

GAS SAFETY Bulletin

ISSUE 34

August 2022

Best Practices of
Operation and Maintenance

e-Services

Voluntary Continuing
Professional Development Scheme for RGI



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機電工程署
EMSD



Message from the Editor



Hello, everyone! In this issue of the Gas Safety Bulletin, we will talk about the latest developments in the gas industry and new initiatives introduced by the Electrical and Mechanical Services Department (EMSD). To align with the Government's efforts in promoting the electronic public service, the Gas Standards Office has now provided the electronic version of all of its 27 application forms and launched a brand-new Gas Installer Electronic Registration Card. Moreover, in the coming year, we will introduce a Voluntary Continuing Professional Development Scheme for Registered Gas Installers to further promote the culture of continuing education among workers in the gas industry.

In addition, we have also compiled a handbook on the best practices of operation and maintenance of gas utilisation facilities to provide exemplary practices for liquefied petroleum gas (LPG) vehicle mechanics and registered gas installers of commercial gas appliances so as to further enhance the safety performance of gas installations.

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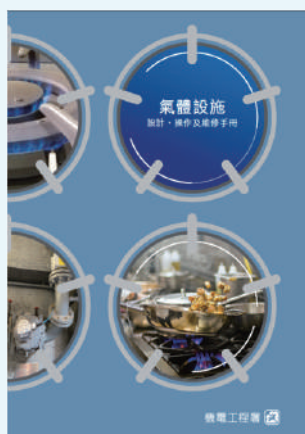


Best Practices of Operation and Maintenance: Handbook on Design, Operation and Maintenance of Gas Utilisation Facilities and Best Practices for Maintenance of Fuel System of Liquefied Petroleum Gas Vehicles

To enhance quality management of electrical and mechanical (E&M) installations in the E&M industry, the EMSD has published eight booklets and handbooks on the best practices of operation and maintenance in various E&M areas (including heating, ventilation and air conditioning (HVAC) installations, lift and escalator installations, electrical installations, fire service installations, solar photovoltaic systems, solar water heating systems, gas utilisation facilities and fuel system of LPG vehicles) for reference of the trade, owners and management professionals of the installations/facilities/vehicles, clients and other stakeholders.



Fuel System of Liquefied Petroleum Gas Vehicles



Gas Utilisation Facilities

Two of the publications, namely Handbook on Design, Operation and Maintenance of Gas Utilisation Facilities and Best Practices for Maintenance of Fuel System of LPG Vehicles, provide the trade with relevant information and tips on gas installation work and maintenance of fuel system of LPG vehicles and set out “General Practices” / “Basic Requirements” and “Best Practices” for reference of the trade.

“General Practices” / “Basic Requirements” refer to requirements that must be met in fulfilling statutory requirements and guidelines as well as aligning common practices in the trade, while “Best Practices” refer to a range of exemplary practices and innovative technologies which are identified and referred to at the time of preparation and revision of the handbooks. We encourage members of the gas trade to adopt the “Best Practices” so as to further enhance the level of operational safety regarding gas installations and maintenance works of fuel system of LPG vehicles.

The handbooks have been uploaded onto the EMSD website and EMSD mobile application for public reference. Here are the link and the QR code:

- **Online versions of the EMSD’s handbooks on the best practices of operation and maintenance:**
<https://bestpractice.emsd.gov.hk/en/>



For enquiries about the contents of the handbooks, please email to gasso@emsd.gov.hk.

Online Application for Registration

The Gas Standards Office has now provided online application services for registration to facilitate the submission by the gas industry. 27 application forms as listed below for 11 registration items are covered:

