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Notice of variation to regulations – No. V/E 04/11 Testing of gas installations – AS 5601 2002, Appendix E

There has been some confusion and concern within the WA industry regarding the testing of consumers' gas installations.

Part 5 of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* provides for the calling up of Codes and Standards. AS 5601 2002 is one of the Standards called up in the Regulations and Appendix E of that Standard provides details on the pressure testing of consumers' gas installations.

The current requirement to test at a pressure of 5 kPa is known to be causing problems on existing installations that comprise older appliances and piping systems. It is counterproductive to achieving the required safety outcome - a gas tight installation.

To ensure that the test pressure requirement is practicable, the following variation to Appendix E item E3.2.1(e) will apply to the testing of gas installations in Western Australia.

The Director of Energy Safety gives notice of variation to the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999: Testing of gas installations to AS 5601 2002, Appendix E

Pursuant to the provisions of Regulation 32(3) of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999*, the Director of Energy Safety hereby gives notice that, from 19 April 2004, the following variation to AS 5601 2002 Appendix E E3.2.1(e) shall apply until further notice:

Delete "(e) Subject the *consumer piping* to the *operating pressure* or 5 kPa whichever is the greater"

and replace with the following:

- "(e)
- For a consumer's gas installation with a nominal gas meter outlet pressure of 2.75 kPa or an LP Gas installation with a nominal appliance inlet pressure of 2.75 kPa, test the consumer piping to a pressure of 4 kPa.
 - For a consumer's gas installation with a nominal gas meter outlet pressure of 1.25 kPa, test the consumer piping to a pressure of 2 kPa.
 - For all other situations, test the consumer piping to the operating pressure (lockup pressure)."

All other testing requirements in the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* and AS 5601 2002 continue to apply without variation.

Gas fitters testing gas installations under this variation must record the variation number V/E 04/11 on the Compliance Badge.

ALBERT KOENIG
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Energy Safety



Revised process for Alinta gas connections

From 17 May 2004, Alinta will be introducing a revised process for connecting new gas customers.

The revised process addresses the requirements of Full Retail Contestability (FRC) due to be introduced at the end of May 2004.

Under FRC, gas retailers [such as Alinta Sales] need to observe the new retail market rules. These include:

- a need to establish a customer account; and
- obtaining a customer's explicit informed consent (EIC) before a new connection can occur.

Another major change is that a connection request can only be made by the gas retailer. This differs from the current process whereby gas fitters directly contact the Network Operator [Alinta Networks].

Under this revised process, gas fitters must submit a new style 'preliminary' notice called a "Request for Gas" directly to Alinta Sales.

New forms, approved by Energy Safety, will be available from Alinta Sales by 1 May. Use of the new forms will be compulsory from June onwards, after a short transition period during May.

A sample of the new form can now be viewed on Alinta's website at www.Alinta.net.au and selecting "Our Organisation" / "Alinta Networks" / "Contestability".

Alinta will hold a series of presentation nights for gas fitters. Details of the presentations will be mailed out to gas fitters soon.

These new requirements will only apply to Alinta's reticulated network. In all other areas, Preliminary Notices should still be submitted to the gas supplier.

Responsibility for gasfitting work

Energy Safety regularly interviews gas fitters regarding substandard gasfitting work and non compliance with the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999*.

Some of the gas fitters interviewed are signing notices on behalf of others who have carried out the work. That is unacceptable except in special cases. Furthermore, in some cases, the work they are signing for is substandard and not in compliance with the regulations.

Gas fitters should take note of the following.

When signing a Notice of Completion, the gas fitter is certifying that every part of the gas installation on which the gasfitting work specified on the Notice was carried out or that is affected by that work complies with the *Gas Standards Act 1972* and associated regulations, is safe to use and is completed to a trade finish. The gas fitter also declares that he or she is currently registered [with Energy Safety] to carry out the gasfitting work.

