Message from the Technical Regulator

Welcome to the 35th edition of Regulation Roundup. Since the last edition the Department of State Development, which incorporates the Office of the Technical Regulator (OTR), has been working on developing Strategic Goals. The Department has recently published these goals, one of which promotes the notion of “trusted” regulation. For us at the OTR this means that we want to be more to the industry than just the “work quality and compliance police”. The OTR is interested in working with industry to promote the quality and safety of work before the job commences, and therefore devotes significant resources to functions other than post-work auditing. Regulation Roundup is intended to be a tool to assist the industry to achieve quality work outcomes so we encourage industry input to enable us to improve the content. This edition also promotes the upcoming series of Roadshows. The Roadshows are another means by which we can promote safe outcomes in the work being performed by industry. The OTR also devotes significant resources to answer technical questions directed to it by the industry. Through an active role on Standards development committees the OTR can advocate for industry in relation to aspects of the Standards that are either not clear or causing problems. As always I encourage you to take advantage of the material presented in Regulation Roundup.

Robert Faunt, Technical Regulator

Electrical Safety Recall

DC Solar Isolator
Katko-NHP brand, Metal and plastic versions sold at Electrical Wholesalers

All NHP DC Solar Isolator Switches type KDA-432 and KDM-432 have been recalled. This recall includes switches replaced as a result of a previous recall in February 2014. Affected units would have been sold to electrical wholesalers or solar contractors/installers between July 2013 and 10th October 2014

DEFECT: The switch contact mechanism may overheat due to an internal fault; this could result in damage of the switch mechanism, internal arcing and potential damage to the enclosure and cables which could allow access to live parts.

HAZARD: Fire and electric shock hazard

WHAT TO DO:

Electrical Contractors/Installers:
Defective DC Solar Isolator switches type KDA-432 and KDM4-32 are required to be replaced. PV systems with these switches need to be shut down and safe isolation procedures need to be followed.

For further details contact NHP Electrical Engineering Products Pty Ltd by phone or email.

Home owner/consumer
Contact your electrical contractor that performed the installation ASAP to organise the replacement of the switch. For further information contact NHP Customer Service Centre

Customer Service Centre; Phone 1300 NHPNHP (1300 647 647) or email to nhpsales@nhp.com.au

Re-sellers:

See www.recalls.gov.au for Australian product recall information

FOR TECHNICAL ENQUIRIES:

Electrical
P: (08) 8226 5518 | (8.30am - 4.30pm)
F: (08) 8226 5529

Gas
P: (08) 8226 5722 | (8.00am - 5.00pm)
F: (08) 8226 5866

Plumbing
P: 1300 760 311 | (8:00am – 4:30pm)

NECA 2015 Roadshow Seminar Series

Calling all Electricians...

NECA SA will be running their 2015 Roadshow Seminar Series from March through until May and we encourage all electrical contractors and workers to attend and find out the latest developments within the industry. This year, NECA have made some changes to the Roadshow Series to make it an even better experience for all attendees so make sure you get along to one of the seminars to take advantage of the changes the 2015 series will bring.

The seminar series is a significant training resource for our industry. The event this year is designed to provide licenced electricians with a greater understanding of the following topics:

- NECA on Electromagnetic Radiation (EMR) and discounts for members
- Energise Oz on a review of the MAP Program + Moving Forward
- SA Power Networks on updates to the Service and Installation Rules and a Q&A forum
- Straight Through Insurance on how you can access free NECA membership
- Triple Point Calibrations on Test Equipment: Care and Use
- Office of the Technical Regulator on the new AS5033, Electrical Equipment Approvals and Electrical Certificates of Compliance.

OTR 2015 Gas and Plumbing Roadshows

Please check the OTR website in March for information about the upcoming Gas and Plumbing Roadshows.

IMPORTANT INFORMATION - Have You Changed Your Address?

Remember to contact Consumer and Business Services (CBS) for any change of address or licence details. Their address is L3, 91-97 Grenfell Street, Adelaide 5000, phone 131 882 or you can email them on pge.bos@agd.sa.gov.au

Only contact the Office of the Technical Regulator for change of address notification if you receive Regulation Roundup but do not hold a trade licence.

Registration of Gas and Electrical CoC books

You can register your CoC books online by going to www.sa.gov.au/otr and clicking on the link in the Top 5 box on the left side of the page.

The link will bring you to a page where you can enter your details for the CoC book you are registering. Remember to enter the prefix letter of the book you are registering eg G200251.
Thanks to the Office of the Technical Regulator, SA Power Networks, Energise Oz, Straight Through Insurance and Triple Point Calibrations for their support and involvement in this initiative.

Electricians who are a part of the Clean Energy Council Solar PV Accreditation Scheme can receive 30 CPD points for attending a NECA Roadshow Seminar. For further information, visit www.solaraccreditation.com.au

This year, NECA have nominated Mates in Construction to be our charity of choice for the 2015 Roadshow Seminar Series. There will be donation tins available at each seminar, and more information will be provided on MIC, the fantastic work they are doing for the construction industry and why they need our help.

Suppliers, manufacturers and wholesalers will be on location with their new products and service displays and NECA SA staff will also be on hand to answer your questions in regard to what NECA can do for you and your business.

To attend the NECA 2015 Roadshow Seminar Series, please complete and return the registration form enclosed in this edition of the Regulation Roundup to NECA SA via fax on (08) 8373 1528 or email neca@necasa.asn.au at least 7 days prior to your chosen event.

For further information please phone NECA SA on (08) 8272 2966 or visit www.neca.asn.au/sa

Product Safety Recalls Australia

The Australian Competition & Consumer Commission (ACCC) has issued several recalls recently on electrical products that are commonly used in the electrical contracting industry.

The affected brands and details of the equipment are as follows:

- **INFINITY branded TPS & Orange Round Electrical Cables (Second Tranche)**
  All sizes and configurations of TPS and orange round mains power cables sourced from Infinity Cable Co Pty Ltd and supplied under the ‘INFINITY’ brand name.

  The cables fail the required ageing tests of AS/NZS 5000.2:2006. The insulation could become prematurely brittle with age. If the insulation becomes brittle and the cables are disturbed, the insulation could break and expose live conductors, resulting in possible electric shock or fires.

- **NHP Electrical Engineering Products P/L – DC Solar Isolator Switches**
  Model no: KDA-432 and KDM-432

  Dates available for sale: 11 July 2013–10 October 2014

  The switch contact mechanism may overheat due to an internal fault; this could result in damage of the switch mechanism, internal arcing and potential damage to the enclosure and cables which could allow access to live parts.

- **Blue Line Solar Pty Ltd – Avanco DC Solar Isolator Switches**
  Model no: AV/DC4P25A and AV/DC4P25AUT

  High temperature can occur at the internal switch plate, causing the contacts to spread and the polymer support plate to degrade. This poses a risk of arcing and eventual catastrophic failure, resulting in fire.