Form 1	New Application for Registration as a Gas Installer / Application for Change of Class of Registration for Registered Gas Installer / Application for Replacement of Lost / Destroyed Registered Gas Installer Card
Form 101	Application to Become a Competent Person
Form 103	Application to Become a Gas Systems Contractor for LPG Compounds, Cylinder Stores And Mains
Form 104	Application for Construction Approval of Notifiable Gas Installation
Form 105	Application for Approval of Use of Notifiable Gas Installation
Form 106	Report of Testing and Examination of LPG Tank
Form 107	Report of Testing and Examination of LPG Vaporiser
Form 108	Report of Testing and Examination of LPG Pipes
Form 109	Report of Annual Inspection of LPG Storage Installation
Form 109A	Annual Inspection Report of LPG Filling Station
Form 109B	Annual Inspection Report of NGI LPG Vehicle Maintenance Workshop
Form 110	Application for Approval of Container
Form 112	Application for Road Tanker Permit to Convey Liquefied Petroleum Gas In Bulk
Form 113	Record of Competent Person Employed On LPG Road Tankers
Form 114	Annual Record Update For Competent Person Employed on LPG Road Tanker
Form 2	New Application for Registration as a Gas Contractor/Application for Replacement of Lost / Destroyed Registered Gas Contractor Certificate
Form 201	Application For Registered Gas Supply Company / Change of Gas Business / Change of Company Particulars / Replacement of Certificate of Registration
Form 3	New Application / Renewal for Permit for Conveyance of LPG Cylinders on Gas Vehicle
Form BISA	Blue Identification Signage Application
Form GS4/01	Test and Examination Report of LPG Fuel Tanks for LPG Vehicles
Form GS4/02	LPG Vehicle Fuel Tanks Detachment/Replacement Form
Form GU01	Approval of Flexible Gas Tubings For Low Pressure Applications
Form GU05-01&02	Approval of Domestic Gas Appliance
Form GU05-03	Declaration on Local Quality Assurance Inspection
Form GU15	Flexible Gas Tubing For Commercial Applications
Form GU18	Application for Listing of LPG Lighter (New and Renewal)
Form VFTSC	Certificate for Scrapping LPG Fuel Tank



Applicants can submit their applications and supporting documents in e-format through “EMSD (Regulatory Services) Web Based Registration Services” and “ 智方便” mobile app, and digitally sign their submissions with “iAM Smart”.

<https://wbrs.emsd.gov.hk/wbrs/#/>



Gas Safety Briefing



The gas safety briefing 2021 had been successfully held on 3 December in the lecture theatre of the EMSD Headquarters in Kowloon Bay. Colleagues from the Gas Standards Office joined hands with representatives from the Hong Kong and China Gas Company Limited and the Pro-Act Training and Development Centre of the Vocational Training Council and provided the participants with various detailed information on gas safety. The topics of the seminars included Points to Note and Updated Information for Registered Gas Installers and Registered Gas Contractors, Points to Note for Regular Safety Inspection of Domestic Gas Installations, Measures for Safe Storage and Use of Cylinder Liquefied Petroleum Gas, Smart Cooking in Industrial and Commercial Kitchens, and Guide to Installation Works of Gas Appliances and Case Sharing. Participants could join the briefing on the spot and live broadcast on the web was also available. There was a total of about 200 participants and the response was positive.



Please visit the EMSD website for the contents of the briefing and the details of the answers to the questions raised in the briefing:

https://www.emsd.gov.hk/en/gas_safety/online_learning/gas_safety_seminar_briefing_in_2021/index.html



氣體安全

網上學習

機電工程署於 2021 年為氣體業界提供的氣體安全事項簡介會

2021 年 12 月 3 日 (星期五)

- ▶ 註冊氣體裝置技工及註冊氣體工程承辦商 — 注意事項和最新資訊
[PDF 格式 (3.10MB)]
- ▶ 卓越培訓發展中心 (氣體燃料業)：住宅氣體裝置定期安全檢查注意事項
[PDF 格式 (13.26MB)]
- ▶ 安全存放及使用直裝石油氣的措施
[PDF 格式 (10.27MB)]
- ▶ 煤氣 Towngas：工商業廚房的「精明火」聚會
[PDF 格式 (6.73MB)]
- ▶ 氣體裝置工程學知及獨家分享
[PDF 格式 (3.85MB)]
- ▶ 氣體安全事項簡介會 2021 — 業界理問
[PDF 格式 (256KB)]



Correct Steps to Change Liquefied Petroleum Gas Cylinders for Commercial and Industrial Use

Since LPG is an inflammable substance, extra attention must be paid to ensure safety and prevent gas leakage when changing a LPG cylinder, or serious consequence may be resulted.

