S SAFETY Bulletin

Message from the Editor

Greetings to our dear readers. This issue of the Gas Safety Bulletin carries a feature on how to apply for construction and use approvals of notifiable gas installations. Legal tips on gas safety, as well as regulations requiring the attention of registered gas contractors, are also included. Readers will also find in this issue gas incident and prosecution statistics from January to October 2013.

How to Apply for Construction and Use Approvals of Notifiable Gas Installations



Notifiable Gas Installations

s defined in the Gas Safety Ordinance (Cap. 51 of the Laws of Hong Kong), a notifiable gas installation (NGI) means any liquefied petroleum gas, natural gas or town gas installations which are, or consist of, or involve the use of:

- 1. Terminals for the importation of gas;
- 2. Works for the manufacture of town gas, substitute natural gas or synthetic natural gas;
- 3. Gasholders, including the pressure-raising and control equipment used in connection therewith;
- 4. High pressure gas mains or service pipes;
- 5. Pressure-regulating installations which are supplied with gas from an intermediate or high pressure gas main or service pipe, but excluding any installation whose volumetric capacity is less than 30 standard cubic metres per hour;
- Stores containing LPG (see the list on the right), including, where such gas is supplied to consumers by pipes from such stores, any outlet pipework, vaporisers and pressure-regulating installations used in connection therewith; or
- 7. Any process which involves the transfer of LPG in liquid form from one container (other than a disposable cylinder) to another container, but excluding the transfer of such gas in such form from a ship or road tanker into a tank or road tanker.



"Store" means any place where the following is kept:

- i. A gasholder which contains or has contained town gas or natural gas;
- ii. A container which contains or has contained LPG and has a facility for withdrawing such gas in liquid form where such gas is, or is to be, supplied to consumers by gas pipes from such a container; or
- iii. Any container which contains or has contained LPG whose aggregated nominal water capacity is more than 130 litres.

Construction and Use Approvals

Any person who wishes to construct or subsequently use an NGI should obtain approval from the Gas Authority, i.e. Director of Electrical and Mechanical Services, prior to its construction (which also covers modification works) and use. Please refer to regulations 3 to 6 of the Gas Safety (Gas Supply) Regulations for the requirements.

How to Apply

Application for construction (which also covers modification works) or use approval of an NGI should be submitted in writing to the Gas Authority by hand or by

registered mail together with the relevant information and two copies of plans/drawings (for construction approval only) relating to the installation, with the application fee as prescribed to the Gas Authority, Gas Standards Office, Electrical and Mechanical Services Department.

Enquiries

For enquiries, please contact the Gas Standards Office on telephone 28083683 or fax 25765945, or visit the EMSD website at www.emsd.gov.hk. ^

Case Sharing

Functions and Powers of a Gas Safety Inspector

ccording to sections 11 to 13 of the Gas Safety Ordinance, the functions and powers conferred on a gas safety inspector include:

(1) enter, inspect and examine any place in which any gas is manufactured, stored, supplied or used; (2) seize, remove and detain anything in respect of which any offence against the Ordinance has been committed, or likely to be, or to contain, evidence of any such offence; and (3) issue improvement notices to persons who have contravened the Gas Safety Ordinance, etc. The question is, what consequence will a person face if he/she wilfully obstructs, resists or delays a gas safety inspector in performing these functions?

According to our case records, there was a case in which a number of unattended LPG cylinders were found during an inspection. Since an excessive quantity was stored, the gas safety inspector exercised his power under section 12(1)(e) of the Gas Safety Ordinance to seize those cylinders. While the matter was being handled, a person approached and interfered with the gas safety inspector as he was carrying out his enforcement action, and wilfully snatched away those cylinders.

EMSD subsequently initiated prosecution against that person for, among other things, contravention of section 27(5)(a) of the Gas Safety Ordinance, i.e., wilfully obstructing and resisting a gas safety inspector in the performance of his functions under the Ordinance. The person in question was later convicted by the court.