Electrical contractors are advised not to install these products.

For more information and updates see www.recalls.gov.au

Prohibition of Sale and Use – Ecables

The Technical Regulator has issued a Prohibition of Sale and Use notice in relation to defective ‘Ecables’ branded copper clad aluminium RE 110 insulated power cables.

This relates to all sizes and configurations of power cable with RE 110 insulation, which includes all SDI sizes 10mm²–630mm² and multicore sizes 6mm²–50mm².

Testing has identified that this cable is non-compliant due to a manufacturing defect with the cable’s insulation not being cross-linked. The cable’s mechanical properties are greatly reduced with the increase of temperature. This can allow access to live parts if the cable is subject to pressure such as from cable fixings, weight of other cables etc.

Supply and installation of these cables is prohibited. Contractors are warned to be vigilant and ensure they do not install these cables unknowingly.

For further information contact Ecables: ph (03) 9706 9058 or email sales@ecables.com.au

Example of Ecable
Reporting of electrical accidents/incidents

Several electrical contractors have raised their concerns as to when an electrical incident report is required to be sent to the OTR, and also how these forms can be obtained.

Reporting of electrical incidents is a requirement under Section 63 of the Electricity Act 1996. Regulation 70 of the Electricity (General) Regulations 2012 gives the time frames as to how soon such incidents must be reported to the OTR.

Section 63 of the Act requires that if an accident occurs that involves electric shock or electrical burns caused by the operation or condition of electricity infrastructure, or by an electrical installation, then the accident must be reported to the OTR within the timeframes as required under the Regulations. Where an electrical accident occurs that results in death or other major incident, the infrastructure or installation must not be altered or interfered with unnecessarily by any person so as to prevent a proper investigation of the accident. The maximum penalty for breaching this part of the Act is $2500, with an expiation fee of $210.

The majority of electrical accidents reported are due to abnormal neutral displacement, commonly known as ‘MEN shocks’. Such shocks usually occur from water pipes within an electrical installation. If your customer rings to report such a shock then we strongly recommend that you or your customer immediately refer the incident to SA Power Networks on their emergency number ph: 131 366.

Regulation 70 requires the electricity entity to promptly investigate any accident that involves electric shock or electrical burns that may have been caused by the operation or condition of their transmission or distribution network, or by an electrical installation connected to the network, and report the results of the investigation to the OTR. If the cause of a shock is due to a fault in the infrastructure, the electricity entity will then rectify the fault and complete the OTR incident report.

If the shock is not due to a fault on the infrastructure, but is a result of something within the electrical installation itself then the electricity entity will advise the owner/occupier to contact their electrical contractor to identify and rectify the cause of the shock. The electricity entity must then report that result to the OTR and need not proceed further with the investigation.

If the electrical accident occurs while an electrical worker is working on an electrical installation and the electrical worker is able to make the report, then the report shall be made by the electrical worker.

In any other case the owner or occupier of the place in which the accident occurs shall make the report.

Under Regulation 70, electrical accidents must be reported to the OTR:

- Immediately where a death has occurred, or
- Within 24 hours where an injury has occurred requiring medical assistance, or
- Within 10 working days for all other accidents

Copies of the OTR incident report forms can be found at the back of the Electrical certificate of compliance books. The incident report forms are also available on the OTR website: www.sa.gov.au/otr

New PV array standard

AS/NZS 5033:2014 Installation and safety requirements for photovoltaic (PV) arrays was published on 6 November 2014.

An exemption period of compliance to this new standard is permitted in accordance with Regulation 11 of the Electricity (General) Regulations 2012 in South Australia. There are a number of exemptions permitted under the Regulations, for example new PV installation work that starts after the publication date of the new standard and is completed within 6 months of that publication date can still be done in accordance with the previous standard. Contractors are advised to adopt the changes immediately where possible.

The new PV standard includes the following revisions:

- Standard is applicable to PV systems up to 240kW at STC – see Clause 1.1.1
- Definition for ‘adjacent’: Within 3 metres, where each item is fully visible from both locations – see Clause 1.4.1
- Definition for ‘domestic dwelling’: A building of Class 1, Class 2, Class 3 or Class 10 as specified in the National Construction Code (NCC) 2014 under Australian building classifications – see Clause 1.4.2
- Revised ‘restricted access’ definition – see Clause 1.4.61
- New installation requirements for PV strings constructed using d.c. conditioning units – see Clause 2.1.5
- Revision of series-parallel configurations and orientations permitted for PV arrays – see Clause 2.1.6
- Revised installation requirements for non-domestic installations that require restricted access (i.e. PV array maximum voltages above 600 V d.c. – see Clause 3.1
- Revision of overcurrent protection requirements; only circuit breakers and fuses as specified in the standard are permitted, semiconductor (solid-state) devices shall not be used for overcurrent protection purposes – see Clause 3.3.2
- Switch-disconnectors, and any other load breaking disconnection devices used for protection or disconnecting means shall be capable of being secured in the open position – see Clause 4.3.5.2(e)
- LV string cables in all systems and all LV d.c. cables installed in domestic systems shall comply with PV1-F requirements; or UL 4703; or VDE-AR-E 2283-4 – see Clause 4.3.6.2
- Plastic cable ties shall not be used as a primary means of support – see Clause 4.3.6.3.1
- Revised installation requirements for PV d.c. cables within buildings and at PCE (e.g. inverter) connections – see Clause 4.3.6.3.2
- New installation requirements for small micro inverter installations – see Clause 4.3.12
- Revised installation requirements where multiple disconnection devices are installed – see Clauses 4.4.1.4 & 4.4.1.5
- Revised earthing requirements for metal PV modules frames and array mounting frames; this includes the earthing of a.c. module frames and PV module frames connected to microinverters with LV outputs – see Clauses 4.4.2.1 & 4.4.2.2
- To minimize the risks of d.c. arcs occurring between conductors in LV systems, double insulation on each conductor shall be maintained including within wiring enclosures – see Clause 4.4.4.1
- New installation requirements for segregation of circuits (i.e. between a.c. & d.c. circuits) – see Clause 4.4.4.3
- Revised marking (e.g. wiring/ conduit identification, fire emergency information, shutdown procedure) and documentation requirements – see Section 5
- The voltage rating of ‘each’ isolator/ switch disconnector pole shall be at least the PV array maximum voltage in systems where PV arrays are functionally earthed via a high resistance – see Appendix B2(b)

