Site Selection
A comprehensive quantitative risk assessment will have to be conducted for each LPG filling station to ensure the compliance with the Government Risk Guidelines. The requirement of conducting the quantitative risk assessment is in line with the practice of other advanced countries. The study assesses the risk to the population in the vicinity of the proposed installation, taking into account adjacent land uses and developments. It is also a crucial measure to assure the highest safety level to be attained by the LPG filling stations.

Statutory Framework
According to the Gas Safety Ordinance (Chapter 51), LPG filling stations are Noticeable Gas Installations. Their construction and use require prior approval from the Gas Authority, i.e., the Director of Electrical and Mechanical Services. The Gas Authority will examine in detail the design, installation, operation and maintenance of the stations to ensure that they comply with all safety regulations, standards and code of practice. The quantitative risk assessment mentioned above is also a requirement when applying for construction of LPG filling stations. Further, these filling stations have to meet the fire safety requirements as set out by the Fire Services Department.

Safety Training
Staff such as LPG filling operator, LPG road tanker driver and etc. working at the LPG filling station must receive relevant safety training provided by the registered gas supply company to cope with emergency and accidental incidents.
安全措施

Safety Features

The following safety features are implemented in the LPG filling stations. Fail-safe designs are used extensively to ensure that nothing dangerous can happen even under abnormal operating conditions or accidental damage, or if any part of the system goes wrong.

緊急開閉按鈕 – 在石油氣加氣站的不同位置設有緊急開閉按鈕，以便在發生緊急事故如氣體洩漏或火警時開閉整個加氣系統。

Emergency shut-down buttons – Emergency shut-down buttons are provided at different locations of the LPG filling station for shutting down the whole system for emergency such as gas leakage or fire.

火警及消防系統 – 石油氣加氣站內設有噴淋器，覆蓋範圍包括石油氣槽車、液態石油氣裝載區及卸油區以及石油氣加氣站的其他位置，以防火警及消防水滅火。

Water sprinklers – Water sprinklers are installed to cover the fill connection at road tanker unloading point and the floor area of the LPG dispensers to provide automatic fire fighting in case of gas leakage or fire.

氣體探測系統 – 在石油氣加氣站內的不同位置設有氣體探測器，用於監測石油氣的濃度，當石油氣濃度超高造成警報，探測儀會發出警報，而該警報亦會自動傳達給消防局。

Gas detection system – A gas detection system with several detector heads at different locations is installed at the LPG filling station. Alarm will sound and signal will be sent directly to the Fire Services Department in case of gas leakage.

石油氣氣瓶可接受的石油氣容器

Safety relief valve – A safety relief valve is connected to the vapour space of the LPG storage tank, for relieving the excessive pressure in case of fire.

LPG storage tank – The LPG storage tank is designed to international pressure vessel standards. The tank will be installed underground to ensure that the tank is durable and not easy to be damaged.

石油氣氣瓶及石油氣儲存罐的氣體監測

Non-return valves – A non-return valve is installed at the fill-connection of the LPG storage tank, and a double non-return valve is installed at the extinguishing fill-connection to prevent LPG leakage in case of system failure.