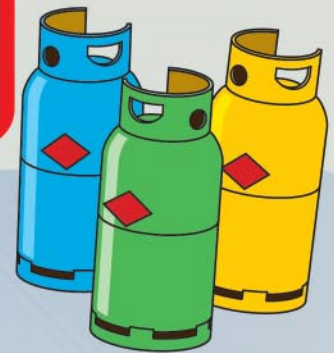


GAS SAFETY Bulletin

Message from the Editor



In this issue of the Gas Safety Bulletin, we will specially publish a feature article on the safety issues on liquefied petroleum gas (LPG) installations in village houses as well as the relevant statutory and technical requirements. In addition, as hot summer approaches, mosquitoes will breed and weeds grow thickly. We would like to take this opportunity to introduce to you the working principle of LPG mosquito traps for the reference of trade members. Also, we will continue to provide you with more legal knowledge on gas safety, news items and some interesting gas statistics.



LPG Installations in Village Houses

Gas installations, almost a necessity for many families, are closely related to our daily life. LPG cylinders have all along been used in places (e.g. some remote villages) where no central piped gas supply system is provided. From the perspective of LPG safety, proper storage of suitable amounts of LPG is very important. Not long ago, the Gas Authority received reports about illegal storage of LPG or other gas installations in village houses. Although no accidents occur as a result, trade members should pay attention to this. In order to avoid a recurrence of such incidents, we hope trade members will take note of issues concerning LPG installations in village houses and the storage of LPG cylinders.

The Quantity of LPG Cylinders Permitted and Ways of Storage

In order to meet daily needs, households using LPG may store a small amount of LPG for future use. The storage of LPG is regulated by the Gas Safety Ordinance. Unless specifically approved by the Gas Authority, storing LPG cylinders (including empty cylinders) with a total nominal water capacity of over 130 litres (approximately 50 kg nominal weight) is prohibited at any time. Also, gas suppliers or gas distributors shall not supply LPG cylinders (including empty cylinders) exceeding the above total nominal water capacity to unapproved LPG users.

As far as storage of LPG cylinders is concerned, LPG cylinders shall be stored upright in a well-ventilated and readily accessible location and kept away from heat and flames. They shall not be freely put aside and easily accessible to other people or children. If it is necessary to keep LPG cylinders outside the houses, the area where LPG cylinders are to be kept shall be located within private premises and consent be obtained from premises owners. The area shall have a secure fence and canopy for protection purposes. It will be better if there is no tree or plant in the vicinity. LPG cylinders shall not be kept adjacent to or together with flammable materials. Nor shall they be used or kept below ground level, adjacent to drains or in basements. If possible, it is suggested that a well-ventilated LPG cylinder store be constructed for storing LPG cylinders.

For the construction of LPG cylinder stores, please refer to the *Gas Utilisation Code of Practice GU06*, which can be downloaded from the EMSD web page at <http://www.emsd.gov.hk>.



Installation of LPG Pipework

Under certain circumstances, there may be a distance between an LPG cylinder store situated outside the village house and the flat of the LPG user. The flat of the LPG user may be on the second or third floor, while the LPG cylinder store is situated on the ground outside the village house. Under such circumstances, metal connection pipes shall be used to supply LPG to the flat of the LPG user on the second or third floor from the LPG cylinder store at ground level. No non-metal connection pipes shall be used. According to the *Gas Safety (Installation and Use) Regulations*, the non-metal gas pipes installed shall not be longer than 2 metres.

Let's Join Hands to Enhance Gas Safety

In the past, there were frequent cases of non-compliance in relation to LPG installations in village houses. Fortunately, these cases had not resulted in any serious property losses or casualties. From the perspective of gas safety, proper storage and use of LPG and LPG installations can prevent accidents and reduce the risks of property losses. Therefore, effective promotion of gas safety and enhancement of public awareness of gas safety rely on the concerted efforts of the gas trade.

LPG Mosquito Trap



Summer is the season when mosquitoes proliferate. As venues such as schools and gardens in housing estates install LPG mosquito traps to eradicate mosquitoes, gas installers have to understand the working principles of LPG mosquito traps and the relevant legislation and safety measures, so that they are well-equipped to provide the public with quality service.

An LPG mosquito trap uses LPG to produce carbon dioxide by the oxidation of LPG with catalysts to attract bloodsucking insects. The temperature and humidity of the air released by the trap resemble those of the air exhaled by humans when they breathe. When mosquitoes are attracted to a LPG mosquito trap, some of them will be stuck by stickers with a special odour on the surface of the trap. Also, the vacuum chamber of the trap will suck mosquitoes into a net so as to exterminate them.

LPG mosquito traps are gas appliances, so gas fittings connected to them (such as cylinder, regulator, flexible tubing) are regulated by the Gas Safety Ordinance (Cap. 51). According to the Ordinance, only registered gas installers of the appropriate class employed by registered gas contractors can install and maintain the gas fittings of LPG mosquito traps.

