# 認識建築物內 的石油氣管道 **Understand LPG Pipework in Buildings**



2019年8月 Aug 2019

誰可為氣體喉管進行檢查和維修?

Who can carry out inspection and maintenance of gas pipes?

根據《氣體安全條例》(第51章),只有受僱於註冊 氣體工程承辦商的註冊氣體裝置技工才可進行氣體安 裝、檢查及維修工程。機電工程署網站載有註冊氣體 工程承辦商名單。氣體喉管的擁有人可與註冊氣體供 應公司或註冊氣體工程承辦商聯絡,就氣體喉管的狀 況徵詢其意見,以及為老化的喉管制訂維修和更換計 劃,包括目視檢查、整修及重新髹漆或進行更換。此 舉有助氣體喉管的擁有人及早和適時地更換老化的喉 管,以避免出現氣體泄漏的危險。

According to the Gas Safety Ordinance (Cap. 51), only a registered gas installer employed by a registered gas contractor can carry out gas installation, inspection and maintenance works. A list of registered gas contractors is available on the EMSD website. Owners of gas pipes may contact the RGSCs or registered gas contractors to seek their advice on the condition of gas pipes and to establish a maintenance and replacement programme for aged pipes, including visual inspection, reconditioning and repainting or replacement. This can facilitate early and timely replacement of aged pipes by the owners of gas pipes, thus avoiding the hazard of gas leakage.





## **Enquiry**

如需要有關建築物內石油氣管道的進一步資料,請 聯絡你的註冊氣體供應公司、註冊氣體工程承辦商 致電政府熱線 1823 或瀏覽機電工程署網頁:

#### https://www.emsd.gov.hk

For further details of LPG pipework in buildings, please contact your RGSCs, registered gas contractors, call the Government hotline 1823 or visit the EMSD's homepage at

https://www.emsd.gov.hk

## 氣體安全監督 🕙 機電工程署

香港九龍啟成街3號

#### **Gas Authority**

**Electrical and Mechanical Services Department** 

3 Kai Shing Street, Kowloon Bay, Hong Kong.

電話 Tel : 1823 (熱線 Hotline)

傳真 Fax : 2576 5945

網頁 Website : https://www.emsd.gov.hk 電郵 Email : info@emsd.gov.hk







Owners of gas pipes should arrange with the RGSCs to

carry out regular safety inspections in order to ascertain the safe condition of the gas pipes. Gas pipes are

usually attached to the external walls of buildings,

adjacent to other utility pipes. Any continuous water leakage from the utility pipes can cause serious

corrosion of the metallic gas pipes. Owners of

buildings should timely repair their water supply and

drainage pipes to avoid any water dripping on the

gas pipes. Should there be any renovation works





### 為何擁有人應該認識建築物內的石油氣 管道?

Why should owners understand LPG pipework in buildings?

本單張旨在向建築物內的石油氣管道擁有人提供有關石油氣供氣管道的基本知識,並指導他們如何履行責任,把其氣體喉管維持於安全操作狀態,以盡量減少在個別住所及建築物的公用地方出現氣體泄漏的危險。本單張羅列了一些石油氣泄漏的例子和可採取的預防措施,以供參考。

中央石油氣供應系統通常包括從地下至天台的直立式氣體喉管(稱為上給供氣分喉),以及從天台至下層的直立式喉管(稱為下給供氣分喉),通過住所的用戶喉供應石油氣給個別用戶。與其他公用設施管道(例如供水管和排水管)的情況相似,上給供氣分喉和下給供氣分喉大多安裝於建築物外面。至於用戶喉,則通常安裝於住所的牆壁或樓板內,但亦會安裝於外牆外面以方便維修。

This leaflet aims to provide basic knowledge of liquefied petroleum gas (LPG) supply pipework of buildings and guidance to owners of LPG pipes about their duties to maintain their gas pipes in safe working condition, so as to minimise the hazard of gas leakage in their individual premises and common areas of their buildings. Examples are given on how LPG leakage occurs and what preventive measures can be taken for reference.



A centralised LPG supply system usually consists of vertical gas pipes (known as risers) from the ground floor to the roof and vertical pipes (known as downers) from the roof to the lower levels to supply LPG to individual customers through an installation pipe in the premises. Similar to other utility pipes such as water supply pipes and drainage pipes, most of the risers and downers are installed outside the buildings. However, the installation pipes are usually installed inside the walls or floor slabs of the premises, but some may be installed outside the external walls for ease of maintenance.



