Minutes of the 57th Meeting of the Gas Safety Advisory Committee (GSAC)

Date: 12 July 2024 **Time:** 9:30 a.m.

Venue: Room 7102, 7/F, EMSD Headquarters, 3 Kai Shing Street, Hong Kong

Present

Ir POON Kwok-ying, Raymond, JP Chairman

Prof CHAO Yu-hang, Christopher

Ir CHAK Chi-kin, Peter

Ms HA Wing-ka Ir LEE Ho-leung Ms LEE Man-ying Miss LEE Sui-chi Mr LI Tsz-shu

Mr WAN Chee-keung Ms YUNG Ching-yi, Jenny

Ir TSUI Yu-kwok, Samuel Secretary

In Attendance

Ir CHAN Pak-cheung	EMSD
Ir CHOW Hau-keung, Vincent, JP	EMSD
Ir HUI Wing-koon, Joe	EMSD
Ir WONG Lui, Eric	EMSD
Ir YU Siu-pui, Raymond	EMSD
Ir LI Siu-ying	EMSD
Ir WONG Chun-yin, Anson	EMSD

Absent with Apologies

Mr CHOY Chi-tung

11/24 The Chairman welcomed members to the 57th GSAC Meeting. The Secretary briefed members on the mechanism for declaration of interests and reminded members to declare interests in anticipation of potential conflict.

12/24 <u>Confirmation of Minutes of the 56th Meeting</u>

The minutes of the 56th Meeting held on 5 February 2024 were confirmed.

13/24 <u>Publicity Work on Gas Safety</u>

(Minutes reference 04/24 referred.)

- (i) The EMSD reported the publicity activities on gas safety conducted during the period from January to June 2024.
- (ii) The EMSD continued to promote gas safety through social media. Apart from reaching more audiences, the content could also be updated promptly to keep up with the latest issues and concerns of the public.
- (iii) The EMSD promoted gas safety on domestic gas appliances (DGAs) in a TV programme aired on 14 May 2024. The Chairman of the Gas Discipline Advisory Panel of the Hong Kong Institution of Engineers, Ir CHAN Hing-lung, Charles, was invited to share professional advice and gas safety tips, including the purchase of DGAs bearing a "GU" mark, proper use and regular safety inspections (RSIs) of gas installations, as well as urging the public to stop using "energy-saving rings" in the programme. The Chairman of the GSAC expressed gratitude to a member, Ms LEE Man-ying, for arranging a showroom as the shooting venue. Also, the EMSD arranged the display of new posters at public housing estates to promote the proper use of gas water heaters and gas cookers to avoid carbon monoxide (CO) poisoning.
- (iv) In March 2024, the EMSD delivered a gas safety talk to foreign domestic helpers in collaboration with an organisation providing services to migrant workers and ethnic minorities. Regarding the trade stakeholders, the EMSD conducted gas safety talks for registered minor works contractors and gas contractors, property management companies and licensed food premises to raise their awareness of the related statutory requirements.
- (v) In the last meeting, members had suggested carrying out joint promotion campaigns with District Services and Community Care Teams, and the EMSD had agreed with it. With the support of a member, Ms

HA Wing-ka, the EMSD engaged the Fuk Loi Care Team in Tsuen Wan to organise a joint community outreach activity on 15 May 2024. The EMSD provided gas safety tips to the elderly in Fuk Loi Estate in the The Chairman expressed gratitude to Ms HA for her coordination with the Fuk Loi Care Team. The outreach activity was successful in reaching out to the elderly, which is difficult to achieve through traditional publicity methods. In addition, the EMSD collaborated with Ms HA and the Hong Kong Gas and Fuel Practitioners Association in producing a promotional video, urging the public not to use "energy-saving rings" on gas cookers to avoid CO poisoning. The video was uploaded to Ms HA's YouTube channel, which has viewers from various communities. The Chairman noted that the video attracted a large number of views. He thanked Ms HA and the Chairman of the Hong Kong Gas and Fuel Practitioners Association, Mr. WAN Chee-keung, for their efforts in promoting gas safety.