The operating pressure of an LPG mosquito trap should be low (not exceeding 7.5 kPa). Before using an LPG mosquito trap, you have

to check the cylinder, valve and regulator. The regulator must be connected to the valve of the cylinder firmly to ensure that all joints of the cylinder do not leak. In addition, LPG mosquito traps can only be installed outdoors and well-ventilated places should be selected to ensure sufficient air for catalysis. No flames and sundries should exist in the vicinity of an LPG mosquito trap, nor is smoking allowed. When the LPG mosquito trap is not in use, the regulator should be detached and the cylinder should be stored in a well-ventilated place. A warning notice in English and Chinese should be displayed on the LPG mosquito trap to provide users with gas safety tips.



Moreover, gas suppliers must give customers gas safety information on LPG mosquito traps before supplying LPG to the trap to ensure gas safety. ⚠️

Members of the LPG industry should know that the design of an LPG cylinder wagon should comply with safety requirements, especially those stipulated in Schedule 2 of the *Gas Safety (Gas Supply) Regulations* and related codes of practice, in order to obtain permits to carry LPG cylinders.



Recently, we noted that some people who ignored gas safety blocked the ventilation holes of the cylinder compartments of the wagons, which affected the ventilation of the cylinder compartments. This alteration seemed to be minor, but the risk of transporting LPG cylinders increased significantly. Moreover, this alteration may breach the requirement of Item 3(a), Part 2, Schedule 2 of the *Regulations*. The material alteration of a cylinder wagon without permission also breaches Regulation 35 of the *Regulations*.

According to our case record, we found a cylinder wagon whose ventilation holes were blocked by some metal plates and cardboard in the populous urban area during an inspection early last year. Since the vehicle was materially altered without the permission of the Gas Authority, the people and the vehicle owner involved were found guilty by the court.

Owners of cylinder wagons should not think that they can evade their responsibility for illegal alteration of vehicles on the ground that the ventilation holes are blocked by other people. According to the law, in addition to people hiring such vehicles, the owners have to bear legal responsibility too. Therefore, gas distributors and cylinder wagon owners should control the operation of cylinder wagons tightly to avoid breaking the law. ⚠️

Case Sharing

Legal Knowledge

All persons who contravene the *Gas Safety Ordinance* will be prosecuted - this view is not entirely correct, since charging all offenders is not the most effective way of regulation and may not conform to the basic principles of enforcement.



Section 13 of the *Gas Safety Ordinance* empowers the Gas Authority to issue an 'improvement notice' to an offender to direct that person to remedy the matters occasioning the contravention or to take measures to remedy any contravention within such period as is specified in that notice. Please note that the issuance of an improvement notice does not mean that the Gas Authority lacks evidence for charging the offender and has to 'take the second best'.

Any person who contravenes any direction specified in an improvement notice commits an offence and is liable on conviction to a fine of \$25,000 and to imprisonment for 6 months and, in the case of a continuing offence, to a daily penalty of \$2,000.

In addition, the Gas Authority may himself, in accordance with the requirements of Section 13A, take such measures as reasonably appear to him to be necessary in the interests of safety. The cost of any measures taken by the Authority under this section shall be recoverable by the Authority from the person who has failed to comply with the improvement notice,

Any person aggrieved by a direction specified in an improvement notice served on him may appeal to the appeal board according to the method specified in Section 13(4).

In fact, if you comply with the requirements of the *Gas Safety Ordinance* and codes of practice and take note of gas safety at all times, you need not worry about receiving improvement notices or being prosecuted. ⚠️

Beware of the Gas Pipes Inside the Walls

Decoration work carried out in housing estates or our homes, for example, the replacement of old gas pipes, water pipes, wire conduits or fire services installations etc that are concealed inside the walls, or simply general environment beautifying works, always involves the process of drilling and digging through the walls. Since many installation pipes are concealed inside the walls, if the worker is careless and damages the concealed gas pipes when he digs through the walls, it will cause gas leakage and threaten the safety of himself and the public.

An installation pipe is a gas pipe that supplies gas to a particular customer. Some of the installation pipes may be concealed inside the walls. Generally speaking, the owner is responsible for the regular inspection and maintenance of the installation pipes behind the gas meter, while the gas supply company is responsible for the inspection of the service pipes in front of the gas meter. The gas supply company will also carry out a safety inspection on the service pipes, installation pipes and gas installations once every eighteen months. For the essential points on maintenance, please refer to the pamphlet *Regular Inspection and Maintenance of Service Risers and Installation Pipes* issued by the EMSD.

When decoration work is being carried out, you should urge the contractor and the workers concerned to take reasonable steps to avoid damaging the gas pipes concealed inside the walls. If the decoration work involves gas installations, make sure that the contractor you employed is a registered gas contractor. If the contractor is not a registered gas contractor, you should employ one to carry out the relevant works.

