

# User Guide – South Australian Licensed Water Use Meter Specification

This user guide provides an explanation of the requirements in the *South Australian Licensed Water Use Meter Specification* (the [Meter Specification](#)) to assist stakeholders to understand and apply the requirements.

From 1 July 2019, any new or replacement water meter used for licensed purposes must comply with National Metering Standards for water meter selection, installation and maintenance. Meters installed prior to 1 July 2019 do not need to comply with the National Metering Standards but must continue to comply with State-wide requirements. Given different requirements apply to meters installed pre and post 1 July 2019, this user guide has been split into two corresponding sections.

## 1. Requirements for meters installed post 1 July 2019

The table below provides a summary of the key national and state requirements that apply to meters installed post 1 July 2019 with further detail provided in the text below.

Pattern approved meter	Installed in accordance with pattern approval certificate	Validated post-installation	Maintained in accordance with SA Licensed Water Use specifications
√	√	√	√ See Appendix A1

### ***Pattern approved meters***

Meters installed post 1 July 2019 must be pattern approved. This means they have been tested under a range of operating and environmental conditions to confirm meter accuracy. A list of current pattern approved meters is available [here](#). Meters must also be fit for purpose and therefore suited to the intended purpose, installation configuration and operating conditions (i.e. water quality conditions such as iron bacteria or sediment in the water) and able to perform accurately with consideration for any potential interference that may cause doubt regarding meter accuracy.

### ***Meter installation***

Meters must be installed in accordance with the pattern approval certificate. The location of the meter must be situated to ensure it is safe and able to be accessed and located on the discharge side of the pump prior to any off-takes.

While meter installations can be performed by any person, including an entitlement holder, the meter and its installation must be validated by a certified person within 28 days of installation. A certified person is someone who has a current certificate issued by Irrigation Australia to be a certified meter installer or validator. A current listing of certified persons can be found [here](#).

The certified person must approve the meter for use and provide the entitlement holder with a completed validation certificate. This must be provided to the Department for Environment and Water (DEW) within 14 days, preferably via the online [Meter Notification Form](#). It is the responsibility of the certified person to provide and install seals to the meter installation to ensure the meter or any ancillary pipework cannot be removed without breaking the seals. These seals must have a unique identification number and be a specific seal badged with the South Australian Government logo (obtained through [Irrigation Australia Ltd](#)). The unique seal numbers must be recorded on the validation certificate. This ensures that it can be easily identified if a seal is broken or replaced.

### ***Meter Maintenance***

To comply with National and State requirements, the entitlement holder is required to undertake the following activities to ensure the meter is measuring accurately:

- **Ensure all meter installations are validated** by a certified person when there is a change to a feature of the meter facility or any security seals are broken and require replacement. The meter facility includes the meter itself and any ancillary pipework/equipment (which may affect meter accuracy). A new meter installation needs to be validated by a certified person;
- **Use a certified person for maintenance work** where seals are broken or where meter accuracy is affected. If a certified person is unable to perform the maintenance, then a representative of the meter manufacturer that is suitably qualified must do so;
- **Conduct 5-yearly inspections** to ensure the entire meter facility remains compliant, has integrity, there is no apparent damage, faults etc. and to identify and perform any maintenance/servicing on the meter. If seals are broken or work is undertaken that may affect meter accuracy, a certified person must perform the work. Confirmation that the 5-yearly inspection has occurred must be provided through a completed checklist (available on the DEW website) that is accompanied by photographs of the meter installation and seals to demonstrate compliance. A validation also suffices as a 5-yearly inspection;
- **Conduct annual inspections** to ensure the site remains safe and accessible, that the meter appears to be in working order and that any seals are intact. This is to occur at the time of the July meter read and confirmation that the check has occurred will be required on the online meter read form;
- **Fix faults within 28 days** (and notify DEW within 48 hours of becoming aware of the fault); and
- **Arrange for the accuracy of the meter to be tested** if meter is suspected to be operating inaccurately or if meter security seals (these are the seals that connect the meter register to the meter body) are broken by a non-certified person/professional.

### ***Security seals on meters installed post 1 July 2019***

As stated above, security seals are applied to the meter installation by the certified person at the time of the validation. As stated above, for meters installed post 1 July 2019, these seals must have a unique identification number and be a specific seal badged with the South Australian Government logo and obtained through [Irrigation Australia Ltd](#). Importantly, the maintenance requirements mean that only persons authorised under this specification can break and replace seals (as outlined in the paragraphs below).

If maintenance or work require the breaking of any pipework security seals (seals located on the pipework or meter flanges), a certified person<sup>1</sup> must be engaged and they will break and replace the seals and perform a validation. If any pipework security seals need to be broken for a legitimate reason under direction by DEW by the entitlement holder (i.e. to remove the meter for testing), then the entitlement holder must first obtain authority to remove the seals from DEW before breaking the seals. Whenever pipework seals are replaced, they must be replaced by a competent person.

Meter seals (or the manufacturers security seal - which connect the meter register to the body) can only be broken and replaced by a person authorised under the Specifications (i.e. a certified person, a representative of the meter manufacturer or a testing facility). If meter seals are broken by someone not authorised under the Meter Specification (i.e. an entitlement holder or someone not known), testing (or validation if an electronic meter) is required. Notification of the maintenance work and any new seal numbers must be provided to DEW. DEW may also inspect the meter to determine if tampering has occurred.

### ***Meter reading and notification requirements***

Where stated, meter reads must be provided to DEW at the intervals required in the conditions of the instrument (e.g. condition of water licence or water resource works approval).

