

# gas focus

## In this issue...

- Gas appliances in alfresco areas
- Competency in the use of piping materials and jointing methods
- Restrictions on installing gas piping in the ground under buildings
- Commissioning of Type B appliances prior to certification
- Vigilance with autogas kits
- Generic compliance plate for mobile gas installations
- Prosecutions for breaches of Legislation

## Gas appliances in alfresco areas

In a recent edition of the West Australian newspaper, a feature article in the 'Habitat' section gave the impression that gas appliances were being used in an enclosed alfresco dining area. The photo (see photograph 1) clearly showed an outdoor patio heater and an outdoor gas barbecue, which, apart from contravening the *Gas Standards (Gas Fitting and Consumer Gas Installations) Regulations 1999*, could have been unsafe as they may have not provided adequate ventilation for correct operation of the appliances.

EnergySafety initiated a joint investigation with Alinta and discovered that:

- the gas barbecue was an outdoor gas appliance equipped with a mechanical exhaust; and
- the patio heater was an outdoor gas appliance.

It was also found that the alfresco area met the requirements of the Regulations, in that it complied with the outdoor area openings for ventilation (see photograph 2).



Photograph 1 – This view gives the impression that the outdoor area is enclosed (Photo courtesy of The West Australian)



Photograph 2 – This view of the same area shows that the area has adequate ventilation

The Director of Energy Safety wrote to the editor of The West Australian to express concern that the photograph used in the newspaper article could have been misinterpreted in that it did not show the open areas of the alfresco area. The Director also asked that a future article be included in the paper, explaining that where gas appliances are to be installed in outdoor areas, the requirements of EnergySafety's publication "Safe locations for using gas barbecues" need to be met.

Gas fitters are reminded of the need to ensure that, where gas appliances are installed in alfresco areas, the area needs to comply with the ventilation requirements of the EnergySafety publication. This is to ensure that adequate ventilation is provided for the correct and safe operation of gas appliances.

A draft of EnergySafety's publication "Safe locations for using gas barbecues" is available from EnergySafety's website at [http://www.energysafety.wa.gov.au/energysafety/resources/publications/pages/Safety\\_information.html](http://www.energysafety.wa.gov.au/energysafety/resources/publications/pages/Safety_information.html)

## EnergySafety



## Competency in the use of piping materials and jointing methods

EnergySafety has received reports from gas suppliers that some gas fitters are using piping materials and jointing methods they are either not familiar with or are not trained to use. In some cases, this has resulted in defective installations and leaking pipes.

Gas fitters are licensed to install piping systems only within the scope of their licence. For example, Class G gas fitters install piping systems in accordance with AS 5601 up to a pressure of 200 kPa. Traditionally, Type B copper tubing is the main piping used by these gas fitters.

In the past, training organisations have concentrated their training on the use of materials traditionally

used in the gas industry, such as copper and UPVC. Consequently, some gas fitters will only be competent in the use of copper and UPVC.

Regulation 18 of the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* requires gas fitters to ensure that their work is carried out in a safe manner and to a trade finish, the work is compliant and installations are left safe to use.

If gas fitters need to install pipe or materials they are not familiar with, they must obtain the necessary relevant skills and knowledge to be able to carry out the work in accordance with the regulations.

Gas fitters must therefore obtain a certificate of training or competence



issued by the relevant material manufacturer, supplier or agent, or recognised training organisation, authorising them to install a particular piping system or to use a particular jointing method.

Training organisations continually modify their training to take into account the introduction of new materials.

## Restrictions on installing gas piping in the ground under buildings

The article "Consumer piping in the ground" in Gas Focus No. 34 (December 2004) referred to an installation where UPVC gas consumer piping, which was laid under a car park that formed part of a multi-storey building, had to be replaced after a Notice of Defect was issued by the gas supplier's inspector. The article described the installation of UPVC pipe in the ground in an underground car park.



A car park with open sides. Consumer gas piping installed beneath the ground in this type of installation must comply with the requirements for 'piping beneath a building and in the ground'

However, the car park formed the ground floor level of the building.

EnergySafety has been requested to clarify what is considered to be 'beneath a building'. Any area beneath a building, including open sided areas such as car parks (as shown in the following photo), must meet the requirements for the installation of piping in the ground beneath a building. Clause 4.11.19 of Australian Standard AS 5601 – 2002 "Gas installations" allows only copper tube with brazed joints to be used in such situations.

If there is any doubt, gas fitters should contact the relevant gas supplier for advice.

## Commissioning of Type B appliances prior to certification

The *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999* provide for a Type B gas appliance inspector to determine the period for which gas for commissioning can be supplied

to a Type B gas appliance, prior to the appliance being certified by the gas appliance inspector.

Gas for commissioning can be approved for a period of 28 or 90 days. If a longer period is required, this can be determined by the Type B gas appliance inspector, subject to approval by the Director of Energy Safety.

This period is expected to allow sufficient time for the gas fitter to perform testing and commissioning and to then demonstrate to the Type B gas appliance inspector that all the installed safety interlocks on the gas installation operate effectively. When the inspector is satisfied that all the gas safety controls/interlocks function correctly and the gas appliance has been properly commissioned, he/she may then issue a Certificate of Compliance and attach a badge identifying the appliance as approved.

The regulations do not preclude the process equipment from being operated during the approved

(Continued over page)

(Continued from previous page)

period, provided the Type B inspector is satisfied the operating of the process equipment is necessary to prove the effective operation of the gas safety interlocks or combustion emissions.