The decoration contractor must know the position of the gas installations inside the flat in which decoration work is carried out, in particular the position of the gas emergency control, so as to stop the gas supply immediately during an emergency. Before drilling or digging through the floor slab, the ceiling or the wall, the decoration contractor may ask the gas supply company for the records of the layout of the pipes inside the walls, so as to locate the pipes and avoid drilling or digging holes in positions where there are gas pipes.



- Turn off the gas emergency control to stop gas supply immediately in an emergency.



- Be careful not to damage the gas pipes concealed inside the walls when carrying out decoration work.



- Use a metal detector to detect the exact locations of the pipes inside the wall before carrying out the work.

The decoration contractor must be very careful when carrying out the work. If there are any uncertainties, electric tools must be given up and manual tools should be used instead. The decoration contractor can also use a metal detector to locate the exact positions of the pipes concealed inside the walls before carrying out the work, so as to reduce the chance of damaging the pipes inside the walls.

If the gas pipes concealed inside the walls are damaged accidentally and a gas leak occurs, where possible, you should stop the gas flow immediately by turning off the gas emergency control in front of the gas meter. Extinguish all naked flames and open all windows and doors wide to disperse the gas. Do not use the telephone or operate any electrical switches. If the gas leak is serious, leave the premises at once and notify your neighbours to evacuate, but do not press any doorbells. Leave the building by the stairs, dial 999 and notify the Fire Services Department. The emergency rescuers will handle the case.


For further information on gas installations, please contact the relevant gas contractor, call the Citizen's Easy Link 1823 or browse EMSD's website: <http://www.emsd.gov.hk>

Seminars on Guidance Notes on Application for Restaurant Licences




The Food and Environmental Hygiene Department will organise seminars every two months at town halls in different districts, with the aim of informing all restaurant licence applicants of the requirements of various government departments for application for restaurant licences. The attendees can also communicate direct with the speakers during the final question and answer session. The Electrical and Mechanical Services Department has taken part in this event, during which our staff disseminated the messages on gas safety and briefed the audience on relevant legislation and technical requirements for gas installations. The topics covered included the following:

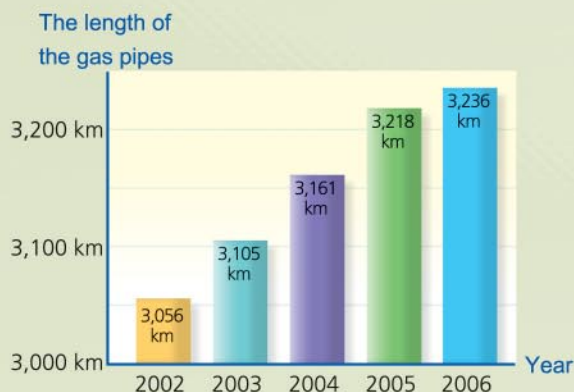
- The *Gas Safety Ordinance*, various codes of practice and safety guidelines;
- Inspection of gas installations and related ventilation/exhaust systems in restaurants;
- Engagement of registered gas contractors;
- Use of the services provided by approved LPG distributors; and
- Use of approved gas appliances.

We hope restaurant operators can use gas installations safely so that maximum energy efficiency can be achieved and a safe working environment be maintained, thereby reducing the number of gas accidents. 



Gas Statistics

Over the past few years, the length of the gas pipes laid in Hong Kong increases steadily. The following are statistics on such an increase since 2002. 



Contact Information

Name: _____

RGI No.: _____

Employer (RGC): _____

Contact Tel. No.: _____

Address: _____

Construction Workers Registration Authority Tells You

The Construction Workers Registration Authority plans to implement the prohibition provisions of the *Construction Workers Registration Ordinance* on 1 September 2007, i.e. unregistered construction workers shall not carry out construction work on construction sites and no person shall employ them. If you are registered as a gas installer in accordance with Regulation 7(1)(a) of the *Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations* (Cap. 51D), please visit any one of the Construction Workers Registration Offices to apply for registration as a Skilled Worker of the Gas Installer Trade (Trade Code: E375).

Registered Skilled Workers of the Gas Installer Trade may personally install, commission, maintain and repair gas appliances, gas fittings, and gas flow control and meters connected to gas cylinders or gas supply points on construction sites.

Should you have any enquiries, please call the Registration Head Offices on 2873 1911 or browse www.cwra.org.hk.



Acknowledgement

To increase the awareness of the public, in particular the children, about electrical and mechanical safety, gas safety and energy efficiency, the EMSD has been using popular comic characters in its safety promotion publications. Recently, the "Mighty Media Co. Ltd." has consented to allow the comic characters of the "Sergeant Keroro" to become members of the EMSD, which means that the EMSD can use these comic characters in our publications for safety promotion purposes. We would like to express our gratitude to the "Mighty Media Co. Ltd".



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