

South Australia's Metering Framework

Fact sheet for Certified Persons and Meter Industry



From 1 July 2019, South Australia introduced a new metering framework, mandating a requirement that all new and replacement meters must comply with the national metering standards and be pattern approved and validated and maintained by Certified Persons¹.

This fact sheet has been developed to provide information to, and answer questions from, certified persons. It also aims to provide information more broadly to the meter manufacture and retail industry. Further information can be found at www.environment.sa.gov.au/topics/water/water-licences-and-permits/metering-water-use.

Metering rules - general

What are the national metering standards?

The national metering standards are *Australian Standard – Meters for Non-urban Water Supply* (AS4747 herein referred to as 'national metering standards') which are available for purchase at www.saiglobal.com or for viewing at selected libraries.

For ease of use and accessibility, the key requirements from the national metering standards have been reflected in the [South Australian Licensed Water Use Meter Specification](#). This means that the requirements from the national metering standards as well as additional state-wide requirements are provided in a single, user-friendly document.

What meters do the national metering standards apply to?

Meters installed *post* 1 July 2019 must comply with the national metering standards. In effect, this means that new and replacement meters must comply with sections

1-7 of the [South Australian Licensed Water Use Meter Specification](#) (which incorporates the national metering standards and additional state-wide requirements in a single document). It should be noted that these rules also apply to new and replacement second hand meters.

The key requirements of the national metering standards that apply to new/ replacement meters (that do not apply to meters installed pre 1 July 2019) are that meters must be pattern approved, installations validated by certified persons and maintenance performed by certified persons.

This means that certified persons need only perform validations on new and replacement meters, not meters installed pre 1 July 2019.

What rules apply to meters installed *pre* 1 July 2019?

Meters installed prior to 1 July 2019 do not need to comply with the national metering standards as these meters are 'grandfathered' and therefore exempt. This means that these meters are not required to be pattern approved, validated or maintained by certified persons. However the installations must still comply with Appendix B of the [South Australian Licensed Water Use Meter Specification](#). In terms of ongoing maintenance, notifications and meter readings, meters installed pre 1 July 2019 must comply with sections 5-7 of the current [Specifications](#).

Pattern approval

How do I find out what meters are pattern approved?

The 'Pattern approved non-urban water meters' list is located at <https://www.mdba.gov.au/publications/mdba->

¹ A certified person is someone who has a current certification from Irrigation Australia Limited to be a trained meter installer/validator.

[reports/compliance-enforcement-documents](#) (scroll to bottom of page) or from the Irrigation Australia website. This document is updated as soon as any relevant new information is available.

How do I find the pattern approval certificates?

The pattern approval certificate number is provided against each meter listed in the 'Pattern approved non-urban water meters' list at <https://www.mdba.gov.au/publications/mdba-reports/compliance-enforcement-documents> (scroll to bottom of page). There is a link on this list to the National Measurement Institute's website (www.industry.gov.au/data-and-publications/certificates-of-approval/14-utility). You can then search the certificate number at this website to obtain the meter's pattern approval certificate.

What do I need to consider when selecting a new or replacement meter?

A meter must have obtained a pattern approval certificate with reference to [NMI M 10 Meters Intended for the Metering of Water in Full Flowing Pipes](#) to be compliant. It is important to check the pattern approval certificate for any special approval conditions (i.e. approval may be granted for potable water only).

In addition to the pattern approval requirements, a meter must be fit for purpose - suited to the intended purpose, installed to appropriate configuration and operating conditions. This includes consideration of whether the meter is suitable given water quality considerations.

Can I install a non-pattern approved meter?

Generally no. If you have purchased/ordered a meter after the 1st of July it needs to be an appropriate, pattern approved meter. However, if there are particular site-specific practical or technical issues that mean there are no pattern approved meters available that are suitable or 'fit for purpose' at the meter site, approval from the Department for Environment and Water (the Department) is required prior to the non-pattern approved meter being purchased/installed.

Meter installation

Who can install a water meter?

In accordance with the national metering standards, anyone can install a water meter including a water management instrument holder, a non-certified person or a certified person. Following installation, however, a certified person must validate the meter and its installation to certify that it complies with the [South Australian Licensed Water Use Meter Specifications](#).

What must I consider when installing a water meter?