LPG cylinders for commercial and industrial use are normally equipped with Prest-O-Lite (POL) Valves and the change of LPG cylinders should as far as possible be carried out by LPG distributors. If the users need to change the LPG cylinders by themselves, they should ask the LPG distributors to demonstrate the correct steps beforehand for the sake of safety.

Key Points to Note



The change of LPG cylinders **should only be done by bare hands without using any tools**. In case of abnormality, the POL valve should be switched off immediately and Registered Gas Contractor should be called to follow up.



- Before changing the LPG cylinder, switch off all gas appliances, put out all sources of ignition in the vicinity and maintain good ventilation.



- Close the cylinder valve completely by turning it clockwise.



- Turn the regulator handwheel clockwise and disconnect the regulator.



- Check the rubber ring of the regulator to ensure that it is not cracked or damaged.



- When connecting a new LPG cylinder, check the inner thread of the cylinder valve and the outer thread of the regulator handwheel to ensure that they are not damaged.



- When reconnecting the regulator to the LPG cylinder, turn the regulator handwheel anticlockwise until tight interlock with the cylinder valve is secured (please bear in mind that no tools should be used).



- After the regulator is securely connected, check to see if the cylinder valve and the regulator are closely connected and ensure that there is no clearance.



- Then open the cylinder valve and instantly apply soapy water at the joint for testing. If the connection is sound, there should be no soap bubbles at the joint.



- Ensure that there is no smell and no leakage or hissing sound from the joint before switch on the gas appliance again.

You may refer to the following leaflet for the procedures for changing LPG cylinders for commercial and industrial use:

https://www.emsd.gov.hk/filemanager/en/content_284/catering_leaflet.pdf



Proper Handling of Liquefied Petroleum Gas Cylinders

LPG cylinders cannot be handled as general waste. Unscrupulous dumping of LPG cylinders in public places, such as on the road or at refuse collection points, does not only cause pollution and affect environmental hygiene, but may also endanger public safety. Disposal of the above said cylinders, whether or not they are housing gaseous content or other materials, is subject to control under the Fixed Penalty (Public Cleanliness and Obstruction) Ordinance (Cap. 570), the Public Cleansing and Prevention of Nuisances Regulation (Cap. 132BK) and the Waste Disposal Ordinance (Cap. 354). Improper disposal will lead to prosecution.

Points to note for disposing LPG cylinders:

- Return the LPG cylinders that have been used or no longer in use to the LPG distributors as soon as possible, or call the 24-hour emergency hotline of the relevant registered gas supply company for collection.

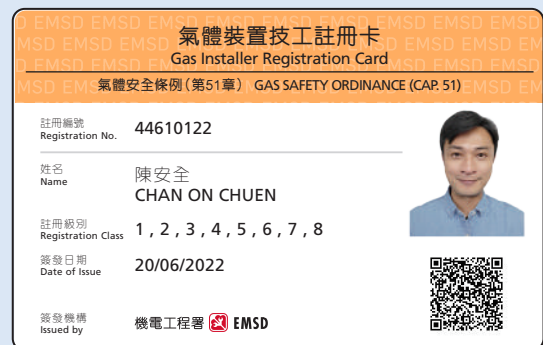


Registered Gas Supply Company		24-hour emergency hotline
The Hong Kong and China Gas Company (Towngas)		2880 6999
ExxonMobil Hong Kong Limited	Esso:	2435 4511
	Mobil:	2495 3518
Chevron Hong Kong Limited	Caltex/Peninsula:	2588 7640
Sinopec (HK) Petroleum Holding Company Limited	Sinopec:	2433 2111
Concord Oil (HK) Limited	Concord:	2333 4215
Rise Smart Industrial Limited	New Ocean:	6672 3328
DSG Energy Limited	Shell LPG:	2322 2000
IP&E GBA Limited	Esso:	2435 4511
	Mobil:	2495 3518

New Registered Gas Installer Card and Electronic Card

Replacement of Registered Gas Installer Card

The Gas Standards Office started issuing new Registered Gas Installer (RGI) Cards on 20 June 2022 and replacing cards for RGIs. The first replacement of RGI Cards is free. RGIs only need to submit a completed application form with two identity photos by email or post.