- (vi) The EMSD launched a territory-wide gas safety publicity programme cum survey on gas utilisation in licensed food premises. "Quick Checks" of 653 licensed food premises had been completed before June 2023. In view of the positive feedback and outcome of the "Quick Checks", the EMSD had extended the scheme to include another 621 licensed food premises. As at May 2024, the "Quick Checks" for 408 of these food premises had been completed by the respective gas supply companies.
- (vii) The EMSD stepped up promotion and inspection at the locations which are the subjects of repeated complaints or prosecution cases related to the contravention of LPG cylinder wagon permit conditions. The situation improved significantly after the enhanced operations.
- (viii) The EMSD conducted a comprehensive review of the "Code of Practice for Hong Kong LPG Industry, Module 2 Underground LPG Pipework" with the trade in 2023 for further enhancing gas safety. The new version of the Code (Issue 2) was issued in May 2024. The major updates included new requirements for polyethylene pipework and extra corrosion protection or monitoring measures.

14/24 Routine Inspection, Incident and Prosecution Statistics

(Minutes reference 05/24 referred.)

- (i) The EMSD briefed members on the inspection, incident and prosecution statistics during the period from January to May 2024.
- (ii) The number of routine inspections during the period from January to May 2024 was similar to that in the same period last year. It was anticipated that the number of inspections could reach the annual target at the end of 2024.
- (iii) The number of gas incidents during the period from January to May 2024 had decreased significantly compared proportionally with the number of incidents during the same period last year.
- (iv) The EMSD reported that the number of prosecution cases during the period from January to May 2024 was slightly higher than that of the same period last year, because some cases under investigation in 2023 were being processed by the courts in early 2024. There was also an increase of cases related to the contravention of LPG cylinder wagon In this connection, the EMSD had conducted permit conditions. targeted promotion campaigns and inspections to prevent recurrence of contravention. A member inquired about the major categories of prosecution cases. The EMSD responded the major types of prosecutions were (1) over-storage of LPG cylinders; (2) damage of gas pipes during renovation or construction works without taking all reasonable steps; and (3) the contravention of LPG cylinder wagon permit conditions.

15/24 <u>Enhancing Safety of Gas Supply for Buildings</u>

(i) The EMSD provided members with an overview on the fuel gas supply in Hong Kong in terms of the number of gas accounts using town gas, piped LPG and cylinder LPG. The EMSD also introduced the responsibility for arranging RSIs and proper maintenance of the gas supply system for residential buildings. Registered gas supply companies (RGSCs) would conduct RSIs for gas installations in domestic

premises at an interval of 18 months.

- (ii) In order to address the recent gas incidents related to CO poisoning, the EMSD collaborated with RGSCs to step up safety inspection of gas appliances during RSIs. For room-sealed natural draught gas water heaters, registered gas installers (RGIs) would carry out CO detection and affix a label to the heaters to alert users to maintain good ventilation during operation of the heaters. Moreover, when RGIs identified that users were using "energy-saving rings" on gas cookers, they would request the users to stop using the rings and remove them from the cookers to prevent CO poisoning incidents. Besides, RGSCs would help disseminate EMSD's safety promotion leaflets during RSIs to enhance the safety awareness of gas users, such as promoting avoidance of gas pipe damage inside domestic premises when the unit was undergoing renovation work.
- (iii) RSIs were important in ensuring the safe operation of gas installations in domestic premises, which could help prevent gas incidents. However, there were occasions when RGIs could not enter the premises to conduct RSIs, including (1) no occupants at the premises and (2) occupants not allowing RGIs to enter the premises for inspection. As there were no legal requirements for users to conduct RSIs, the EMSD would liaise with RGSCs to arrange a special scheme to increase the access rate to the premises for RSIs. Since 2015, the EMSD and RGSCs had collaborated with the Hong Kong Housing Authority (HKHA) and Hong Kong Housing Society (HKHS) to launch a scheme to encourage RSIs for "long-time-no-service" gas accounts in public housing estates. The scheme was mainly targeted on gas accounts who had not had RSIs carried out for the past five years, and was implemented in stages for promoting RSI. At the last stage of the scheme, the EMSD, RGSCs, HKHA and HKHS would issue reminder letters to all remaining inaccessible accounts to encourage them to make appointments for RSI. Recently, the Hong Kong and China Gas Company Limited (HKCG) had been installing smart gas meters for new domestic town gas accounts. Apart from the safety function to automatically shut off the gas supply when excess flow or continuous flow of town gas was detected in the premises, the smart meter also had a function to stop the gas supply when the premises had not conducted RSIs for a pre-set time period,

- such as six years. This could be a long-term solution to ensuring RSIs would be arranged for domestic premises.
- (iv) Starting from 2020, the EMSD had collaborated with RGSCs to select target domestic buildings each year by adopting a risk-based approach for stepped-up inspection of ageing gas risers at a 12-month interval. The EMSD would arrange gas safety promotion and closely monitor the work progress of gas riser enhancement. Furthermore, the EMSD introduced the application of the laser methane gas detector in investigating gas leakage incidents to improve the work efficiency. For the HKCG, the riser health analytics system had been used to conduct inspections of gas risers in residential buildings, which could increase the accuracy and minimise human error during inspection and provide repair recommendations to the buildings concerned.