After signing the Notice of Completion, the gas fitter becomes responsible for the work indicated on the Notice. If the work is not left safe or is not in compliance with the regulations, then the gas fitter who signed the Notice will be required to rectify the work. The gas fitter may also face penalties of up to \$2,000 for each non-compliance and be required to justify to the Director of Energy Safety why his or her licence should not be cancelled, suspended or restricted. It is important that the gas fitter completes the Notice correctly and

provides all the appropriate information and detail.

Furthermore, gas fitters are not permitted to supervise another person carrying out gasfitting work unless that person has his/her own permit allowing them to work under supervision, or they are working under a gasfitting Authorisation¹. Apprentices must also have their own permit to work under supervision, before carrying out any gasfitting work.

To summarise, a registered gas fitter is required to take responsibility for the work he/she carries out, or to that part of the installation that is affected by the work. A gas fitter only installing the pipe system is required to submit a Notice of Completion for that part of the job and fix a Compliance Badge in an approved place (see the information provided in the Notice of Completion book under "Nominated Locations"). Similarly, a gas fitter only installing an appliance and commissioning it, needs only to put in a Notice and fix a badge for that work, but must also make sure the job is left safe to use. If there is a leak on the piping system, the gas fitter should not introduce gas into the system until the leak is rectified, the system is gas tight and the installation can be used safely by the customer.

Gas fitters should note that taking responsibility for other peoples' work can have consequences. Firstly, unless permitted as described above, it is a breach of the regulations, with all the usual consequences. Secondly, it can result in you rectifying *their* work if it is defective, and possibly paying *their* fine and losing *your* licence.

¹ Authorisations are normally only issued for work on industrial sites (Class I) or autogas refuelling facilities (Class P).

DESCRIPTION	CLASS	CLASS	CLASS	CLASS	CLASS
5 NEW CONNECTIONS <i>Send Notice to Gas Supplier</i>					
NEW CONNECTOR	PIPE WORK	COMMISSIONING	APPLIANCE CONNECTOR		
REPAIR WORK	REPAIR WORK				
6 TYPE A (DOMESTIC COMMERCIAL APPLIANCE) 7 TYPE B (INDUSTRIAL APPLIANCE)					
APPLIANCE DESCRIPTION	REG.	CLASS	NAME	DESCRIPTION	
SUBJECT HEADLINE					

Location of LP Gas cylinders

Australian Standard AS/NZS 1596:2002 is the reference document for the location of gas cylinders.

It may not be clear to all gas fitters (and home owners) that placing LP Gas cylinders, particularly those of 9 kg or more, in rooms, carports, garages and other similar enclosures is inviting disaster.

Gas cylinders in a carport or garage can easily be damaged by a vehicle.

Also, if there is leakage from a gas cylinder in a garage or carport, the results could be disastrous. LP Gas tends to pool at low levels because it is heavier than air. And motor vehicles may provide a source of ignition.

Recently, a house in Gosnells was wrecked by an LP Gas cylinder that was stored in one of its rooms. Gas leaking from the cylinder ignited and caused an explosion.

To summarise, gas cylinders should not be located in rooms (including enclosed verandahs), carports, garages or similar locations. There are alternate positions around the house that will comply – and are much safer.

Gas leaks in new appliances

It is said that lightning does not strike twice.

One gas fitter begs to differ.

Some months ago, this gas fitter received superficial burns to his face and hands when lighting up a commercial range for the first time. In this incident, some of the blame could be apportioned to his incorrect pressure testing procedures.

Having learnt from the first incident, the gas fitter has diligently applied his newly developed pressure testing skills. But, in a recent incident, his pressure testing did

not detect a hole in the aluminium tubing downstream of the rail cock on a solid griddle.