For further information relating to AS/NZS 5033:2014 contact the Clean Energy Council on ph: (03) 9929 4100.
<table>
<thead>
<tr>
<th>Shock Source</th>
<th>Cause</th>
<th>Contributing Factors</th>
<th>Injuries</th>
<th>Action to make safe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portable plug in Residual Current Device.</td>
<td>Moisture had entered Residual Current Device.</td>
<td>Water had been splashed on to the Bain Marie connection cord and plug.</td>
<td>Operator received shock to hand when testing RCD was working</td>
<td>Portable plug in Residual Current Device replaced.</td>
</tr>
<tr>
<td>Elevated work platform.</td>
<td>Static Electricity.</td>
<td>Type of carpet used in shopping centre caused EWP to build up static electricity.</td>
<td>Operator received shock when they contacted metal framed ceiling.</td>
<td>Procedure for operating EWP to be re-addressed to eliminate static electricity build up.</td>
</tr>
<tr>
<td>Control unit for hospital air compressor.</td>
<td>Live neutral conductor.</td>
<td>The original equipment wiring had been altered but service records had not been updated.</td>
<td>Electrical worker received shock between hands when connecting neutral conductor.</td>
<td>Review of isolation and testing procedures required for repairer.</td>
</tr>
<tr>
<td>Start stop station of fume extraction fan.</td>
<td>Mechanical damage to start stop buttons exposing live parts.</td>
<td>Welder contacted live parts when he turned off fume extraction fan.</td>
<td>Welder received shock to hand.</td>
<td>Repairs required to extraction fan.</td>
</tr>
<tr>
<td>Downlight.</td>
<td>Switch mechanism connections were live.</td>
<td>Electrical worker investigating faulty light contacted live switch wires.</td>
<td>Shock received to hands.</td>
<td>Isolation procedures to be revised and use of non-contact testers to be restricted.</td>
</tr>
<tr>
<td>Ultraviolet lamp.</td>
<td>Damaged lamp holder.</td>
<td>Bank worker adjusted position of tube came into contact with exposed live parts of the lamp holder.</td>
<td>Worker received shock to hands.</td>
<td>Remove faulty lamp from service for repair or replacement. Training of staff required.</td>
</tr>
<tr>
<td>Meter box and adjacent steel fence.</td>
<td>Tree had fallen across overhead power lines in street.</td>
<td>Home owner contacted meter box and fence simultaneously which was now live due to a broken pole top neutral conductor.</td>
<td>Home owner received shock to hand.</td>
<td>Network operator repaired overhead power line.</td>
</tr>
<tr>
<td>Residential water meter.</td>
<td>Neutral connection at mains connection box corroded.</td>
<td>Maintenance staff replacing water meter had failed to install earthing jumper lead.</td>
<td>Worker received shock between hands and knee.</td>
<td>Network Operator repaired neutral connection.</td>
</tr>
<tr>
<td>Architrave light switch.</td>
<td>Exposed terminals of switch mechanism.</td>
<td>Tenant contacted live terminals of light switch which was not fixed in position.</td>
<td>Tenant received shock between hands and feet.</td>
<td>Electrical contractor replaced light switch and secured it in position.</td>
</tr>
<tr>
<td>Kitchen sink and taps.</td>
<td>Neutral connection at pole top corroded.</td>
<td>Birds nesting in overhead power lines had contributed to the neutral connection failing.</td>
<td>Home owner received shock between hands and feet.</td>
<td>Network Operator removed birds nest and repaired connections.</td>
</tr>
<tr>
<td>Electric hospital bed.</td>
<td>Electrical cord supplying bed was frayed exposing single insulated cables.</td>
<td>Physio assistant operated bed damaging supply cord further.</td>
<td>Assistant received shock to hands.</td>
<td>Electric bed removed from service until repairs completed.</td>
</tr>
<tr>
<td>Handheld sewing machine.</td>
<td>On/off switch was faulty.</td>
<td>Operator sewing 25kg bag was unaware the switch was damaged.</td>
<td>Operator received electric shock to hands.</td>
<td>Electrical contractor repaired sewing machine.</td>
</tr>
<tr>
<td>Shopping centre switchboard.</td>
<td>Conductors not terminated correctly.</td>
<td>Electrical worker did not realise there was a live loose conductor adjacent to where he was testing.</td>
<td>Electrical worker received shock to hand.</td>
<td>Electrical worker re-terminated conductor. Maintenance required for the remaining switchboards at this site.</td>
</tr>
<tr>
<td>Metal cable tray supporting cabling.</td>
<td>Metallic cable tie damaged cable insulation.</td>
<td>Cable tray behind wall had become live because metal cable tie had damaged the insulation.</td>
<td>Carpenter installing adjacent wall vent received shock to elbow.</td>
<td>Electrical contractor repaired damaged cable.</td>
</tr>
<tr>
<td>Thick shake machine.</td>
<td>Machines conductive services had become live.</td>
<td>Maintenance staff whilst performing general servicing discovered detached supply earth connection.</td>
<td>Maintenance person received shock to shoulder.</td>
<td>Thick shake machine repaired tested and returned safely to service.</td>
</tr>
</tbody>
</table>
Clearances and instructions

In the majority of cases the clearances to combustible material or other surfaces are provided by manufacturers in the appliance instructions. Clearances are provided for safe installation, operation and access for service. If the instructions are unavailable or the appliance is second hand, try the manufacturer’s website as most provide installation/operation instructions online. Alternatively, contact the OTR as we may be able to assist.

Ensure that appropriate clearances are provided and avoid being persuaded by customers who often want to reposition an appliance for aesthetic reasons only, without understanding the consequences.

Speaking of clearances…

Gas & Electrical advice

We are often asked by electricians and gasfitters, “What is the clearance from a power point or electrical switch to a gas cooking appliance—hotplates in particular?”

There is no specific clearance stated in the electrical or gas Standards, however the OTR recommends that no switch or power point be located in the splashback walls beside or behind the cooking appliance in the working area for obvious reasons. The working area is where pots and pans sit during cooking.

Gas burners create radiant heat as well as a heat plume which can damage or discolour most combustible materials. Electrical trailing cords above gas cookers are at risk of heat damage, therefore the OTR recommends a horizontal clearance of at least 300mm from the edge of the appliance to protect trailing cords.

Electrical isolation for gas appliances

A reminder—power points or isolation switches acting on all live conductors for gas cooking appliances must be accessible with the appliance in the installed position. Customers and service technicians should not need to remove under-bench ovens to isolate gas appliances.

Refer to Clause 6.2.8.1, 6.2.8.2 of AS/NZS 5601 part 1 or AS/NZS 3000 Clause 4.18.1.

Power points can generally be placed in adjacent cupboards and isolating switches placed above the bench.

Water heaters under a covered area (carports and verandahs)

We are frequently asked to justify a location of a gas appliance under a covered area. The area must be open on two sides and the flue terminal located so that a free flow of air occurs across it to disperse products of combustion.