By sharing this case, we would like to urge you to assist gas safety inspectors when they perform their functions in accordance with the Ordinance.

Improvement Notices

Cection 13 of the Gas Safety Ordinance empowers the Gas Authority to issue an improvement notice requiring a person who has contravened the Ordinance to take remedial measures against the contravention within a specified period. Any person who contravenes any direction specified in an improvement notice commits an offence and is liable on conviction to a maximum fine of \$25,000 and imprisonment for 6 months and, in the case of continuing offence, to a daily penalty of \$2,000.

In addition, the Gas Authority may exercise the power conferred upon him under section 13A of the Ordinance and take the following measures against any person who fails to comply with the directions in an improvement notice:

With or without serving notice to the person in question, the Gas Authority may take such measures as he deems reasonable and necessary in the interests of safety.

Enter the work site to which the improvement notice relates; and remove by force any person obstructing the Authority in the enforcement of those measures.

Recover the cost of any measures taken from the person who has failed to comply with the improvement notice.

If the party on whom an improvement notice is served is aggrieved by any direction(s) contained therein, he/she may appeal to the appeal board in accordance with the procedures specified in section 13(4).

In fact, if you comply with the requirements stipulated in the Gas Safety Ordinance and the codes of practice, and observe gas safety at all times, you need not worry about the prospect of being served the improvement notice or prosecuted. A



Knowledge

Gas Safety on

Hot-pot Gas Appliances

Use Hot-pot Gas Appliances Safely

Always follow the instructions in the manual that comes with the hot-pot gas appliance. Keep flammable materials away from the gas flame and do not leave the appliance switched on unattended. It is recommended that routine check/maintenance should be conducted at least once a year by a registered gas installer. Do not use the gas appliance and arrange for immediate repair if inadequate ventilation, gas leak or faulty equipment is suspected.

Cooking gas appliances equipped with flame failure device (FFD) should be chosen because FFD is a protective device built into a cooker or oven, which shuts off the gas supply when flame presence is no longer detected, as in cooking flame being accidentally extinguished by sudden draught or boiling over of liquid. FFD helps to avoid gas leaks and gas incidents.

All the installation and replacement works of gas appliances must be carried out by registered gas installers employed by registered gas contractors. Registered gas contractors must display a certificate and a sign at their place of business, and registered gas installers employed by them must carry a registration card when performing gas installation works. After completion of works, the registered gas contractor should provide the customer with a work record listing the details of works done, date, time and the name and registration number of the registered gas installer. The work record can be used for future reference.

Safety of Hot-pot Gas Appliances Using Disposable LPG Cylinders

Disposable LPG cylinders used in Hong Kong should be of a type approved by the Gas Authority in accordance with the Gas Safety (Gas Supply) Regulations. For commercial premises such as general restaurants, the operators should strictly observe the instructions and warning notice on the cylinder surface, ensure storage of disposable LPG cartridges in a dry, cool and well-ventilated location and keep cartridges away from flame and heat. Never refill a disposable LPG cylinder.

Safety Precautions in Using Cassette Cookers

- Follow the instructions on the cartridge surface;
- Place the cartridge with the cartridge guide in an upright position;
- Do not use two cassette cookers which are parallel to one another:
- Never fit/remove cartridge near naked flame or heat source;
- Use the cassette cooker in a well-ventilated area and away from flammable materials.

Safe Storage and Use of LPG Culinders

Unless specifically approved in accordance with the Gas Safety Ordinance, storing LPG cylinders (including empty cylinders) with a total nominal water capacity of over 130 litres (approximately 50 kg) at any time is an offence.

