

**Minutes of the 42nd Meeting of
the Electrical Safety Advisory Committee (ESAC)**

Date : 20 April 2021
Time : 2:30 p.m.
Venue : Rooms A & B, Interactive Learning Centre, 4/F, EMSD Headquarters, 3 Kai Shing Street,
Kowloon, Hong Kong

Present

Ir Professor CHAN Kwok-cheung, Thomas (Chairman)
Mr PANG Yiu-hung
Ms CHOI Wing-yee, Cornelia
Miss CHEUNG Hai-man, Flora
Miss LAU Wing-yan, Rikki
Mr TSE Chun-man
Miss YIP Kam-yee, Candy
Dr PUN Kong-pang
Ms SIU Zoe
Mr IP Sung-tai
Mr LEUNG Chun-kit
Dr LAM King-hang
Ir AU Tat-kay, Walter
Mr NG Lui-kai
Mr CHAN Chi-ming, Antonio
Mr CHEUNG Wing-ho
Mr LI Kin-shing
Ir WAI Yip-kin
Miss YEE Sau-wah (Secretary)

In attendance

Mr POON Kwok-ying, Raymond	Acting Deputy Director / Regulatory Services, EMSD
Mr CHU Kei-ming, Barry	Acting Assistant Director / Electricity and Energy Efficiency, EMSD
Ms CHENG Pui-man	Acting Chief Electrical and Mechanical Engineer / Electricity Legislation, EMSD
Ms SIT Kin-ka	Senior Electrical and Mechanical Engineer / Consumer Installations 1, EMSD
Mr LAU Kai-chung	Senior Electrical and Mechanical Engineer / Consumer Installations 2, EMSD
Mr KWAN Siu-kin	Senior Electrical and Mechanical Engineer / Electrical Products, EMSD

Mr WONG Tsz-chung

Senior Electrical and Mechanical Engineer /
Nuclear and Utility Safety, EMSD

Absent with Apologies

Professor OR Siu-wing

Action

Agenda Item 1: Opening Remarks

1. The Chairman welcomed members to the 42nd meeting of the Electrical Safety Advisory Committee (ESAC). He introduced to members those who were in attendance at the meeting.
2. When briefing members on the meeting arrangement, the Chairman specially reminded them that they must observe the guidelines on declaration of interests for members of public councils, boards and committees. If a member became aware that a conflict of interests might arise from his/her participation in the discussion of an agenda item, he/she must disclose full details of the interests involved accordingly. The interests declared would be recorded in the minutes of meeting.

Agenda Item 2: Minutes of the 41st Meeting Held on 30 September 2020

3. Members did not raise any amendment to the minutes of the 41st meeting or matters for follow-up. The Chairman declared the minutes of the 41st meeting confirmed. The Electrical and Mechanical Services Department (EMSD) would arrange to upload the minutes of meeting to its website for public reference.

Agenda Item 3: Overview of Electrical Safety in 2020 (ESAC Paper 01/2021)

4. The EMSD briefed members on the above paper. The paper presented an overview of the enforcement and promotional work on electrical safety in 2020 and the way forward in 2021.
5. The Chairman would like the EMSD to further elaborate on the fatal incidents occurred in 2020.
6. The EMSD responded that among the three fatal incidents occurred in 2020, two cases involved electrocution and one case involved fire.

One of the two fatal incidents involving electrocution occurred in a subdivided unit (SDU). The incident was caused by a wiring short-circuit fault occurred in the fixed electrical installation of the unit concerned, where the earthing installation did not comply with the relevant requirements of the Electricity (Wiring) Regulations. To enhance the knowledge of electrical safety among SDU occupants, the EMSD published the Electrical Safety Checklist for distribution to the relevant occupants to facilitate checking of the fixed electrical installations and equipment in their units. For safety concerns, the occupants may seek help from the owners and make enquiries to the EMSD.

For the other electrocution incident, it was suspected that insufficient safety precautions of an unregistered electrical worker prior to conducting electrical work was involved. To ensure public safety, the EMSD would continue to remind members of the public to employ a registered electrical contractor (REC) for electrical work to ensure that the work would be conducted by registered electrical workers of the appropriate registered grade.