In the case of a fan-assisted flued appliance only: when only one side of the covered area is open to atmosphere, the flue terminal must be within 500mm of the open side, discharging in the direction of the opening. There shall be no openings (windows, vents, doors) into the building along the wall, within that distance.

Certificates of Compliance

Certificates of Compliance (CoC) are a requirement of the Gas Act. They must be filled in completely by the unrestricted licenced gasfitter responsible for the work. The Test/Check Certificate section must be signed off by the responsible gasfitter and by the contractor or appropriately licenced representative of the contractor.

The certificate of compliance is your chance to describe your work and also highlight any pre-existing non-compliances that you have found in the existing installation. The gas CoC is your safeguard if litigation occurs; time invested now could save you time in court.

Transportable homes (LPG)

Rural gas contractors are increasingly finding gas leaks or appliances that are not converted/commissioned in transportable homes, installed by city-based contractors during initial construction. This is despite CoC’s being issued claiming this work has been done.

Generally the gas piping and internal appliances are installed during construction in a manufacturer’s factory or yard and when finished the home is moved to a customer’s property.

A local contractor is then given the task of second fixing all external appliances and services. The contractor then pressure tests the installation, purges the gas lines and commissions the operation of appliances.

This task becomes more difficult, potentially unsafe and expensive for the new home owner if the contractor has to find and repair gas leaks, or convert and adjust appliances. This should have been done prior to the home leaving the factory.

Convertible appliances are now generally supplied as NG with LPG injectors and instructions supplied in a conversion kit form for installation by a licenced gasfitter.

If you install gas appliances that need conversion to operate correctly then you are obligated to convert, commission and adjust appliances to enable safe operation. If gas is not available then you could connect an LPG cylinder temporarily to enable appliance operation and commissioning.

If commissioning is not possible, note it on the gas CoC and advise the builder.

Note: Remember to alter the appliance data plate to reflect the gas type to which you have converted the appliance, i.e NG or LPG.
Gas points in bedrooms
A number of gasfitters have recently contacted the OTR for advice about installing a gas point in a bedroom, at the builder’s or customer’s request. We do not recommend this practice unless an appliance is being installed at that time. It is too easy for a customer or unlicensed person to install an appliance without considering clearances to combustibles or ventilation if you do this.

If you are asked to install a gas point in a bedroom, please decline and offer instead to place one in the ceiling space above the room or similar alternate location. If you are installing a space heater at a later date and you have fitted compliant ventilation then you can proceed.

The only appliances that can be installed in a bedroom (or room for sleeping) are either room-sealed or flued space heaters fitted with a flame safeguard and compliant ventilation where required. Remember that flued appliances now also require ventilation (mandatory).

Refer to Clauses 6.10.6.1 and 6.4 for specifics.

Use of stainless connectors
These fittings are acceptable for fixed installations where the appliance is not portable or expected to be moved about excessively (for cleaning etc) like water heaters, for example. Customers may inadvertently hang water hoses and garden tools on the appliance connections and place unnecessary strain on the connector.

We do not want to see this connector used for a portable appliance, eg BBQ or patio heater on wheels plugging into a bayonet, or upright cookers. For those appliance types a certified flexible hose assembly conforming to AS 1869 of the appropriate class (pressure/temperature rating) must be used.

If, however, the BBQ is fixed/inbuilt and not designed to be moved then it is ok to use stainless limited flexibility connectors. This form of connection has been used on some Type 1 decorative log fires for years for its relative flexibility and heat resistance properties.

Just when you think you’ve seen it all...
We thought that we had seen it all—that is, until we saw this handy work. The OTR has covered clearances to gas meters in numerous Gas Roadshows and the Regulation Roundup newsletters, but sadly it seems the message is not getting through to a small number of a/c installers that do not attend Roadshows or bother to read the Regulation Roundup.

The installation of the a/c compressor condenser pictured here immediately creates a potentially hazardous situation in that the equipment is not intrinsically safe and is therefore an ignition source located within the hazardous zone of the gas meter. The a/c compressor condenser also prevents access to the gas meter and supply isolation valve.

The a/c installer had the intelligence to realise that the gas utility would have difficulty opening the meter box door to read the meter, so he cut a hole in the door to allow readings; how considerate of him!

It’s a pity that his intelligence did not extend to considering the accessibility for safe isolation of the gas in the event of an emergency or periodic meter changing. How clever?! The a/c installer was invited back to site to relocate the a/c compressor condenser so that a minimum separation of 500mm was provided from the nearest part of the a/c compressor condenser to the nearest part of the gas meter wall box.

Had the installer planned the job a bit better and just asked the gas utility or the OTR for advice, this could have been avoided.

Should you require more information on the clearances required from gas meters contact APA Group on ph: (08) 8159 1661.

Are you working within your licence conditions?
The OTR has investigated a number of recent complaints where gasfitting work was performed by a person with a restricted gas workers licence. In some cases a gas certificate of compliance was issued by this person when they did not have the qualification or licence endorsement to do so.

Please note if your gas licence restricts you to work under supervision of an unrestricted worker you are not legally able to issue a gas certificate of compliance.

The OTR checks the licensing status of all installers whenever we receive an enquiry or complaint to determine if the installer can provide ‘Technical Advice and Certify’ or perform ‘Any Gas Work’ on the licence issued by Consumer Business Services (CBS).

Where it is found that the installer is not appropriately licenced the OTR is obliged to notify CBS for investigation under the Plumbers, Gasfitters and Electricians Act 1995.

Check your licence and make sure you are not working beyond your endorsements. If you are unsure of your licence conditions call Consumer and Business Services on ph: 131 882.

PIA has changed its name to Master Plumbers Association
The PIA (Plumbing Industry Association), has reverted back to its original name, the Master Plumbers Association. The change has been endorsed and welcomed by members and aligns with most other states.
Certification requirements for Type A gas appliances

Type A gas appliances are domestic and light commercial appliances rated at less than 500MJ/h. The Gas Act 1997, Gas Regulations 2012 and the Energy Products Act 2012 require that Type A gas appliances be tested for compliance with relevant Australian Standards and be labelled to verify this before they are installed and operated.

All pre-certified Type A gas appliances will carry a data plate and a label from a recognised Australian gas appliance certifying organisation.

There are four organisations recognised by all Australian Gas Technical Regulators:

- The Australian Gas Association
- Standards Australia International Global
- Global Mark
- International Association of Plumbing and Mechanical Officials.

Gas appliances bearing these labels can be installed by a gasfitter with no additional testing except for the normal commissioning checks required for any gas appliance.

Uncertified gas appliances will not be labelled by one of the four recognised certifiers and it is likely that the appliance does not contain one or more of the following:

- A recognisable appliance data plate providing manufacturer information,
- Model type, serial number, gas type, injector size, gas pressure.
- Installation and operating instructions written in English as required for Australian certified appliances.
- A flame safeguard device if the appliance has an enclosed burner.

