

**Minutes of the 56th Meeting of
the Gas Safety Advisory Committee (GSAC)**

Date: 5 February 2024

Time: 2:00 p.m.

Venue: ILC Room B, 4/F, EMSD Headquarters, 3 Kai Shing Street, Hong Kong

Present

Mr PANG Yiu-hung, JP	Chairman
Prof CHAO Yu-hang, Christopher	
Mr CHAK Chi-kin, Peter	
Ms HA Wing-ka	
Mr LEE Ho-leung	
Ms LEE Man-ying, Joyce	
Ms LEE Sui-chi	
Mr WAN Chee-keung	
Ms YUNG Ching-yi, Jenny	
Mr TSUI Yu-kwok, Samuel	Secretary

In Attendance

Mr POON Kwok-ying, Raymond, JP	EMSD
Mr CHOW Hau-keung, Vincent, JP	EMSD
Mr HUI Wing-koon, Joe	EMSD
Mr WONG Lui, Eric	EMSD
Mr LI Siu-ying	EMSD

Absent with Apologies

Mr CHOY Chi-tung, Ray
Mr LI Tsz-shu, James

01/24 The Chairman welcomed members to the first meeting of the new two-year term of the GSAC, with their membership starting from 1 September 2023.

02/24 The Secretary briefed members on the terms of reference of the GSAC and the mechanism for declaration of interests, as well as reminding members to declare

interests in anticipation of potential conflict. Furthermore, the Secretary briefly introduced the functions of the Gas Standards Office (GasSO).

03/24 Confirmation of Minutes of the 55th Meeting

The minutes of the 55th Meeting held on 29 June 2023 were confirmed.

04/24 Publicity Work on Gas Safety

(Minutes reference 11/23 referred.)

- (i) The EMSD reported the publicity activities on gas safety conducted during the period from July to December 2023.
- (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 topics and concerns of the public.
- (iii) The GasSO of the EMSD was invited to the TV programme “Hong Kong United” of Radio Television Hong Kong broadcasted on 11 July 2023. In the programme, the GasSO introduced the background, objectives and scope of the offshore liquefied natural gas (LNG) terminal project in Hong Kong, as well as the safety regulatory role of the EMSD in this project.
- (iv) The EMSD also conducted face-to-face publicity work for different communities and stakeholders. For different communities, the EMSD collaborated with organisations providing services for foreign domestic helpers and ethnic minorities to conduct gas safety talks and outreach activities. Regarding the trade stakeholders, the EMSD dispatched staff to visit construction sites, property management companies and licensed food premises, as well as conducting safety talks to promote gas safety and raise their awareness of related statutory requirements.
- (v) The EMSD launched a territory-wide gas safety publicity programme cum survey on gas utilisation in licensed food premises. Based on the findings of the survey, 653 licensed food premises were accorded with high priority for inspection, and their “Quick Check” had been completed before June 2023 by the respective gas supply companies. In view of the positive feedback and fruitful outcome of the “Quick

Check”, the EMSD had extended the scheme to include another 621 licensed food premises. As at December 2023, the “Quick Check” for 273 of these food premises had been completed by the respective gas supply companies.

- (vi) The EMSD had also conducted a territory-wide survey on gas utilisation in the laundry trade. Based on the findings of the survey, 198 laundry shops had been identified with using LPG cylinders. The “Quick Check” for these shops had been arranged and completed before December 2023 by the respective gas supply companies. At the same time, the EMSD was reviewing the “Code of Practice (GU13) – Commercial Gas Dryer” for updating the technical requirements therein to enhance gas safety. In addition, the EMSD had requested gas supply companies to replace LPG cylinder valves with self-closing function for existing ones to improve gas safety of commercial and industrial applications.
- (vii) The EMSD published a guidance note on “LPG Supply Installations for New Village Houses” in April 2023 to provide reference for persons and contractors preparing to build new village houses. At the same time, the EMSD continued to promote the use of the centralised LPG supply system for village houses to relevant persons and existing village house residents.
- (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. A new version of the Code would be issued after consultation with the trade.

05/24 Routine Inspection, Incident and Prosecution Statistics

(Minutes reference 12/23 referred.)

