the Lachlan Unregulated and Alluvial Water Sources 2012.*

The Lower Darling Alluvial Groundwater Source as described in the *Water Sharing Plan for the Lower Murray-Darling Unregulated and Alluvial Water Sources 2011.*

The Bell Alluvial Groundwater Source as described in the *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012.*

The Cudgegong Alluvial Groundwater Source as described in the *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012.*

The Talbragar Alluvial Groundwater Source as described in the *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012.*

The Upper Macquarie Alluvial Groundwater Source as described in the *Water Sharing Plan for the Macquarie Bogan Unregulated and Alluvial Water Sources 2012.*

The Upper Murray Groundwater Source as described in the *Water Sharing Plan for the Murray Unregulated and Alluvial Water Sources 2011*.

The Billabong Creek Alluvial Groundwater Source as described in the *Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012*.

The Bungendore Alluvial Groundwater Source as described in the *Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012*.

The Gundagai Alluvial Groundwater Source as described in the *Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012*.

The Kyeamba Alluvial Groundwater Source as described in the *Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012*.

The Mid Murrumbidgee Zone 3 Alluvial Groundwater Source as described in the *Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012*.

The Wagga Wagga Alluvial Groundwater Source as described in the *Water Sharing Plan for the Murrumbidgee Unregulated and Alluvial Water Sources 2012*.

The Currabubula Alluvial Groundwater Source as described in the *Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012*.

The Manilla Alluvial Groundwater Source as described in the *Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012*.

The Quipolly Alluvial Groundwater Source as described in the *Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012*.

The Quirindi Alluvial Groundwater Source as described in the *Water Sharing Plan for the Namoi Unregulated and Alluvial Water Sources 2012*.

The Macintyre Alluvial Groundwater Source as described in the *Water Sharing Plan for the NSW Border Rivers Unregulated and Alluvial Water Sources 2012*.

The NSW Border Rivers Downstream Keetah Bridge Alluvial Groundwater Source as described in the *Water Sharing Plan for the NSW Border Rivers Unregulated and Alluvial Water Sources 2012*.

The NSW Border Rivers Upstream Keetah Bridge Alluvial Groundwater Source as described in the *Water Sharing Plan for the NSW Border Rivers Unregulated and Alluvial Water Sources 2012*.

The Orange Basalt Groundwater Source as described in the *Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011*.

The Young Granite Groundwater Source as described in the *Water Sharing Plan for the NSW Murray Darling Basin Fractured Rock Groundwater Sources 2011*.

The Gunnedah–Oxley Basin MDB (Spring Ridge) Management Zone of the Gunnedah–Oxley Basin MDB Groundwater Source as described in the *Water Sharing Plan for the NSW Murray Darling Basin Porous Rock Groundwater Sources 2011*.

The Peel Alluvium Water Source as described in the *Water Sharing Plan for the Peel Valley Regulated, Unregulated, Alluvium and Fractured Rock Water Sources 2010*.