If the appliance brand or model is unfamiliar to you, contact the OTR on 8226 5722 and we will verify if the appliance is certified for installation in Australia.

How do I get an individual Type A appliance certified?

The OTR has arranged for a private service provider, Gassupport Pty Ltd, to perform safety assessments based on Australian Standards appropriate to the appliance type. Once tested and approved a Gassupport Pty Ltd label will be attached to the appliance.

Imported appliances may need modifications to meet the appropriate certification standard and these will need to be performed by a licenced gasfitter. Before embarking on this work it is advisable to warn your client that individually certified imported appliances may be orphans and difficult to get parts for in the event of breakdown.

For uncertified gas appliance safety assessment quotes, or to arrange any remedial work needed before an assessment, please contact Gassupport Pty Ltd on ph: 0408 417 461 or email: admin@gassupport.com.au Their address is: Unit 1 / 61-65 Tapleys Hill Rd, Hendon.

Certification requirements for Type B gas appliances


The person who installs, commissions or modifies a Type B gas appliance must provide a copy of the Certificate, proving compliance with AS 3814 and AS/NZS 5601, to the owner and the gas supplier. Commercial operation of uncertified Type B appliances contravenes the Gas Act and Regulations and may invalidate commercial insurance.

Recognised Approvers

There are now two Type B appliance approvers recognised by the Technical Regulator as appropriate organisations to examine Type B appliance submissions, carry out on-site tests/inspections and issue approvals of compliance with AS 3814 in South Australia.

Select Solutions (a division of AusNet Services) is experienced in this area and is currently performing this function interstate. For more information about Select Solutions check their website at www.select-solutions.com.au

Select Solutions has an alliance with Gassupport Pty Ltd to perform the majority of South Australian approvals. Gassupport Pty Ltd has engaged professional combustion engineers to assist in this process where necessary.

TG Certifications is a locally registered entity affiliated to Tamar Gas based in Tasmania. TG Certifications is also experienced in this area and is currently performing this function interstate. For more information about TG Certifications contact Mr Stephen Wright on phone: 0428 381 803, fax: 03 6394 3643, or email tgc@tamargas.com.au

Fees

All NG and LPG approvals are chargeable and you are advised to contact the approvers regarding cost estimates. If you choose a particular approver you will need to complete a submission based on the requirements outlined in Appendix A and B of AS 3814, and forward it to the chosen approver to initiate the certification process.
Carbon Monoxide (CO) poisoning – 2 people admitted to hospital

The OTR together with the appliance manufacturer recently investigated a CO poisoning incident whereby two residents were overcome by CO emissions from a balanced flue, fan-assisted, room-sealed space heater.

Luckily the occupants recovered and there were no fatalities.

Investigations revealed a number of mitigating factors that collectively contributed to the incident. They are summarised as:

1. The second hand appliance was not fitted correctly by a licenced person when installed approx. 8 years ago. (The manufacturer’s installation instructions were not followed and no gas CoC was issued).

2. The primary heat exchanger was replaced on the second hand appliance prior to installation and the sealing ‘O’ Ring from the primary/secondary heat exchangers was damaged (broken) during reassembly. This allowed products of combustion to leak into the room and the appliance to operate with a blocked flue without shutting down via flame abnormality through the flame supervision system.

3. The appliance had not been maintained (ie serviced by a licenced gasfitter) during the 7 years of occupation by the current owners. Gas appliances need periodical maintenance by authorised persons as per the manufacturer’s recommendations.

As gasfitters you should make consumers aware that installation, service and repair should only be undertaken by authorised persons, ie licenced gasfitters. You should also pay particular attention to disassembly/reassembly of components according to manufacturer instructions to ensure that they are not inadvertently damaged.

All gas appliances should be fully commissioned after servicing or repairs to verify that they operate to the manufacturer specifications. Carbon Monoxide (CO) spillage testing must also be performed to verify that no CO spillage occurs into the room.

CO spillage from an appliance indicates that there may be an installation or appliance fault that will require urgent rectification. Appliances that spill CO must be turned off and tagged ‘Danger Do Not Operate’. The consumer must be made aware and arrangements made to investigate/rectify the issue prior to any further appliance operation.

If you are not repairing the appliance, note the appliance details and fault condition on a gas CoC in the ‘faults identified and brought to the customer’s attention’ section to cover yourself and issue it to the consumer.

If you have any doubts or concerns regarding servicing or repairs to a gas appliance, remember that the manufacturer knows the product best and should be able to provide you with technical support.

Had the appliance been inspected/serviced by a licenced gasfitter earlier, the incident could have been avoided.

The OTR wishes to thank the appliance manufacturer for their assistance with the forensic investigation of this incident to determine the causes so that we could share the results with gasfitters and avoid reoccurrences.

Composite Pipe: Prohibited as a final connection to a gas appliance

Calling all Cowboys, please take note: you are not allowed to connect directly to gas appliances with composite pipe.

There are obvious issues with doing this; they include vibration, movement and the lack of flexibility and heat resistance.

If you had done the pipe manufacturer accreditation training and read the AS/NZS 5601 Standard you should know this.

Remember composite pipe is rated at best 80°C so installing composite pipe above a commercial baking oven that operates 7+ hours a day is not your best piece of work. Consider the environment where any gas pipe is to be installed.

Envestra has changed its name to Australian Gas Networks Limited

Australian Gas Networks Limited is the new name for Australia’s leading natural gas distribution company, previously known as Envestra Limited.

The name change to Australian Gas Networks Limited follows the recent move to full ownership of Envestra by the Cheung Kong Consortium. The new website address is: www.australiangasnetworks.com.au
Booking plumbing audits

The Office of the Technical Regulator (OTR) conducts audits of a sample cross section of plumbing installations booked through the Plumbbooking system.

The OTR requires the following categories of Plumbing Work to be booked for auditing purposes to ensure the work is performed in accordance with the National Construction Code Volume 3:

- Sanitary Drainage Installations (including alterations)
- Sanitary Drains Crossing Boundaries (part of a Land Division)
- Underfloor Plumbing
- Above Ground Plumbing (stack work)
- Non Drinking Water (in ground and in wall)
- Fire Services (including extensions/alterations)
- Final Inspections (see below)
- Trade Waste Installations
- Treated Grey Water Systems
- Any building involving a Plumbing or Drainage Alternative Solution

Booking Audits

- Plumbers must either call the Plumbing Booking Line on 1300 884 055 between the hours of 8:30am and 3:00pm or book online via the website www.plumbbooking.sa.gov.au.
- **Bookings for auditing must be made before 3:00pm on the working day prior to when the audit is required.**
- If booking multiple job categories, individual bookings must be made for each notification.
- Plumbers must continue using the same Plumbing Certificate of Compliance number for each particular work contract specific to a property regardless of the number of bookings it may require or plumbing categories it may cover.
- After each booking is made a Booking Reference Number will be issued that must be recorded on the Plumbing Certificate of Compliance as evidence the plumbing work has been registered on the Plumbbooking system.