Please scan the QR code or follow the link below to download the application form:

https://www.emsd.gov.hk/filemanager/tc/content_266/更換新氣體裝置技工註冊卡申請表格.pdf



Electronic Registered Gas Installer Card



From 20 June 2022 onwards, RGIs can log in the EMSD's mobile app "E&M Trade App" by mobile device via "iAM Smart" for inspecting and presenting their digital E&M licence.

Please scan the QR code to watch a video demonstrating the steps:



Please follow the link below or scan the QR code on the right to download the "E&M Trade" app:

https://www.emsd.gov.hk/tc/about_us/mobile_apps/



[E&M Trade App]



[iAM Smart]



Voluntary Continuing Professional Development Scheme for Registered Gas Installers

The EMSD has all along been encouraging E&M practitioners to pursue continuous studies, in order to enhance their professional standards. With reference to the successful experience regarding the existing Continuing Professional Development (CPD) Schemes for various E&M trades, the EMSD is planning to launch a voluntary CPD scheme for gas installers. The industry is supportive of the Scheme and agrees that the Scheme will be able to reinforce the skill level of gas installers and enhance the image of the trade. After discussion, the Gas Safety Advisory Committee has decided to formally launch the Scheme in January 2023. Relevant details will be announced in due course.

January 2023
officially launch



Objectives of CPD scheme

Strengthening
Professional Standards



Enhancing Image
of the Trade



Befitting Industry
Trends



Use of Liquefied Petroleum Gas Cylinder Wagons on the Road and Their Parking Locations



Any person using a motor vehicle to carry LPG cylinder(s) with a water capacity of over 130 litres on a road must use an LPG cylinder wagon issued with a valid permit by the Gas Authority. When using an LPG cylinder wagon, in addition to complying with relevant regulations under the Gas Safety Ordinance, the additional conditions attached to the permit issued by the Gas Authority to LPG cylinder wagons must also be observed. The additional conditions are set out in the issued LPG cylinder wagon permit and include the following rules in respect of the use LPG cylinder wagons on the road and their parking spaces:

- No LPG cylinder wagon laden with LPG cylinder(s) shall enter any enclosed car park or building.
- An LPG cylinder wagon laden with LPG cylinder(s), when engaged in delivery and collection work, may be parked at one same outdoor location for a period not exceeding one hour within any 4-hour duration provided a competent person shall be onboard the cylinder wagon at all times; or may be parked unattended provided the parking location must not be densely populated or congested with traffic and a minimum of 15 metres must be maintained between the said LPG cylinder wagon and any buildings used for assembly, institutional or multiple residential occupancy.
- An LPG cylinder wagon laden with LPG cylinder(s), when not engaged in delivery or collection work, must also be parked at a location which is not densely populated or congested with traffic and a minimum of 15 metres must be maintained between the said LPG cylinder wagon and any buildings used for assembly, institutional or multiple residential occupancy. In case the wagon is in a district where parking sites designated by the Gas Authority are available, the said LPG cylinder wagon shall not be parked in any other locations within the district.



Under regulation 28(3) of the Gas Safety (Gas Supply) Regulations, any person who uses an LPG cylinder wagon in contravention of the conditions specified in the permit issued by the Gas Authority for an LPG cylinder wagon commits an offence and is liable upon conviction to a fine of \$5,000.

Approval and Examination of Liquefied Petroleum Gas Cylinders



According to the Gas Safety Ordinance (Cap 51), an LPG cylinder is a receptacle which has a water capacity of not more than 150 litres used, or to be used, to contain LPG. Regulation 7(1) of the Gas Safety (Gas Supply) Regulation stipulates that a cylinder shall not be used in Hong Kong unless the Gas Authority is satisfied that the cylinder can be used for containing LPG. In this connection, owners of LPG cylinders shall submit the design of LPG cylinders to the Gas Authority for type approval in writing.