The meter must be installed in accordance with the requirements of the relevant pattern approval certificate and manufacturer's specifications. The pattern approval certificate outlines the installation requirements, including the required lengths of straight pipework up and downstream of the meter. This may require modifications to pre-existing infrastructure. The pattern approval certificates are hyperlinked in the 'Pattern approved non-urban water meters' list at www.mdba.gov.au/publications/mdba-reports/compliance-enforcement-documents (scroll to bottom of page).

There are additional location and installation requirements (sections 2 and 3) in the [South Australian Licensed Water Use Meter Specification](#) that must also be considered when installing a meter.

Certified persons

How do I become a certified person?

In order to become a certified person you must complete the training to become a [certified meter installer and validator](#) conducted by Irrigation Australia Limited.

When you have satisfactorily completed the training course and any workplace assessments, you will receive your certification and validator number. You will then be listed publicly on the [IAL website](#). The website includes information regarding how to maintain your certification.

I have completed the training to become a certified person prior to or in 2015 – am I still certified?

Irrigation Australia has a list of current certified installers and validators on their [website](#). If your name is not on the list it may be because your certification has expired or you didn't complete all the required course material. If this is the case you will need to get in touch with Irrigation Australia to renew or update your certification.

Validation

Where do I find the Validation Certificate?

Some minor improvements have been made to the Validation Certificate. Version 2 (January 2020) of the Certificate is now available at the following website www.environment.sa.gov.au/topics/water/water-licences-and-permits/metering-water-use. If you have printed copies of the previous validation certificate (version 1), this will still be accepted.

In response to feedback from validators, DEW has now made available a word version of the certificate to enable you to fill the form out electronically.

When are validations required?

Validations are required only for new and replacement meters installed post 1 July 2019 in the following circumstances:

- Following installation of a new or replacement meter;
- Whenever a security seal is broken; or
- Whenever there is a change or alteration to the meter installation which may affect meter accuracy (i.e. a new filter or 'flow disturbance' is installed within required lengths of straight pipework).

Please note that a validation is not required if any maintenance/work that you perform does not break security seals. This includes minor maintenance such as battery replacement (where removal of the battery does not alter the meter totaliser) or cleaning of the external parts. Please also note that a validation is not mandated to occur at periodic intervals – only if triggered by one of the actions above. Validations may also be directed to occur by the Department if deemed necessary.

Validations are not mandated to occur on meters installed pre 1 July 2019 as these are 'grandfathered' and exempt from the national metering standards.

How do I perform a meter validation?

The Department requires that you complete a validation certificate to certify that the meter and its installation complies with the [South Australian Licensed Water Use Meter Specification](#). By completing the form and the 'validation checklist', this will ensure that you have completed a validation in accordance with the national metering standards (section 2.4 of part 8 of AS4747) and the [Meter Specification](#).

Once completed, you must provide a copy of the completed validation certificate to the customer. It is the responsibility of the customer to provide this certificate to the Department. However, if authorised by the customer, you can provide the certificate to the Department on behalf of the customer.

What do I do if a meter does not comply with the [Meter Specifications](#)?

It is a requirement that a meter and its installation is validated within 28 days of installation.

If you find that a meter and/or its installation is not compliant, if authorised to do so by the customer, you can make the required modifications while you are on-site or in a subsequent visit within 28 days of meter installation. Once the installation is compliant, you can complete a single validation certificate and approve the meter for use. Please note that if additional time is required to make the required modifications, an extension of time can be sought and granted from the Department.

If the customer does not authorise the required modifications to make the meter installation compliant,

the onus is on the customer to then make the required changes and have the site validated by a certified person within 28 days of meter installation. You can still provide the customer with information as to why the installation is not compliant at the completion of your validation assessment but you cannot 'approve the meter for use' on the validation certificate. In addition, it is a part of your 'Certified Meter Installer and Validator Code of Conduct' that you report any non-compliance to the relevant authority, being the Department.

Can I (as a certified person) provide the validation certificate to the Department for Environment and Water?

While it is the licence holder's responsibility to submit this form, if the customer provides you with authority to do so, you may submit it on their behalf.

It is preferred that the validation certificate be provided using the Meter Notification Form. However, the certificate may alternatively be provided directly to the Department via the contact details provided in section 6 of the [Meter Specification](#).

Can I validate a meter that has been installed by someone else?

Yes. In accordance with the national metering standards and the [South Australian Licensed Water Use Meter Specifications](#), anyone is permitted to install a meter.