In addition, advice must be provided to DEW within 14 days of a meter being installed and validated, revalidated, repaired, replaced, removed, tested or being subject to a 5-yearly inspection. Advice must also be provided to DEW when a meter is suspected or identified as being faulty within 48 hours. It is preferred that this advice be provided via the online [Meter Notification Form](#). However, it may otherwise be provided directly to DEW – see section 6 of the Meter Specification.

## **2. Meters installed pre 1 July 2019**

Meters installed pre 1 July 2019 do not need to comply with the National Metering Standards as they are ‘grandfathered’. These meter need only comply with the National Metering Standards when they are replaced. Meters installed pre 1 July 2019 must continue to comply with Statewide requirements - see Appendix B of the Meter Specification.

<b>Pattern approved meter</b>	<b>Installed in accordance with pattern approval certificate</b>	<b>Validated post-installation</b>	<b>Maintained in accordance with SA Licensed Water Use specifications</b>
<b>X</b>	<b>X</b>	<b>X</b>	√ <b>See Appendix A2</b>

### ***Maintenance***

The ‘grandfathering’ of meters installed pre 1 July 2019 means that these meter installations are exempt from mandatory validations and the use of certified persons for maintenance work. All other maintenance provisions are the same for meters installed pre and post 1 July 2019. Greater detail has been included in the current Meter Specification to assist licensees to understand metering requirements and processes.

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<sup>1</sup> Or if they are not qualified to perform the maintenance work then a representative of the meter manufacturer must be used who can also break and replace the seals under the Specifications

To comply with National and State requirements, the instrument holder is required to undertake the following to ensure the meter is measuring accurately:

- **Use a competent persons for maintenance work** - any work that requires seals to be broken or which may affect meter accuracy must be performed by a competent person – someone who is employed in the meter or irrigation industry who is suitably qualified to maintain or repair meters;
- **Conduct 5-yearly inspections** to ensure the entire meter facility remains compliant, has integrity, there is no apparent damage, faults etc. and to identify and perform any maintenance/servicing on the meter. If seals are broken or work is undertaken that may affect meter accuracy, a competent person must perform the work. Confirmation that the 5-yearly inspection has occurred must be provided through a completed checklist (available on the DEW website) that is accompanied by photographs of the meter installation and seals to demonstrate compliance;
- **Conduct annual inspections** to ensure the site remains safe and accessible, that the meter appears to be in working order and that any seals are intact. This is to occur at the time of the July meter read and confirmation that the check has occurred will be required on the online meter read form;
- **Fix faults within 28 days** (and notify DEW within 48 hours of becoming aware of the fault)<sup>2</sup>; and
- **Arrange for the accuracy of the meter to be tested** if meter is suspected to be operating inaccurately or if meter security seals (connect the meter register to the meter body) are broken by a non-certified person/professional.

#### ***Security seals on meters installed pre 1 July 2019***

All meters installed prior to 1 July 2019 will have a meter seal - or manufacturer's security seal on the meter itself (which connects the meter register to the meter body) and also may have pipework seals attached to the pipework and flanges of the meter.

In relation to any pipework security seals (located on pipework or meter flanges) that are present, if maintenance or work is required that would require breaking of these seals, then a competent person (someone employed in the irrigation or meter industry and who is suitably qualified to maintain meters) must be engaged and they will break and replace the seals. If any pipework security seals (located on pipework or meter flanges) need to be broken for a legitimate reason under direction by DEW by the entitlement holder (i.e. to remove the meter for testing), then the entitlement holder must first obtain approval from DEW before breaking the seal(s). Whenever pipework seals are replaced, they must be replaced by a competent person.

In relation to meter seals (or manufacturers security seals which connect the meter register to the meter body), if these are broken by someone not authorised under the Meter Specification (i.e. an entitlement holder or someone not known), testing (or validation if an electronic meter) is required. These can only be replaced by a competent person or the testing facility (if broken as part of testing). Notification of the maintenance work and any new seal numbers must be provided to DEW.

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<sup>2</sup> The annual inspections and fixing of faults processes aim to provide a mechanism to fulfil a standing requirement (in licence conditions and in the Specifications) to ensure the meter is not defective and the site is accessible.

### ***Meter reading and notification requirements***

Where stated, meter reads must be provided to DEW at the intervals required in the conditions of the instrument (e.g. condition of water licence or water resource works approval).

In addition, advice must be provided to DEW within 14 days of a meter being installed and validated, revalidated, repaired, replaced, removed, tested or being subject to a 5-yearly inspection. Advice must also be provided to DEW when a meter is suspected or identified as being faulty within 48 hours. It is preferred that this advice be provided via the online [Meter Notification Form](#). However, it may otherwise be provided directly to DEW – see section 6 of the Meter Specification.

### **3. Further information**

Further information can be obtained through contacting the relevant water licensing office on the contact details below:

<b>Prescribed Water Resource Area</b>	<b>Office</b>	<b>Contact No.</b>
McLaren Vale, Northern Adelaide Plains, Western Mount Lofty Ranges, Far North, Central Adelaide	Adelaide	(08) 8463 6876
River Murray, Angas Bremer, Eastern Mount Lofty Ranges, Mallee, Marne Saunders, Peake Roby and Sherlock, Clare Valley, Barossa Valley, Eyre Peninsula	Berri	(08) 8595 2053
All prescribed areas within the South East region	Mount Gambier	(08) 8735 1134