Final Audits

- All Commercial/Industrial jobs must be booked for final audit.
- Residential final audits will be conducted on a random basis and at this stage do not need to be booked for auditing but will be arranged by the OTR contacting the plumber.

Auditing Times

- When booking an audit, Plumbing contractors may select the time and day for the audit between 8:00am and 3:30pm weekdays (excluding public holidays and not more than 30 days in advance).
- This will then become the agreed time for the audit unless the OTR seeks renegotiation to a more mutually convenient time.
- **If plumbing work is completed earlier or will not be ready at the agreed time/day of the audit, the OTR must be contacted on 1300 760 311 as soon as is practically possible to advise any changes.**
- Should you have any queries please contact OTR Plumbing on 1300 760 311. Website: http://www.sa.gov.au/otrplumbing

Backflow Prevention Process

The Office of the Technical Regulator (OTR) will notify the property owner of any new devices installed via an initial ‘Backflow Prevention Device Notification Notice’ advising the device serial number and encumbrance number registered against the property.

Backflow Prevention Devices must be tested on a yearly basis by a licenced plumber to comply with AS/NZS 3500.1 Clause 4.4.6

Accordingly, the property owner will be sent a yearly ‘Notification of Annual Device Retest’ letter reminding them of this maintenance requirement.

Should the OTR not receive the appropriate ‘Commission, Inspection and Maintenance Report’ from a licenced plumber indicating that this requirement has been met, the property owner may be expiated and, in the case of a containment device, the water industry entity will be notified.

Backflow prevention requirements for fire hydrant service installation

There are specific requirements for the design, construction, installation, replacement, repair, alteration and maintenance of any part of a fire-fighting water service from the point of connection to the fire-fighting equipment.

Installation requirements

The National Construction Code Series Volume Three, Plumbing Code of Australia (PCA), Part B4 sets out the requirements for installing fire-fighting water services.

Part B4.2 of the PCA specifies the ‘deemed to satisfy’ provisions for fire-fighting water service installation requirements:

- Fire-fighting water service installations must be in accordance with AS/NZS 3500.1.
- Fire hydrant installations must be in accordance with AS 2419.1.

Refer to B4.1 and B4.2 of the PCA for the complete list of deemed to satisfy provisions for fire-fighting water services.

Backflow prevention requirements

Plumbers must ensure that a WaterMarked single-check valve testable device (SCVT), with WaterMarked gear or rotary-activated resilient-seated isolating valves either side of the SCVT assembly, is installed as close as practicable (approximately three metres) from the water entity connection.

Plumbers should check with the water entity (eg SA Water), as a higher hazard backflow prevention device may be required, as is the case for in-line pumping from a water entity main to an on-site water storage tank.
Location options for backflow prevention device

The SCVT assembly may be installed either:

- separately ie prior to the feed hydrant/booster installation as per Figure 1
- within the ‘H’ pattern of the booster as per Figure 2
- on the supply to a stand-alone feed hydrant as per Figure 3.

Branches must not be installed upstream of the SCVT assembly ie between the water entity connection point and the SCVT assembly.

Materials used in fire service installations

Materials used in fire service installations must be approved to specific standards listed in AS 2419.1:2005. Galvanised steel pipe must not be used upstream of the SCVT assembly (indicated by the blue lines in Figures 1, 2 and 3). Galvanised steel downstream and below ground must be no more than 1.5 metres in length.

When selecting materials used in fire service installations, plumbers should consider:

- if the material will be above or below ground
- the requirements for protecting specific materials
- the pressure rating (for PVC-U and polyethylene piping the pressure rating must be a minimum of PN16).

Protective covers for buried fire pipe

Galvanized steel risers and copper pipes installed in the ground must be double-wrapped with petrolatum tape.

- The second wrapping must overlap by 50% and be wrapped in the opposite direction of the first wrapping.
- The coating must be overwrapped with a self-adhesive polyethylene tape.

Loose polyethylene sleeving must not be used as in-ground corrosion protection for galvanized steel pipe.

WaterMarked full-flow non-return valves

When installing a WaterMarked SCVT device within three metres of the SA Water connection, plumbers must install a WaterMarked full-flow non-return valve and WaterMarked isolating valve in the ‘H’ pattern of the booster, as per Image 2 (see page 12). Such installations do not require the WaterMarked full-flow non-return valve to be registered with the Office of the Technical Regulator.
### Materials used in fire service installations

<table>
<thead>
<tr>
<th>Material</th>
<th>Above-ground use</th>
<th>Below-ground use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast iron fittings</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Copper tubes</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Ductile iron pipes and fittings</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Plastic pipe and fittings</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Stainless steel pipes and fittings</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Steel pipes and fittings – galvanised</td>
<td>Y – downstream of the SCVT device and no more than 1.5m in length</td>
<td>Y – downstream of the SCVT device</td>
</tr>
<tr>
<td>Wrought steel fittings</td>
<td>Y</td>
<td>N</td>
</tr>
</tbody>
</table>
Bath Waste Connections

This advisory note is to address complaints made to the Office of the Technical Regulator (OTR) from both the building industry and property owners about non-compliant plumbing bath waste connections installed in wet areas where there is no floor waste gully.

The building industry has adopted the practice of removing central floor waste gullies from bathrooms and other wet areas.

Plumbing and drainage installations must comply with the National Construction Code Series (NCC). When installing plumbing and drainage in wet areas in Class 1 residential buildings, plumbers need to be aware of the following requirements:

- the Building Code of Australia (NCC Volumes 1 and 2) provides that bathroom floors in South Australia need not be graded to a floor waste gully providing:
  - all vessels (e.g., plumbing fixtures) are provided with in-built overflow protection, or
  - there is a permanent open trapped connection to the waste system (such as a WC pan), or
  - the floor drains without ponding to a floor waste within the shower area.

- the Plumbing Code of Australia (NCC Volume 3) requires bath waste pipework and fittings to be designed and installed to address the following:

  - materials and products used in plumbing and drainage installations where required under Section G of the NCC must be WaterMarked.
  - compliance with provisions of the AS/NZS 3500 Sanitary plumbing and drainage standard.

A floor waste gully may not be required for the draining of floors in Class 1 residential buildings under the Building Code if all vessels have in-built overflow protection, however a floor waste gully may still be installed to enable plumbing installations to meet the requirements of the Plumbing Code.

Where built-in overflow protection is not fitted on plumbing fixtures in wet areas and a floor waste gully is installed to meet Building Code requirements, the fall of the floor surface to the floor waste gully shall comply with the NCC Volumes 1 and 2 including SA Variations and Additions.