- (i) The EMSD briefed members on the inspection, incident and prosecution statistics during the period from January to December 2023.
- (ii) The annual target of around 5 000 routine inspections was achieved in 2023. The total number was slightly higher than that in 2022 due to stepped-up inspections of restaurants and homeware shops, which

targeted on portable cassette cookers and disposable LPG cylinders.

- (iii) The number of gas incidents in 2023 had decreased as compared with 2022. Since the epidemic subsided in the first quarter of 2023, registered gas supply companies had fully resumed regular safety inspections (RSIs). Gas pipe leakage issues could be detected and rectified at an early stage during RSIs and thus prevented minor gas leakage incidents effectively.
- (iv) The EMSD reported that the number of prosecution cases in 2023 was higher than that in 2022, due to the increase in construction and commercial activities after easing of the epidemic restrictions.

06/24 Gas Trade cum I&T Forum

- (i) The EMSD had been proactive in applying innovation and technology (I&T) to enhance service quality, and ensuring that electrical, mechanical and energy technologies are harnessed in a safe, reliable, economical and environmentally friendly manner for the betterment of people's quality of life. In 2023, the EMSD won 23 awards at the 48th International Exhibition of Inventions of Geneva, including two winning projects adopted by the GasSO, namely Gas Pipe Health AI Prediction Model and LPG Tank Inspection & Data Analysis with Intelligent Tanker Robot.
- (ii) In the last GSAC meeting, the EMSD introduced to members the Gas Trade cum I&T Forum with the aim of strengthening collaboration with the trade on I&T development. With enthusiastic support from the trade, the forum was held successfully at the EMSD Headquarters on 27 September 2023. Officiating guests at the forum included Ir Edmund LEUNG, past chairman of Energy Advisory Committee and Ir Duncan WONG, past president of the Institution of Gas Engineers and Managers. The EMSD briefed members on the experience and achievements in I&T applications presented by speakers from key organisations and registered gas supply companies.

07/24 Registered Gas Installer (RGI) Awards Scheme

- (i) To enhance collaboration with the trade, the EMSD had put forward a series of new initiatives for RGIs, which had been discussed in previous GSAC meetings and were fully supported by the members. The new initiatives included replacement of RGI registration cards, launch of the new digital E&M licence through the EMSD's mobile app "E&M Trade App", and implementation of the voluntary Continuing Professional Development Scheme.

- (ii) In addition to these new initiatives, a competition for RGIs – RGI Awards Scheme was organised in July and August 2023, with a view to recognising outstanding RGIs, setting examples to the trade, and also enhancing the safety awareness and technical standards of RGIs. The competition was the first of its kind for RGIs and organised by the EMSD together with the Pro-Act by the Vocational Training Council, the Hong Kong & China Gas Co. Ltd Chinese Employees Association, and the Hong Kong Gas and Fuel Practitioners Association. The RGI Awards Scheme was well received by the trade with encouraging results, and the participating RGIs' performance generally met high standards. The prize-giving ceremony was held in the "Gas Trade cum I&T Forum" on 27 September 2023 to share the joyfulness of winners together with the trade.

08/24 Publicity to Prevent Carbon Monoxide Poisoning

- (i) The EMSD briefed members on the recent carbon monoxide (CO) poisoning incidents in connection with the use of gas cookers and gas water heaters at home.

- (ii) Three CO poisoning incidents related to gas cookers had occurred since August 2023. Investigation revealed that the incidents were caused by poor indoor ventilation. All concerned gas cookers were fitted with an accessory, commonly known as "energy-saving ring", which was not supplied by the original gas cooker manufacturers. The EMSD sent the "energy-saving rings" for testing by laboratory and the findings showed that when gas cookers were used with the "energy-saving rings", emission of CO increased substantially, the amount of which

significantly exceeded the safety standard specified in the Basic Safety Assessment under Approval of Domestic Gas Appliances. Carbon monoxide accumulated rapidly in poor indoor ventilation conditions, leading to CO poisoning.

- (iii) Three CO poisoning incidents related to gas water heaters occurred in January 2024. Investigation revealed that two incidents involved non-approved gas water heaters bought outside HK and improperly installed, and the exhaust gas was discharged inside the bathroom. The remaining one involved an aged gas water heater installed in 1995 with serious corrosion on the casing, causing exhaust gas to leak into the bathroom. Carbon monoxide in the exhaust gas accumulated rapidly in poor indoor ventilation conditions, leading to CO poisoning.