如何避免氣體在建築物內泄漏的危險? How to avoid the hazard of gas leakage inside buildings?

如住所長期有滲水問題,隱藏於住所混凝土樓板內(特別是在浴室或廚房)的金屬氣體喉管(即用戶喉)及鋼筋可被嚴重銹蝕。混凝土可能會因生銹的金屬膨脹而破裂。由於石油氣比空氣重,石油氣可能會從銹蝕的氣體喉管經由裂縫從上層樓板泄漏至下層。

如下層的浴室或廚房裝有假天花,泄漏的石油氣便可 能積聚在假天花的空間內。當開啟電器(例如照明設 備、抽濕機或抽氣扇)時,所產生的火花可引起火警 或爆炸,結果可能令住戶蒙受財物損毀或身體傷害。

住所擁有人應向其物業管理處查詢,以確定是否有氣體喉管安裝在樓板或牆壁內,以及這些喉管的位置。 若確定樓板或牆壁內藏有氣體喉管,住所擁有人應與計冊氣體供應公司協調,安排在進行定期安全檢查 時,一併檢查假天花空間內有否積聚石油氣。為安全 起見,浴室或廚房的任何假天花均應設有通風百葉, 以避免石油氣積聚的風險。

此外,如住所將進行裝修工程,住所擁有人應檢視氣體用戶喉的狀況,並考慮是否需要更換。



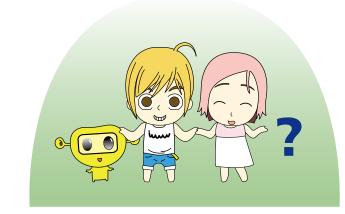
If water seepage problem has sustained for a long period, the metallic gas pipes (i.e. installation pipes) and steel bars concealed in the concrete floor slabs of premises, particularly those in the bathrooms or kitchens, can be seriously corroded. The concrete may be cracked due to expansion of the rusted metal. LPG may leak from the corroded gas pipe via the cracks from the upper floor slab to the lower floor as LPG is heavier than air.

If the lower floor is equipped with false ceiling at the bathroom or kitchen, the leaked LPG may be trapped in the ceiling void. When switching on an electrical appliance such as lighting, dehumidifier or exhaust fan, the generated spark can cause fire or explosion. As a result, the residents may suffer from property damage or personal injury.



Owners of premises should consult their estate management office to ascertain whether any gas pipes are installed in floor slabs or walls and their locations. If there are any concealed gas pipes in floor slabs or walls, owners of premises should co-ordinate with the registered gas supply companies (RGSCs) to check any potential LPG trapped in the ceiling void during regular safety inspections. For the sake of safety, any false ceiling in the bathroom or kitchen should be provided with ventilation louvre to avoid the risk of LPG accumulation.

In addition, owners of premises are recommended to review the condition of the gas installation pipes and consider necessary replacement when there are any renovation works for the premises.



### 如何避免氣體在建築物外面泄漏的危險? How to avoid the hazard of gas leakage outside buildings?

當外露的上給供氣分喉和下給供氣分喉嚴重銹蝕, 石油氣便可能在建築物外面泄漏。如附近有任何火源(例如冷氣機),便可能發生火警或爆炸,並引致 房屋和外牆損毀及居民受傷。

氣體喉管擁有人應與註冊氣體供應公司安排進行定期安全檢查,以確定氣體喉管的狀況安全。氣體喉管通常附連於建築物外牆上,鄰近其他公用設施喉管。如公用設施喉管持續漏水,可導致金屬氣體喉管嚴重銹蝕。建築物擁有人應適時修理其供水管及排水管,以避免有水滴在氣體喉管上。如建築物的外牆進行翻新工程,擁有人應檢視氣體喉管的狀況和安裝位置,並考慮是否需要整修和更換氣體喉管,或盡可能把氣體喉管遷移到遠離公用設施喉管的位置。

LPG leakage can occur outside the buildings when there is serious corrosion of exposed risers and downers. Fire or explosion can occur if there is any ignition source in the vicinity (e.g. air conditioners) and cause damage to the premises and external walls and injuries to residents.

