


GAS SAFETY Bulletin



Message from the Editor

Hello, everyone! This issue of Gas Safety Bulletin features tips on the safety of gas installations at restaurants and food preparation establishments, regulation of safe operation of liquefied petroleum gas terminals on Tsing Yi and the new "single-card-multiple-use" arrangements for Construction Workers Registration Cards. Readers will also find legal knowledge about gas safety, as well as gas incident and prosecution statistics by type of cases in the first half of 2017 for reference.

Tips on the Safety of Gas Installations at Restaurants and Food Preparation Establishments

Hong Kong has long been hailed as a gourmet paradise offering a wide selection of cuisines from around the world. A multitude of food premises, ranging from exquisite food stalls to premium dining restaurants, can be found in all corners of the territory. When we are enjoying delectable dishes, crews of busy chefs are working in hot kitchens.

Industrial and commercial kitchens as well as food preparation establishments are equipped with different types of gas installations. Failure to conduct regular safety inspection and maintenance for these installations not only poses safety hazards to users, but may also cause casualties and property loss to restaurant patrons or even passers-by in case of incidents. The recent incident of gas explosion in the kitchen of a restaurant in To Kwa Wan, in particular, has aroused public concern about the safety of gas installations in commercial kitchens. Therefore, the persons-in-charge of industrial and commercial kitchens as well as food preparation establishments should ensure that their gas installations are kept in safe working order at all times. For the prevention of accidents, the persons-in-charge and their employees should take up the responsibility for safety management and pay attention to the following points:

Points to Note for Persons-in-charge of Food Premises

- Arrange for a registered gas contractor to carry out gas installation work;
- Select gas appliances that meet the safety standards, including those fitted with flame failure devices and

automatic ignition systems. If the appliance is connected to low pressure flexible gas tubing, it should be of the type as approved by the Electrical and Mechanical Services Department (EMSD);


- Arrange for a registered gas contractor to carry out timely maintenance and replacement of gas installations as well as safety inspection once every 12 months;
- Keep the manual of the gas installation and the records of safety inspection and gas installation work of not less than two years;
- Arrange training to teach employees how to properly use gas installations and remind them of the air quality at workplaces and relevant stipulations;
- Ensure that detailed and clear user instructions on safe use of gas installations are affixed to all gas installations in the kitchen.

Points to Note for Persons-in-charge and Employees of Food Premises

- Be clear about the location of the "emergency control valve" so as to ensure that the gas supply can be cut off immediately when an accident occurs;
- Keep the kitchen well ventilated. If the kitchen is fitted with a mechanical exhaust system, ensure that the fresh air supply system and exhaust system in the kitchen operate normally. Moreover, ensure that the gas appliance connected to the mechanical exhaust system has been fitted with an interlocking device and is in good working order;



- Make sure that the gas control valve of the appliance has been switched off before turning on the main gas supply valve;
- Ignite the gas appliance with a proper tool. After turning on the gas supply valve, light the fire immediately so as to avoid accumulation of excessive gas around the burner. If the flames go out automatically, stop using the appliance immediately and notify the registered gas contractor concerned for follow-up action;
- Before getting off work, switch off the gas control valve of the appliance and then turn off the main gas supply valve;
- Clean and maintain the gas appliance regularly so as to avoid the accumulation of food scraps and coagulated fat on it, which may affect its safe operation;

- Inspect the flexible gas tubing regularly so as to check whether it is damaged or has reached the end of its service life, and whether the gas tubing connection joint has come loose. If necessary, immediately arrange for a registered gas contractor to carry out replacement or repair work. 



Ensuring Safe Operation of the Liquefied Petroleum Gas Terminals in Tsing Yi

Background

Liquefied Petroleum Gas (LPG) is imported into Hong Kong mainly by sea and stored at the five terminals in Tsing Yi before being distributed to various customers, which include 430 000 domestic, industrial and commercial users, as well as 66 LPG filling stations for LPG vehicles.

Ensure Safe Operation

The EMSD regulates gas supply companies in accordance with the Gas Safety (Registration of Gas Supply Companies) Regulations. It shall be the duty of every registered gas supply company to ensure, in carrying on its business, the health and safety at work of all its employees and to conduct its operations in a safe manner so that members of the public are not exposed to undue risks from gas. Every registered gas supply company shall also submit to EMSD a written statement of its general policy with respect to the health and safety at work of its employees, as well as the organisation and arrangements for the time being in force for carrying out that policy.