The maximum number of LPG cylinders that may be stored is listed in the following table:

	Nominal LPG Weight (kg)	Maximum Number of LPG Cylinders
Disposable LPG Cartridge	0.25	236
Shell / Sinopec / Esso / Mobil	2	27
Shell / Esso	8	7
Shell / Sinopec / Concord	10.5	5
Shell	13 . 5	4
Shell / Mobil	15	3
Esso / Mobil / Sinopec / Concord	16	3
Mobil	21	2
Esso	22	2

* The maximum number of LPG cartridges that may be stored is 236. However, for the sake of fire safety, it is recommended that the quantity should not exceed 50 cartridges.

LPG cylinders must be handled with care to avoid damage, stored upright in a well-ventilated location away from heat and flame, and not be stored in a basement or close to drains. LPG rubber tubing and pressure regulator should be checked regularly for any possible damage. The pressure regulator must be switched off after use. Rubber tubing should be replaced every 3 years by a registered gas installer. All flexible gas tubing used should be of a type approved by the Gas Authority. Its length should be kept to a minimum, in any case not exceeding two metres. Used cylinders should be returned to the gas distributor as soon as possible and not be left unattended in a public place.

Further information is obtainable from your gas supply company or the Electrical and Mechanical Services Department at 1823. \triangle

Government Encourages More LDG Filling Stations

o incrementally expand Hong Kong's LPG filling station network, the Government will require the land users to also provide LPG filling facilities at all sites granted for petrol filling stations in future, provided the sites can satisfy LPG filling station safety requirements.

Under the Gas Safety Ordinance (Cap. 51), a LPG filling station/facility is classified as a notifiable gas installation and a Quantitative Risk Assessment Report is required to ascertain that the risk level it poses is acceptable in accordance with the Government Risk Guidelines referred to in Section 4.4 of Chapter 12 of the Hong Kong Planning Standards and Guidelines.

In general, such gas filling stations are subject to more stringent requirements than petrol filling stations without LPG filling facilities. While the suitability for incorporation of LPG filling facilities in petrol filling stations is subject to its distances from other land uses and the results of Quantitative Risk Assessment, the following distances apply as a general rule:

High-rise residential/educational/ hospital:	55m
Commercial/recreational/industrial:	15m
Low density residential/incidental dwellings (sporadic dwellings spread over a large area):	15m





With regard to the site selection study for gas filling stations, EMSD provides ongoing technical advice to the Environment Bureau, the Planning Department, the Lands Department and the Transport Department for their reference in conducting preliminary feasibility studies. After a site has been selected, the contract will be formally awarded to a gas supplier through tendering procedures. According to regulation 5 of the Gas Safety (Gas Supply) Regulations, the gas supplier should make an application for construction of a notifiable gas installation (NGI) and submit the relevant plans and required documents to EMSD for construction approval of the NGI. The gas supplier should conduct the construction works in accordance with the plans and information as required in the approval notice served by EMSD. After completion of works, the gas supplier should make an application to EMSD for approval of use of the NGI under regulation 6 of the Gas Safety (Gas Supply) Regulations. The LPG gas filling station may commence operation after use approval has been obtained from EMSD. A

etters were sent via registered mail to all registered gas installers on 9 July 2012 and 14 June 2013 and all registered gas contractors on 14 June 2013, reminding them of the requirement under regulation 11 of the Gas Safety (Registration of Gas Installers and Gas Contractors) Regulations that any registered gas installer who changes his name or address for service by post specified in his application under regulation 5 after registration as a gas installer must notify the Gas Authority in writing of such change not later than 21 days after such change takes place. Any registered gas installer who, without reasonable excuse, contravenes regulation 11 commits an offence and is liable on conviction to a fine of \$1,000.

As some of the mails were returned undelivered, we have reasons to believe that some registered gas installers could have already contravened the above legal requirement. To deal with this situation, we shall consider taking disciplinary action, including temporary suspension of registration, against the registered gas installers in question in accordance with the Regulations. To avoid contravening the above regulation and being subject to our disciplinary action, the parties concerned should contact us in writing and update their postal addresses as soon as possible. \Lambda