- (iv) The EMSD briefed members on the follow-up actions and publicity work urging the public to take precautionary measures against CO poisoning:
 - The EMSD and the Customs and Excise Department immediately conducted inspections of shops in various districts to proscribe sale of non-approved gas water heaters and “energy-saving rings”;
 - Since the concerned “energy-saving rings” and non-approved gas water heaters were allegedly bought outside Hong Kong, the EMSD collaborated with the General Administration of Customs, China to intercept cross-border sales of these products via online shopping platforms;
 - To raise public awareness on safety, safety tips for proper purchase, use and regular safety inspection of domestic gas appliances were promoted via various channels, including press releases, posts on social media, articles on Choice Magazine and interview on TV programmes; and
 - The EMSD also instructed the trade, including registered gas contractors, gas installers and gas supply companies, to urge their customers to stop using “energy-saving rings” and to suspend the gas supply in case any non-approved or unsafe gas appliances were found.

- (v) A member suggested that joint promotion campaigns with District Services & Community Care Teams (Care Teams) could be considered. Another member engaged in community services also advised that Care

Teams were set up to support the Government's district work and thus capable of disseminating information to the community effectively. The Chairman welcomed members' suggestion and agreed that the possibility of carrying out promotion campaigns with the assistance of Care Teams could be further explored. A member, as the representative of the Hong Kong and China Gas Co., Ltd. (HKCG), supplemented that if the premises has installed with the smart gas meter, gas supply to premises without safety inspections for more than six years could be suspended by the HKCG using the smart gas meter. Safety inspections would then be conducted by the HKCG when the account holder made a service request for supply resumption.

09/24 Latest Hydrogen Development in Hong Kong

- (i) To keep pace with the development of hydrogen fuel application, the HKSAR Government set up the Inter-departmental Working Group on Using Hydrogen as Fuel (the Working Group). The Working Group comprises the Environment and Ecology Bureau, Transport and Logistics Bureau, Development Bureau, Security Bureau, Environmental Protection Department, Electrical and Mechanical Services Department (EMSD), Fire Services Department, Transport Department, Marine Department, Planning Department, Lands Department, Buildings Department and Architectural Services Department.

- (ii) As of January 2024, the Working Group has received a total of 15 applications for trial projects on hydrogen fuel technology, and has given agreement-in-principle to 9 of these projects. The trial projects in the transportation sector include two hydrogen fuel cell double-decker bus by Citybus, the hydrogen fuelled light rail vehicle by MTRC, and the hydrogen fuel cell street-cleaning vehicle by the Food and Environmental Hygiene Department. The hydrogen filling station projects include two filling stations located at Citybus West Kowloon Depot and Chai Wan Depot, the hydrogen filling station at Au Tau by Sinopec, and the dedicated filling station for MTRC's hydrogen fuelled light rail vehicle. In the power generation sector, the trial projects include hydrogen extraction system from Towngas network for hydrogen fuel cell and charging electric vehicles by Towngas, and power supply facility by China State Construction Engineering (Hong Kong)

Limited to provide electricity to site offices at the Lok Ma Chau construction site.

- (iii) To facilitate the use of hydrogen fuel in Hong Kong, EMSD has formulated Code of Practice for Hydrogen Fuelled Vehicles and Maintenance Workshops, Code of Practice for Hydrogen Filling Stations, and Guidance Note for Quantitative Risk Assessment Study for Hydrogen Installations in Hong Kong after consulting the industry. These guidelines have been applied in the current hydrogen fuel technology trial projects conducted in Hong Kong. EMSD would continue to update these guidelines in response to the development of hydrogen fuel technology and the implementation experience of hydrogen fuel technology trial projects, ensuring they are up-to-date and in line with the latest developments. To provide a legal framework applicable to local hydrogen fuel technology applications, EMSD would amend the Gas Safety Ordinance (Cap. 51), including incorporating the aforementioned guidelines into the legal framework. EMSD would also continue the legislative amendment work, including trade consultation, with the aim of submitting the proposed legislative amendments to the Legislative Council in 2025.

10/24 Date of Next Meeting

The next GSAC meeting would be held tentatively in June 2024.

The meeting adjourned at 4:15 pm.

Secretary, GSAC
February 2024