The EMSD carries out annual performance assessment for registered gas supply companies in respect of the contents of the written statement and the conditions of registration. Regular safety reports submitted by registered gas supply companies will also be examined to ensure that the terminals operate in a safe manner and that an effective safety

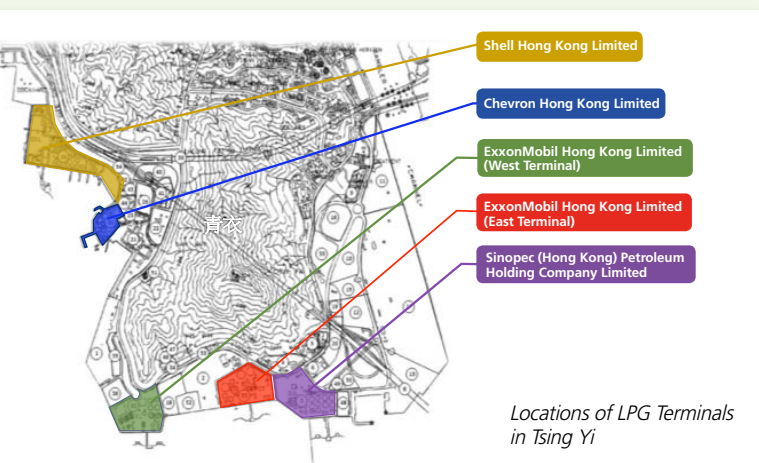
management system is in place to protect the safety of their employees and the general public.

Conduct Regular Inspection and Maintain Communication

In order to prevent fire, explosion or other hazards arising from the installations, owners of LPG terminals (i.e. registered gas supply companies) shall carry out inspections and maintenance so as to maintain and operate the installations in a safe condition. The EMSD conducts regular gas safety inspections at LPG terminals to ensure that the installations are maintained and operated in accordance with relevant procedures and guidelines. The EMSD also meets regularly with the senior management of registered gas supply companies to review the overall effectiveness of their safety management systems and enhance communication.

Reporting of Major Gas Emergencies

In accordance with regulation 15 of the Gas Safety (Registration of Gas Supply Companies) Regulations, where there is a major gas emergency, the registered gas supply company concerned shall forthwith after it becomes aware of the emergency, report the emergency to EMSD but, in any case, not later than the next working day after the day on which the emergency occurred. In this connection, EMSD has refined the reporting mechanism with registered gas supply companies, under which they shall report to EMSD on such information and details in relation to the emergency as soon as practicable. According to the past experience, reports can normally be made within a few hours. Furthermore, the registered gas supply company concerned shall, not later than 28 days after the day on which the emergency occurred, furnish EMSD with a written report stating the cause of the emergency as well as the actions which are or have been implemented and the improvement measures proposed to prevent the recurrence of any similar emergency. 



Locations of LPG Terminals in Tsing Yi

LPG Terminals in Tsing Yi



New "Single-card-multiple-use" Arrangements for Construction Workers Registration Cards

Starting from late November 2017, the Construction Workers Registration Cards (CWR Cards) issued by the Construction Industry Council (CIC) will show other registration qualifications of cardholders according to their preference, including the registration qualification of registered gas installers as stipulated in the Gas Safety Ordinance (Cap. 51). If a cardholder opts for showing this registration qualification, his CWR Card is equivalent to the registration card currently issued by EMSD to registered gas installers.

The layout of the new CWR Card is as follows:



Members of the public may access or verify the information of a registered gas installer on a CWR Card by the following means:

1. Access the webpage of CIC's database by scanning the QR code on the CWR Card;
2. Browse the website of CIC as shown on the CWR Card and then key in the registration number of the cardholder to search for the relevant information; or
3. Call EMSD at 2808 3683 during office hours or browse the following website to check the classes of work in respect of which the registered gas installer has registered and the latest status of the registration:

EMSD's website (www.emsd.gov.hk) > Gas Safety > Registers > Registered Gas Installers

http://www.emsd.gov.hk/en/gas_safety/register/register_gas_installers_search/index.html

Cardholders are responsible for explaining to the public the new arrangements and the above-mentioned means of accessing or verifying information. If requested by the public to produce registration cards currently issued by EMSD in accordance with the Gas Safety Ordinance, cardholders are advised to act correspondingly.

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Safety Requirements for LPG Vaporisers

According to the interpretation of the Gas Safety (Gas Supply) Regulations (Cap. 51B), vaporiser means any equipment used, or to be used, to provide heat for the vaporisation of LPG. There are two types of vaporisers, namely direct-fired vaporiser and non-direct-fired vaporiser. Direct-fired vaporiser (Figure 1) means a vaporiser which burns LPG or other fuel to provide heat directly to that part of the vaporiser through which LPG flows. Non-direct-fired vaporiser (Figure 2) makes use of hot water as a medium to heat and vaporise LPG flowing through the vaporiser tube in a hot water chamber.

According to regulation 13 of the Gas Safety (Gas Supply) Regulations, no person shall use any vaporiser to vaporise LPG unless shut-off valves have been fitted to each liquid or vapour line between the vaporiser and the container for which it is provided. Besides, according to regulation 14 of the Gas Safety (Gas Supply) Regulations, the owner of a direct-fired vaporiser shall not use the vaporiser to vaporise LPG unless the vaporiser has been tested and examined not less than once by a competent person within the 12 months period immediately preceding such use to ascertain whether

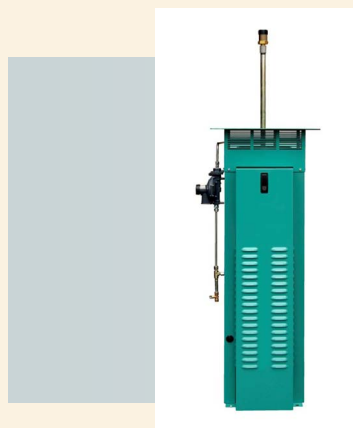


Figure 1: Direct-fired vaporiser



Figure 2: Non-direct-fired vaporiser

the vaporiser is safe to be so used. The same requirement applies to non-direct-fired vaporiser but the testing and examination shall take place within the five years immediately preceding such use. The owner of a vaporiser shall keep a written record of the results of any test and examination carried out on the vaporiser until the vaporiser ceases to be used to vaporise LPG.