During the commissioning phase, the gas fitter still has control of the gas installation and the gas appliance is not considered permanently connected to a consumer's gas installation.

The owner/operator can only operate the process equipment with the approval of the Type B gas appliance inspector and should not commence production until the gas appliance has been certified and a compliance badge attached to the appliance.

### Vigilance with autogas kits

Recent autogas inspections by EnergySafety have revealed that some gas fitters are purchasing and installing autogas conversion kits and relying on the fact that as a supplied kit, it complies with the relevant requirements. This may not be correct and the gas fitter must check that the completed installation complies.

In one instance a gas fitter purchased a generic kit for a particular motor vehicle. This vehicle is available in both two-wheel and four-wheel drive models. The usual fuel container location on the four-wheel drive is compliant. However, in this instance, the kit was installed into the two-wheel drive model.

As the chassis height of the two-wheel drive model is lower than that of the four-wheel drive, the fuel container location was non-compliant. The fuel container



was too close to the ground and outside the tangential line drawn from the rear wheel to the rear finished bodywork. Both of these points are contrary to AS/NZS 1425 "LP Gas for fuel systems for vehicle engines" and therefore constitute a breach of the regulations.

Modifications had to be carried out to the vehicle's suspension so that the fuel container location would comply.

It is the gas fitter's responsibility to be vigilant and ensure installation compliance. Non-compliance can cause time delays and incur additional costs. It may also lead to disciplinary action being taken.

### Generic compliance plate for mobile gas installations

EnergySafety will introduce a revised generic compliance plate [ESWA G058 0705] in January 2006 for use on all mobile gas installations in Western Australia.

The revised compliance plate will:

- replace the red 'Autogas' compliance plate [ESWA G016 0402] that is currently used on LP Gas fuel systems for vehicle engines; and
- provide a uniform plate for all other mobile gas installations.

The compliance plate is the same colour and of similar size to the existing 'red' plate. It is designed to be able to be used for any mobile installation that has to conform to the *Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999*.

The gas type and other nominated information are to be clearly inscribed on the compliance plate. Where details are not required on the plate, such as the container serial number and test date on a removable LP Gas container, the plate should be inscribed with 'NA' (not applicable).

The Australian Standards that can be used on mobile installations are shown in Schedule 7 of the Regulations and will include AS 4983 "Forklift or engine" when the Regulations are amended later this year.

The current 'red' plates will be phased out after 1 January 2006.

Private compliance plates previously approved by the Director Energy of Safety can continue to be used on mobile gas installations that have been installed in accordance with AS 1425.

The instruction sheet on the inside front cover of books of Notices of Completion will be amended to cover the revised compliance plate.

**ENERGYSAFETY WA**  
Gas Standards Act 1973 Compliance Plate

THE GAS INSTALLATION TO WHICH THIS NOTICE IS AFFIXED COMPLIES WITH THE REQUIREMENTS OF AUSTRALIAN (OR OTHER) STANDARD		
INSTALLATION DATE		GAS TYPE
NOTICE OF COMPLETION NUMBER		
INSTALLED BY REGISTERED GAS FITTER:		
NAME		GAS FITTER'S No.
WORKSHOP NUMBER		
VEHICLE / HULL IDENTIFICATION NUMBER, OR EQUIPMENT NUMBER		
CONTAINER SERIAL NUMBER		
CONTAINER TEST STATION STAMP DATE		

ESWA G058 0705

The new generic compliance plate

## Prosecutions for breaches of Legislation 1 April 2005 to 30 June 2005

<i>Breach</i>	<i>Name (and suburb of residence at time of offence)</i>	<i>Licence No.</i>	<i>Fine (\$)</i>	<i>Court Costs (\$)</i>
<i>Failed to attach a compliance badge Regulation 28(2) GSR Failed to submit a Notice of Completion to the Gas Supplier Regulation 28(3A)(B) GSR Failed to submit a Notice of Completion to the person for whom the work was carried out Regulation 28(3A)(C) GSR Failed to install a suitable fire resistant barrier on a timber wall behind a water heater Clause 602(1)(a) GSR</i>	<i>Michael Palassis (Atwell)</i>	<i>GF 002658</i>	<i>2,500.00</i>	<i>343.45</i>
<i>Failed to ensure gasfitting work is made to comply with regulations and provide a Notice of Rectification within 7 days Regulation 30(1)(A)(B) GSR Failed to fit a compliance badge to the gas installation Regulation 28(2) GSR Failed to submit a Notice of Completion to the gas supplier Regulation 28(3A)(B) GSR Failed to give a Notice of Completion to the customer Regulation 28(3A)(C) GSR</i>	<i>Tyrone Harston (Coolbellup)</i>	<i>GF 011268</i>	<i>800.00</i>	<i>443.45</i>
<i>Failed to fit a compliance badge to the gas installation Regulation 28(2) GSR Failed to submit a Notice of Completion to the gas supplier Regulation 28(3A)(B) GSR Failed to give a Notice of Completion to the customer Regulation 28(3A)(C) GSR</i>	<i>Peter Clements (Willetton)</i>	<i>GF 010354</i>	<i>800.00</i>	<i>443.45</i>

## Legend:

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

Note: There was one other prosecution (2 breaches) finalised in this period. The detail of this prosecution is not included above as it resulted in a spent conviction order being issued.

**Articles in this publication may be reproduced, provided they are reproduced in full and show acknowledgement to EnergySafety.**