See diagrams for examples of acceptable solutions for the connection of bath wastes.
Heated water service design and installations: Requirements for Class 1 buildings (new homes)

In South Australia, to improve the energy and water efficiency of residential dwellings there are specific requirements that must be met; these include the type of heated water services and showerhead outlets that can be installed to service new and existing dwellings.

For information on the requirements for heated water services installed into established homes, see www.sa.gov.au/otrplumbing

The requirements for heated water services installed as part of the building approvals for new Class 1 buildings (including newly purchased transportable homes) or renovations under the Development Act 1993, are outlined in the South Australian Appendix Part B2 in Volume 3 of the National Construction Code (NCC).

For new Class 1 buildings to achieve energy efficiency the type of hot water service/s should be considered as a part of building design or planning process. Good design practices, such as maximising solar access for solar hot water systems, minimising noise impacts from heat pump systems, minimising hot water piping run lengths and increasing opportunities to promote more building-integrated heated water services (eg hydronic heating/cooling), are questions owners, builders and plumbers should consider at the design stage rather than after the home has been built.

builders are required to sign a Schedule 19A Statement of Compliance under the Development Act 1993, stating that the building is built as per specified plan drawings. This includes plumbing services such as the heated water service. In the event of a dispute relating to the plumbing services, the builder may transfer liability back onto the contracted plumber. Hence it is in a plumber’s interest to ensure that the installed heated water service is compliant.

Where a non-complying heated water service is annotated on a set of approved plans, the plumber should ensure that the installed heated water service complies with the energy efficiency requirements. A departure from the approved plans for the purpose of meeting compliance should be communicated as early as possible to the builder, who should notify the council/private certifier regarding the change to the approved heated water services.

Should a plumber come across a situation where they are asked by a builder to install a heated water service that does not comply with Volume 3 of the NCC, they should raise this matter with the builder and seek advice from the Office of Technical Regulator as early as possible.

1 Class 1 dwellings include a detached or semi-detached house; a maisonette; a row house; a townhouse; a flat or unit (not located above or below another dwelling); and a small hostel. It excludes apartments or flats in multi-storey buildings.

2 The Schedule 19A Statement of Compliance operates for a period of 5 years, suggesting that the plumbing services under such Statement would also be liable for 5 years.

Register Online

You can register online to receive Regulation Roundup electronically by going to www.sa.gov.au/otr and clicking on the link in the Top 5 box on the left side of the page. Requests for electronic versions of Regulation Roundup can also be emailed to dsd.otr@sa.gov.au Include your name, licence number (if you hold a trade licence) and a contact phone number in case there are any difficulties with emailing. You will also see in this box a link where you can register your Electrical and Gas Certificate of Compliance books. Remember to contact us if you change your email address!
Water and Sewerage Infrastructure

The Water Industry Act 2012 (the Act) establishes the regulatory framework for the water industry covering economic regulation, licensing, technical regulation and water planning. The Act identifies the Technical Regulator as being responsible for the development, monitoring and regulation of technical standards in connection with the water industry. The technical standards include requirements to ensure technically sound and safe practices are followed in operating and maintaining water and sewerage installations and associated equipment, products and materials.

Water and sewerage infrastructure is defined as the “off-site” infrastructure that services the community. That is, the infrastructure into which the plumbing contractors connect their on-site plumbing (including non-drinking water (recycled water)) and drainage installations.

Water and sewerage infrastructure includes, but is not limited to:
- Drinking water distribution system.
- Drinking water treatment and storage facilities.
- Sewage collection systems.
- Sewage treatment and storage facilities.
- Community wastewater management collection systems.
- Wastewater treatment and storage facilities.
- Non-drinking (recycled) water distribution system.
- Non-drinking (recycled) water treatment and storage facilities.

Water and sewerage infrastructure is the responsibility of a water industry entity, such as SA Water, or most often a regional local Council. By comparison, on-site plumbing and drainage and associated equipment is the responsibility of the property owner. For further information refer to the Office of the Technical Regulator (OTR) Plumbing Trades Website: www.sa.gov.au/otrplumbing and the plumbing section of this bulletin.

Water industry entities

The Act defines a water industry entity as a person who holds a licence from the Essential Services Commission of South Australia to provide a potable water, non-potable water and/or sewage service, operation or activity.

Water industry standards

In order for the water industry entity to provide a safe and reliable service, the entity must take reasonable steps to ensure that its infrastructure, equipment, products and/or materials are compliant with the technical and safety requirements or standards specified and published by the Technical Regulator.

Safety, Reliability, Maintenance and Technical Management Plan

Under the Water Industry Act 2012, the Technical Regulator may require a water industry entity to prepare and periodically revise a safety, reliability, maintenance and technical management plan (SRMTMP). The intention of a SRMTMP is to demonstrate that the water industry entity’s infrastructure is designed, installed, commissioned, operated, maintained, monitored and where required, decommissioned, in a safe and reliable manner by suitably qualified persons. A SRMTMP will be a working document that is unique to each water industry entity.

A SRMTMP will include information about the water industry entity pertaining to their organisational makeup, a description of their operation(s), safety elements and assessment processes, asset management, contractor management, customer/public protocols and agreements, and compliance monitoring. Once prepared, the SRMTMPs will be reviewed and are required to be approved by the Technical Regulator.

A guidance document for the preparation of SRMTMPs is currently being finalised for testing and implementation by six water entities commencing in the second quarter of this year.

Contact Person

Niki Robinson is the Manager of Water and Sewerage Infrastructure Regulation for the Office of the Technical Regulator. Niki’s contact details are: niki.robinson@sa.gov.au
ph: 08 8463 3209 mob: 0475 826 663

More Information

The Office of the Technical Regulator is currently developing information related to water and sewerage infrastructure regulation to be included on the OTR website www.sa.gov.au/otr

We welcome your feedback. If you have any comments or wish to suggest some topics to be covered in future editions please send an email to niki.robinson@sa.gov.au
Contact list

Electrical Technical Advice
Office of the Technical Regulator
Level 8, 11 Waymouth Street, Adelaide
Phone: (08) 8226 5518 (8:30am–4:30pm)
Fax: (08) 8226 5529
Email: otrmail@sa.gov.au

Electrical Certificates of Compliance
Available in person from the following agencies:
Office of the Technical Regulator
Level 8, 11 Waymouth Street, Adelaide
NECA
213 Greenhill Road, Eastwood
Phone: (08) 8272 2966
Master Electricians Australia
4A Northcote St, Torrensville 5031
Phone: 1300 889 198
Lawrence & Hanson
All stores
MM Electrical
All stores
Middendorp
All Stores
Rexel Australia Ltd
All stores
P & R Electrical Wholesalers
All stores
CNW Wholesalers
All stores
Service SA Outlets
EDS Centre, 108 North Terrace, Adelaide and Regional Areas