Legal Knowledge

Points to Note for Gas Distributors on Carrying LPG Cylinders

According to regulation 25(2) of the Gas Safety (Gas Supply) Regulations, no person shall use a motor vehicle to carry on a road any combination of liquefied petroleum gas (LPG) cylinders which have a combined water capacity of more than 130 litres unless the vehicle is a cylinder wagon and there is a valid permit issued in respect of the wagon.


In addition, regulation 11 of the Gas Safety (Registration of Gas Supply Companies) Regulations stipulates that any person (including gas distributors) must first obtain the approval in writing from a registered gas supply company

before he is allowed to carry LPG cylinders manufactured by such company. Besides, regulation 12 of the Gas Safety (Registration of Gas Supply Companies) Regulations also states that when a gas distributor carries LPG cylinders using a cylinder wagon, the LPG cylinders being carried on the wagon must be those provided by a registered gas supply company for which he is a gas distributor, or another gas distributor for such company. Any gas distributor who, without reasonable excuse, contravenes regulation 12 commits an offence and is liable on conviction to a maximum fine of \$10,000 and, in the case of a continuing offence, to a daily penalty of \$1,000. 

Guidance Notes on Repair and Maintenance of LPG Vehicles – The table below illustrates the relationships among suitable persons and venues for repair and maintenance of LPG vehicles

Suitable Persons		Repair & Maintenance Process		Suitable Venues
General Vehicle Mechanic	⇒	Work not involving repair and maintenance of LPG vehicle fuel system or associated components (such as replacement of tyre, indicator light, lubricant and repair of vehicle body or vehicle engine, etc.)	⇐	General Vehicle Maintenance Workshop
Competent Person (Class 6) or under his supervision	⇒	Work involving the repair, maintenance or replacement of LPG vehicle fuel system or associated components (including vaporiser, LPG fuel pipe, pressure regulator, mixer) and replacement of LPG fuel tank	⇐	LPG Vehicle Fuel System Maintenance Workshops with Blue Identification Signage*
			⇐	LPG Vehicle Fuel System Maintenance Workshops with Red Identification Signage#
Competent Person (Class 1) or under his supervision	⇒	Work involving the structure or internal components or external components of an LPG fuel tank (including replacement of fuel pump inside the tank and associated components, pneumatic leak test of fuel tank and five-yearly revalidation of fuel tank)	⇐	LPG Fuel Tank Workshop

* LPG Vehicle Fuel System Maintenance Workshops with Blue Identification Signage are vehicle maintenance workshops that are only allowed to store LPG with an aggregated nominal water capacity of not more than 130 litres (i.e. can store one LPG fuel tank only)

LPG Vehicle Fuel System Maintenance Workshops with Red Identification Signage are vehicle maintenance workshops with approved notifiable gas installation that can store LPG with an aggregated nominal water capacity of more than 130 litres (i.e. can store more than one LPG fuel tank) 

Scan the QR codes below for other relevant information



List of Competent Persons (Class 1)



List of Competent Persons (Class 6)



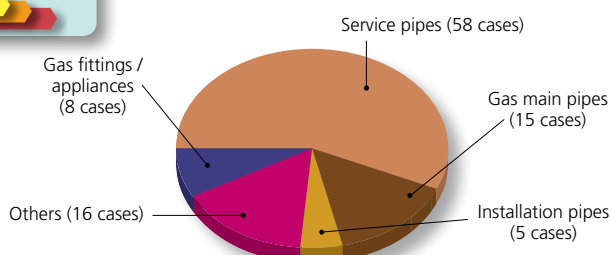
List of LPG Vehicle Fuel System Maintenance Workshops with Identification Signage



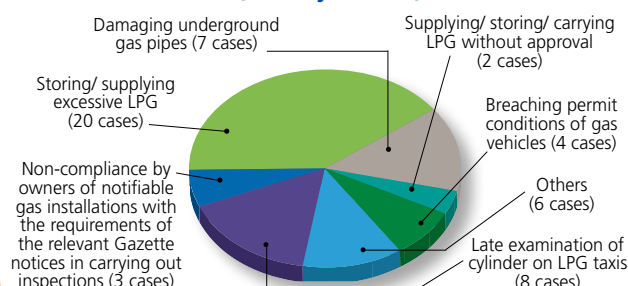
Other Booklets on Repair and Maintenance of LPG Vehicles

Gas Incident and Prosecution Statistics

Gas Incidents by Type in 2017 (January to June)



Prosecutions by Type for Gas-related Cases in 2017 (January to June)



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