All LPG cylinders shall be periodically examined and inspected to ensure compliance with safety requirements. Regulation 8(2) of the Gas Safety (Gas Supply) Regulation stipulates that a LPG cylinder (other than a disposable cylinder) shall not be used to contain LPG unless the cylinder has been tested and examined not less than once in the five years period immediately preceding such use to ascertain whether the cylinder is safe to be so used. Such examination is commonly known as “revalidation”. Owners of LPG cylinders shall appoint Competent Persons (Class 1b) to supervise the “revalidation” and issue test certificates. For details, please refer to the Code of Practice for Hong Kong LPG Industry, Module 9 (LPG Cylinders) published by the Gas Standards Office.

The Code of Practice can be downloaded from the EMSD’s website at :
https://www.emsd.gov.hk/en/gas_safety/publications/codes_of_practice/index.html



Gas Safety

Home > Gas Safety > Publications > Codes of Practice

Codes of Practice

Guidance Notes General

Codes of Practice by Gas Standards Office

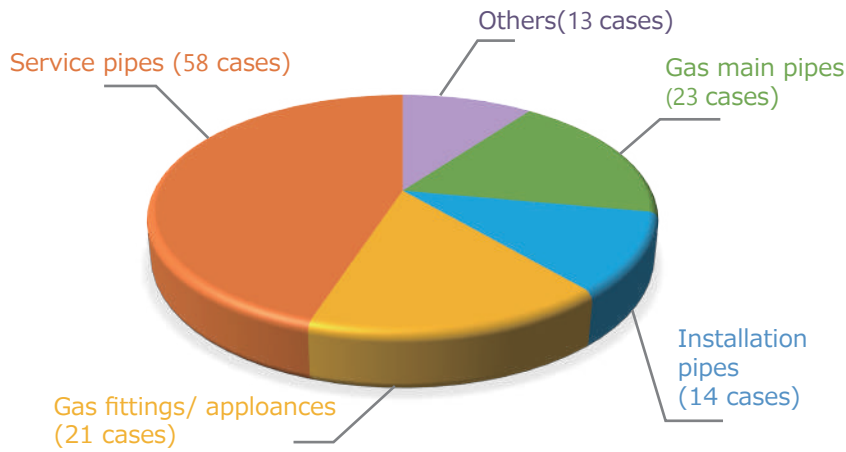
Publication	Type of Information	Price (HK\$)	Availability
1. <i>Avoidance of Damage to Gas Pipes 2nd edition</i> [PDF format (49.5MB)] - Supplementary Information (Registered gas supply companies with fixed gas system in Hong Kong) [PDF format (104KB)]	Code of Practice	Free of Charge	EMSD Website
2. <i>Code of Practice for Hong Kong LPG Industry, Module 1 (Issue 2) - LPG Compounds and Cylinder Stores</i> [PDF format (292KB)]	Code of Practice	Free of Charge	EMSD Website
3. <i>Code of Practice for Hong Kong LPG Industry, Module 2 (Issue 1) - Underground LPG Pipework</i> [PDF format (443KB)]	Code of Practice	Free of Charge	EMSD Website
4. <i>Code of Practice for Hong Kong LPG Industry, Module 3 (Issue 1) - Handling and Transport of LPG in Bulk by Road</i> [PDF format (1289KB)]	Code of Practice	Free of Charge	EMSD Website
5. <i>Code of Practice for Hong Kong LPG Industry, Module 7 (Issue 1) - Operating Procedures for Emergencies for LPG Compounds and Cylinder Stores</i> [PDF format (83KB)]	Code of Practice	Free of Charge	EMSD Website
6. <i>Code of Practice for Hong Kong LPG Industry, Module 9 (Issue 1) - LPG Cylinders</i> [PDF format (155KB)]	Code of Practice	Free of Charge	EMSD Website

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6. [Code of Practice for Hong Kong LPG Industry, Module 9 \(Issue 1\) - LPG Cylinders](#) [PDF format (155KB)]

Gas-related Incident and Prosecution Statistics by Type

**Gas Incidents by Type in 2022
(January to June)**



**Prosecutions by Type for Gas-related Cases in 2022
(January to June)**