Gas Technical Advice
Office of the Technical Regulator
Level 8, 11 Waymouth Street, Adelaide.
Phone: (08) 8226 5722 (8:00am–5:00pm)
Fax: (08) 8226 5866
Email: dsd.otr@sa.gov.au

Gas Certificates of Compliance
Available in person from the following agencies:
SA Water
250 Victoria Square, Adelaide
Gas Works
All stores
Gas Appliances Plus
Unley
Norm’s Plumbing Supplies
John Street, Mt Gambier
Scott’s Plumbing
66 O.G. Road, Klemzig
Northern's Plumbing Supplies
All Stores
Tradelink
All stores
Reece Plumbing
All stores
Personal collection and phone or fax orders are available from:
Service SA Outlets
EDS Centre, 108 North Tce Adelaide and Regional Areas

General Information
Licence and Address Change
Consumer & Business Services
Phone: 131 882
Email: pge.bos@agd.sa.gov.au
Appointments and Information
SA Power Networks Builders & Contractors Line
Phone: 1300 6500 14
Fax: 1300 6500 16
Australian Standards
Standards Australia
www.standards.com.au
AGA
Phone: (03) 9580 4500
www.gas.asn.au

Training
Gas
Master Plumbers Association (formerly PIA)
1 South Road, Thebarton
Phone: (08) 8292 4000
Fax: (08) 8292 4040
Technical Advisory Centre P/L
4/543 Churchill Road, Kilburn
Phone: (08) 8162 5640
Fax: (08) 8162 5638
www.techad.com.au
Gastrain
U1 61-65 Tapleys Hill Rd
Hendon 5014
(phone: 8447 7783
Phone: 1300 955 583
Fax: (08) 8447 7753
www.gastrain.com.au

Electrical and Gas
TAFE info (for all training enquiries)
Phone: 1800 882 661
Peer Veet
Rescue and Resuscitation, First Aid
& other Industry related courses:
1042 Port Road, Albert Park
Phone: (08) 8348 1200
www.peer.com.au

Electrical
ATEC (Adelaide Training & Employment Centre)
Electrical Rescue & Resuscitation Certificate
Phone: (08) 8240 1233
www.atec.asn.au

Power Lines/Cables
 Clearance Zones
Between vegetation and power lines or building/
structures and power lines contact
Office of the Technical Regulator
Phone: (08) 8226 5521
SA Power Networks Service Rules Advice
Phone: (08) 8404 4898

For Locations of Gas, Electricity or Telecommunications
“Dial Before You Dig”
This service is still available when doing emergency excavations at short notice.
Phone: 1100
www.dialbeforeyoudig.com.au

For after hours locations or gas emergency (including LPG)
Natural Gas Network: 1800 808 526
Origin Energy LPG: 1800 808 526
Kleenheat: 1800 093 336
Elgas: 1800 819 783
APA Group Gas leaks: 1800 427 532
(1800 GAS LEAK)

For gas or electrical major incident reporting 24 hours (SA only)
Office of the Technical Regulator
Phone: 1800 558 811
This number also appears in the 24 hour emergency numbers section at the front of the
South Australian White Pages

Gas Trade contact
APA Group system operator
Phone: 1300 001 001

Additional websites for further information
South Australian Parliament for Acts and Regulations
www.legislation.sa.gov.au
SafeWork SA
www.safework.sa.gov.au
Australian Liquefied Petroleum Gas Association (ALPGA)
www.alpga.asn.au
Australian Competition and Consumer Commission (ACCC)
www.accc.gov.au
Australian Gas Networks Ltd
(formerly Envestra)
www.australiangasnetworks.com.au
Elgas
www.elgas.com.au
Origin Energy
www.originenergy.com.au
Kleenheat
www.kleenheat.com.au
Australian Standards
www.infostore.saiglobal.com/store/

Plumbing Technical Advice
Office of the Technical Regulator
Level 8, 11 Waymouth Street, Adelaide
Phone: 1300 760 311 (8:00am-4:30pm)
Email: otr.plumbenquiries@sa.gov.au

Plumbing Certificate of Compliance
Available in person from:
Service SA Outlets

Government of South Australia
Department of State Development

be energy safe
IMPLOUT NOTIFICATION TO GASFITTERS
CHANGE OF METER OUTLET CONNECTIONS
FEBRUARY 2015

About Us

APA Group (‘APA’) operates the South Australian Natural Gas Distribution Network under contract to the network owner and licensee, Australian Gas Networks which includes the installation of new gas connections.


Introduction

APA has recently redesigned the Gas Meter Assembly to improve safety and gain consistency throughout all the distribution networks that APA maintains.

The current meter outlet connection will be replaced with a new fitting known as a “10 Light Fitting.” This fitting will remove the kinko rubber and “O” connection from the installation, eliminating gas leaks that are caused by the kinko rubber perishing or the nut becoming loose.

The new fittings will be installed on all new domestic free standing meters (i.e. not fixed enclosures or wall boxes) and where consumer piping is required to be altered.

The purpose of this notification is to advise all Gasfitters of the new design so they are aware of and recognize the 10 Light Fittings when coming across them in the field, and understand the new requirements when connecting consumer piping to the new fitting.

Requirements

Free Standing Meter Sets

NOTE: The process of installing consumer piping to fixed enclosures/wall boxes does not change.

When installing consumer piping to the 10 Light Fitting the meter bar and gas inlet service should not be moved or altered.

The 10 Light Fitting consists of a 3/4” threaded liner BSP, a cap nut and a flat washer see Figure 1.

When installing the 10 Light Fitting to the consumer piping, remove the plastic plug holding the 10 Light Fitting to the meter bar and attach it to the consumer piping.

Once attached, reinstall the plastic plug and tighten to the meter bar.

If the consumer piping is installed before the inlet service and meter bar, the connection point of the 10 Light Fitting to the consumer piping shall be at a height of 360mm. See Figure 3. The 10 Light Fitting will be installed at a later date.

The final height of the consumer piping with the 10 Light Fitting attached should be the same height as the horizontal plate of the meter bar. See Figures 2 and 2a for an example of the Inlet Assembly and Figures 3 and 3a for an example of the complete 10 Light Installation.
IMPORTANT NOTIFICATION TO GASFITTERS

CHANGE OF METER OUTLET CONNECTIONS

FEBRUARY 2015

APA will commence installing the 10 Light Fittings for all new domestic free standing meters and where consumer piping is required to be altered effective March 2nd 2015.

Implementation

APA will commence installing the 10 Light Fittings for all new domestic free standing meters and where consumer piping is required to be altered effective March 2nd 2015.

Enquiries

Enquiries relating to the information contained in this notification may be directed to Andrew Saliba, Program Manager for APA Group on (08) 8159 1771.