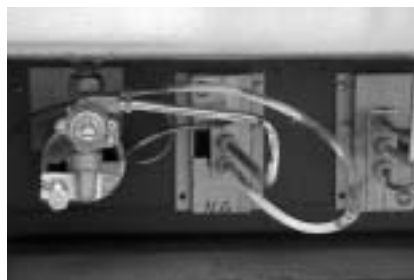
One of the final tasks in manufacturing appliances is to fix a data plate. It appears that in the case of this particular appliance, a person pressed a little too hard when drilling the pop rivet holes to fix the data plate on the fascia plate. As the drill passed through the stainless steel fascia, it also passed through the aluminium tubing immediately behind the fascia.

Pressure testing would not test that side of the rail cock. It is only when lighting up the gas appliance that the leak would be evident.

Unfortunately for this gas fitter, he was caught out again when the accumulated gas ignited behind the fascia. He must be wondering if lightning ever strikes for a third time!

Fortunately these types of incidents are rare.

The lesson to be learnt here is that, as required by legislation, the matter was reported to Energy Safety. An investigation was carried out and a report passed to the Australian Gas Association to follow up with the manufacturer. Hopefully this will help to avoid further problems.



The damaged tubing behind the appliance fascia



Drill damage to the aluminium tubing

Mulch fires

During 2003, the Fire and Emergency Services (FESA) attended more than 500 fires related to mulch catching fire.

FESA contacted Energy Safety to assist at one of these incidents. Heat generated by mulch surrounding the base of a gas water heater and steel riser encasing the PE service pipe into the gas meter box had melted the PE gas pipe inside the steel casing. Medium pressure gas then escaped and ignited, engulfing the gas meter and regulator.

Had it not been for a prompt response by FESA, this home could have easily been destroyed.

Gas fitters and plumbers should remain alert for all types of situations where foreign matter is in contact with or near to gas appliances and service equipment. The installation owners should be notified to carry out some 'housekeeping' to keep these areas clear of debris – and prevent such incidents.

The next consumer may not be as lucky as this one.

Disciplinary action taken by the Director of Energy Safety

1 November 2003 to 31 January 2004

The Director of Energy Safety dealt with one authorisation holder during this period.

The operative was the subject of a formal Inquiry.

Austheat Pty Ltd

On 5 May 2003, an employee of Austheat Pty Ltd carried out

gasfitting work on a skid-mounted gas-fired burner. Whilst attempting to start the burner, the employee received burns to his face, neck, arms and legs as a result of an LP Gas escape and resultant flash explosion.

An Inquiry was held into the incident on 26 November 2003. The Director of Energy Safety issued the following order pursuant to section 13A (16) of the *Gas Standards Act 1972*:

An authorisation number will not be issued until Austheat Pty Ltd satisfies the Gas Licensing

Committee that it has effective systems in place, both in an operational sense for the supervising gas fitter and in the effectiveness of training procedures that are provided to staff. There must be in place suitable and safe operating guidelines for the supervising gas fitter and effective and relevant training for employees.

PROSECUTIONS FOR BREACHES OF THE GAS STANDARDS ACT 1972 AND GAS STANDARDS (GASFITTING AND CONSUMER GAS INSTALLATIONS) REGULATIONS 1999

1 November 2003 to 31 January 2004

<i>Breach</i>	<i>Name (and suburb of residence at time of offence)</i>	<i>Licence No.</i>	<i>Fine \$</i>	<i>Costs \$</i>
<i>Carried out gasfitting work without holding the appropriate licence classification Section 13A(2) GSA</i>	<i>Roger Carraher (Belmont)</i>	<i>GF 007023</i>	<i>277.70</i>	<i>200.00</i>
	<i>Michael Jelly (Waikiki)</i>	<i>NLH</i>	<i>500.00</i>	<i>387.70</i>
<i>Did not attach a badge or label to an installation Regulation 28(2) GSR Failed to submit Preliminary and Completion Notices Regulations 27, 28(3) GSR</i>	<i>Peter Bacon (Caversham)</i>	<i>GF 001512</i>	<i>700.00</i>	<i>277.70</i>

GSA Gas Standards Act 1972

GSR Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999

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