16/24 Latest Hydrogen Development in Hong Kong

(Minutes reference 09/24 referred.)

- (i) Further to the last meeting, the EMSD updated members on the latest hydrogen development. The EMSD shared that the Government announced the Strategy of Hydrogen Development in Hong Kong (the Strategy) on 17 June 2024. A press conference was held on the same day at the Food and Environmental Hygiene Department Nam Cheong Offices and Vehicle Depot. At the event, the first hydrogen fuel cell street washing vehicle introduced by the Government was showcased. The EMSD joined the event and shared with the media the key features and safety devices of the vehicle.
- (ii) Hydrogen energy was regarded as a low-carbon energy with development potential, as the world was striving to phase out fossil fuels and accelerate the energy transition to tackle the challenge of climate change. Hydrogen energy development could help Hong Kong strive towards carbon neutrality, develop new quality productive forces and maintain international competitiveness.
- (iii) To prepare for opportunities presented by the development of hydrogen energy, the Government had set up the Inter-departmental Working Group

on Using Hydrogen as Fuel in 2022. The working group had assisted in formulating interim standards for hydrogen applications in Hong Kong and had given agreement-in-principle to 14 projects, including cross-boundary hydrogen transportation, supply facilities, as well as applications in transport, construction sites in remote areas. The EMSD had formulated interim standards, including the Code of Practice for Hydrogen Fuelled Vehicles and Maintenance Workshops, the Code of Practice for Hydrogen Filling Stations, and the Guidance Note on Quantitative Risk Assessment Study for Hydrogen Installations in Hong Kong. To provide a legal framework applicable to local hydrogen fuel technology applications, the EMSD would amend the Gas Safety Ordinance (Cap. 51), and incorporate the aforementioned guidelines into the legal framework.

- (iv) According to the Strategy, hydrogen had clearer potential for use in areas such as transport as well as electricity supply for mobile machinery in remote areas in Hong Kong. In terms of transport, hydrogen vehicles offered the advantages of zero emission, high energy efficiency, long driving ranges and minimal noise pollution. It would be more appropriate for Hong Kong to focus on exploring the development of more fuel intensive heavy hydrogen vehicles and hydrogen vehicles for cross-boundary passenger and freight services. As regards mobile machinery, the construction industry in Hong Kong had already explored the feasibility of distributed electricity supply using hydrogen to replace traditional diesel generators to supply electricity to offices and machinery at construction sites in remote areas. reference to Mainland's and overseas experience, the use of hydrogen fuelled mobile machinery at the airport, major port facilities and container terminals, as well as large-scale construction sites could be further explored. In terms of low-carbon electricity generation, the power generation sector was exploring the feasibility of adding hydrogen to natural gas for electricity generation in future.
- (v) Moreover, the Government outlined the technical challenges of hydrogen development in the six major areas of "safety", "suitable technologies", "infrastructure", "cost-effectiveness", "capacity building" and "public acceptance", as well as the unique situation of Hong Kong. The Strategy also set out the four major strategies of "improving legislations", "establishing standards", "aligning with the market" and "advancing with

prudence" to create an environment conducive to the development of hydrogen energy in Hong Kong in a prudent and orderly manner.

- (vi) Capacity building was very important for the application of hydrogen energy. Among them, the installations, equipment, and hydrogen fuel systems on vehicles would require regular maintenance. With safety as a priority, hydrogen practitioners would undergo appropriate training and registration. The forthcoming legislation would establish two primary categories of hydrogen practitioners: "competent persons" and "registered hydrogen vehicle mechanics". Their respective roles and responsibilities were outlined during the meeting.
- (vii) Regarding the three-category training framework, the first category would focus on hydrogen safety awareness, with the target to commence training in the first half of 2025. The second category would focus on training for registered hydrogen vehicle mechanics, with the target to commence by the second half of 2025, while the third category would involve training for competent persons. The Vocational Training Council has signed Memoranda of Understanding with the China Inspection Company Limited and REFIRE separately to jointly develop corresponding training courses.

17/24 <u>Date of Next Meeting</u>

The next GSAC meeting would be held tentatively in January 2025.

The meeting adjourned at 11:45 a.m.

Secretary, GSAC July 2024