Regarding the fatal incident involving fire, it was suspected that a modified extension unit was involved. The fuse originally installed in the extension unit's plug was inappropriately removed, and the extension unit was connected to the fixed electrical installation in the unit. The EMSD pointed out that an extension unit without a fuse was likely to pose danger when there was overload due to the absence of effective overload protection. Moreover, members of the public shall employ a REC to conduct electrical work.

Agenda Item 4: Overview of Publicity Plan in 2021/22 (ESAC Paper 02/2021)

7. The EMSD briefed members on the above paper. The paper presented an overview of the 2021/22 Publicity Plan formulated by the EMSD to enhance electrical safety. The EMSD welcomed members to comment on the Publicity Plan.
8. A member asked about the unfortunate fire incident occurred at Po Tat Estate, in which the massage chair suspected to be involved appeared to be an electrical product regulated by the EMSD. The member enquired about the role the EMSD played in the incident and whether it would strengthen the promotional work on electrical safety in view of the incident.
9. The EMSD responded that it was saddened by the unfortunate fire incident mentioned. The EMSD worked with the relevant departments to conduct

investigation of the incident. It was primarily suspected that the fire was caused by a lithium battery, which was not part of the concerned massage chair. Meanwhile, there was no evidence that the incident was related to the massage chair. The EMSD would continue to conduct further investigation with the relevant departments to ascertain the cause of fire of the unit concerned.

Nevertheless, the EMSD enquired various suppliers of massage chairs and was informed that most massage chairs received power supply from household socket outlets and did not have built-in lithium batteries. In general, lithium batteries were not regulated by the Electrical Products (Safety) Regulation since they had relatively low rated voltage. The EMSD would continue to monitor the incident and provide necessary support and assistance to the relevant departments.

The EMSD had always attached great importance to electrical safety. It would continue to strengthen the promotional work on the safety of electrical products. In the coming year, the EMSD would step up the promotional work on the safety of electrical products on online platforms.

10. A member noted that while lithium batteries were not regulated by the Electrical Products (Safety) Regulation, their electric chargers were under the regulatory regime of the said Regulation. In the past, there were also fire incidents that involved electric chargers and extension units. Electric chargers sold in Hong Kong should be regulated. Yet, quite a number of members of the public purchased electric chargers through Mainland websites. To address this issue, the member suggested that the EMSD should carry out patrols of online shopping to ensure that electrical products sold online complied with local safety requirements. The EMSD could also carry out promotional work to avoid members of the public from purchasing electrical products that did not comply with local safety requirements.
11. The EMSD stated that general household electric chargers received power supply from household socket outlets were regulated by the Electrical Products (Safety) Regulation. However, batteries were not regulated by the said Regulation because of their relatively low rated voltage. They were instead regulated by the legislations under the purview of the Customs and Excise Department (C&ED). The EMSD had been maintaining close liaison with the C&ED and providing mutual support on the enforcement actions and inspections for relevant products.

In 2019, the EMSD signed a memorandum of co-operation on cross-border e-commerce in relation to the quality and safety of electrical and mechanical products supplied through Mainland websites with the General Administration of Customs of China (GACC). The EMSD had also maintained close collaboration with the GACC. When unsafe electrical products or products with safety hazards were found to be supplied through Mainland websites, the EMSD would notify the GACC in accordance with the mechanism for follow-up actions to be conducted by law enforcement agencies of the Mainland to intercept the import of those electrical products to Hong Kong. This arrangement helped prevent unsafe electrical products or products with safety hazards from entering the Hong Kong market and being sold in the Mainland, thereby safeguarding the consumers of the two places.