The role of a certified person is to perform a validation in accordance with the national metering standards, which involves the certified person making a series of observations on the meter selection, location, installation and internal pipework and certifying that, on the basis of these observations, the meter complies with the [Meter Specifications](#).

This does not create a legal obligation on the certified person to guarantee the ongoing accuracy of the meter, it provides an assessment of the meter's compliance with the [Meter Specifications](#) at a point in time only.

Can I validate my own meter?

Yes, if you are a certified person. If a number of validations are required on an ongoing basis, businesses may elect for staff to obtain their own certification to reduce costs.

What do I do if the meter is faulty?

You must inform the customer that the meter is faulty and they are required to notify the Department of the fault within 48 hours. If authorised by the customer, you can still proceed to fix the fault as part of your 'service' (if possible) as a validation is required where a repair or maintenance breaks security seals in any case. Once fixed, the customer must inform the Department that the matter has been rectified and a validation certificate provided.

If you are not authorised by the customer to fix the fault, it is a part of your 'Certified Meter Installer and Validator Code of Conduct' that you report any non-compliance to the relevant authority, being the Department.

Security Seals

What security seals can I use?

The Department has adopted a policy position that, from 1 December 2019, an 'approved seal' under the [Specification](#) is considered to be a security seal badged with the South Australian Government logo and a unique identifying number that has been purchased through Irrigation Australia Limited. These seals must be used on [any new and replacement meter from 1 December 2019](#) and can only be distributed to current certified persons.

Where do I get the 'approved seals' from?

These seals can be purchased by current certified persons only through a login function at the following website www.irrigationaustralia.com.au/products/store.

What about seals for meters installed pre 1 July 2019?

As stated above, these meters are exempt from the requirements of the national metering standards. Hence, *any* tamper proof seal (including those provided by Irrigation Australia) can continue to be used or replaced on meters installed pre 1 July 2019. This means that any seals already in place on a meter installed pre 1 July 2019 can remain in place with no need to change them.

How do I install security seals?

Seals must be positioned to ensure that the meter and the required lengths of straight pipework up and downstream of the meter are secured with seals. Irrigation Australia have developed instructions on how to install seals which will be provided with your seals when ordered.

What do I do if I find that the meter manufacturer's seals have been broken?

If you find that the manufacturer's security seal is broken, the meter cannot be validated and is considered faulty. The customer must then inform the Department within 48 hours that the meter is faulty. In addition, it is a part of your 'Certified Meter Installer and Validator Code of Conduct' that you report any non-compliance to the relevant authority, being the Department. This includes broken or missing seals.

If the meter manufacturer's seals are broken, it is a requirement under the Specifications that the meter be

tested to confirm its accuracy². The Department will direct that the customer undertake this testing.

When the meter is tested, the manufacturer's security seal should be replaced by the testing facility. If it is a meter installed post 1 July 2019, the meter will need to be revalidated following re-installation/testing. If the manufacturer's seals were not replaced at the time of testing by the testing facility, you are permitted to replace the manufacturer's security seal at the time of validation.

What do I do if I find that the security seals on the pipework have been broken?

If you find that any of the pipework seals are broken or appear to have been replaced by a non-authorised person (i.e. indicated by the use of a non-approved seal), you may continue with the validation and replace any removed or non-approved seals. Please indicate in the checklist at the back of the validation certificate at point 5 regarding tampering that seals had been removed/replaced. It is the Department's responsibility to then undertake any follow up investigations or compliance actions in relation to broken or unauthorised replacement of seals.

More information

Adelaide

Areas managed by this office: McLaren Vale, Northern Adelaide Plains, Western Mount Lofty Ranges, Far North, Central Adelaide

Phone: (08) 8463 6876

Email: DEWWaterLicensing@sa.gov.au

Berri

Areas managed by this office: River Murray, Angas Bremer, Eastern Mount Lofty Ranges, Mallee, Marne Saunders, Peake Roby and Sherlock, Clare Valley, Barossa Valley, Eyre Peninsula

Phone: (08) 8595 2053

Email: dew.waterlicensingberri@sa.gov.au

Mount Gambier

Areas managed by this office: South East Region

Phone: (08) 8735 1134

Email: DEWNRMeteringSouthEast@sa.gov.au

Website: www.environment.sa.gov.au

² Note that if the meter is an electronic type meter, the Department may approve that a validation be used in place of laboratory testing.