The EMSD's law enforcement officers also conducted cyber patrols on online platforms that sold household electrical products to check whether the electrical products supplied on the platforms complied with the safety requirements and other relevant requirements stipulated in the Electrical Products (Safety) Regulation. In 2019 and 2020, the EMSD conducted about 200 and 800 cyber patrols respectively. When non-compliance of supplied products with the requirements stipulated in the Regulation was found, the EMSD would investigate and take the appropriate law enforcement actions. In view of the growing popularity of online shopping in Hong Kong and with the aim of further strengthening the relevant regulatory work, the EMSD was also in the course of studying the application of innovation technology, e.g. online search software and artificial intelligence, to build a smart search engine, in order to save the time of law enforcement officers spent on searching for relevant information on the online platforms and enhance the efficiency of the regulatory work.

According to the Electricity Ordinance, electrical products supplied in Hong Kong shall be issued with certificates of safety compliance. In order to meet statutory requirements, suppliers were responsible for ensuring that the products they supplied were issued with certificates of safety compliance. Consumers should purchase electrical products at reputable shops. The EMSD would also continue to formulate action strategies and enhance promotional work to advise members of the public on smart choice of electrical products.

[Post-meeting note: The EMSD posted messages on the safe use of USB quick electric chargers on Facebook and Instagram on 25 June 2021.]

12. A member enquired whether the responsibility to register a solar photovoltaic power system should fall on the contractors who were responsible for the design and installation work or the system owners. The member also asked about the EMSD's role in matters related to solar photovoltaic power systems. The member learned that a number of contractors believed that upon completion of the system work, as well as it was checked by the power companies and had the meter installed, then their jobs were done.
13. The EMSD responded that according to the Electricity Ordinance, save for exceptional conditions stipulated in the Ordinance, the owner of a generating facility that was in use or on standby use had the statutory obligation to register it with the EMSD. After the registration of the facility in accordance with the Electricity Ordinance, the EMSD would issue to the owner of the facility a certificate of registration. The owner of the facility shall display at the facility with the certificate of registration, as well as a notice showing the name and registration number of the REC who was responsible for the facility's maintenance work. The application form for registration of generating facility might be submitted by the REC. However, it must bear the signature of the owner of the facility.

The EMSD emphasised that the above statutory requirements were to ensure electrical safety and the stability of electricity supply. For generating facilities that were connected and supplied electricity to the power grid of the power companies, their electrical safety problems would affect not only the owners of the facilities, but also the stability of power supply of the power companies and other electricity users connected to the power grid. In case of electricity incidents or malfunctions of the generating facilities, the affected areas could be very wide, covering electrical installations in buildings or village houses in the vicinity, to which there might be impacts.

For general generating facilities connected to the power grid of the power companies to receive Feed-in Tariff payments, if the fixed electrical installations in the units concerned were electrical installations that required submission of periodic test certificates under the Electricity (Wiring) Regulations, i.e. installations with approved loading exceeding 100A, the generating facilities would be regarded as exceptional conditions for which registration would not be required. However, owners of the facilities shall have the fixed electrical installations and generating facilities of the units timely inspected, tested and certified. For owners of fixed electrical installations with approved loading not

exceeding 100A, they shall register the generating facilities with the EMSD and arrange regular maintenance to ensure that the generating facilities were maintained in continuous safe working order.

The EMSD hoped that members of the trade could share the above information with relevant RECs and urge them to assist their clients in the registration of generating facilities with the EMSD. RECs should also remind their clients to comply with the requirements of maintenance of generating facilities and arrange discussions on maintenance where appropriate. The EMSD had also urged all RECs to remind owners of generating facilities about the relevant requirements.

[Post-meeting note: For the posters and leaflets on the registration of generating facilities, please visit the EMSD's website:

https://www.emsd.gov.hk/filemanager/en/content_442/Poster_GnrtnGfclts.pdf

https://www.emsd.gov.hk/filemanager/en/content_442/Leaflet_GnrtnGfclts.pdf]

Agenda Item 5: Any Other Business

14. The EMSD reported to members that the Improving Electoral System (Consolidated Amendments) Bill 2021 stipulated that the chairman of this committee could be an ex-officio member of the engineering subsector.
15. No other business was raised by members.
16. The Chairman thanked members for their attendance and adjourned the meeting. Members would be informed of the date, time and venue of the next meeting in due course.