

Escalator Safety

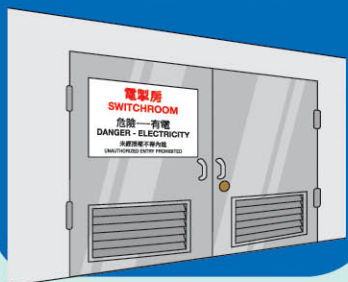


The Mandatory Energy Efficiency Labelling Scheme

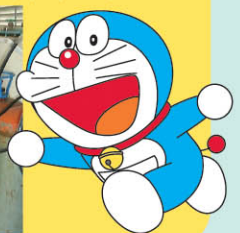
Look for the Energy Label
Save Electricity, Save Money



Safety requirements for switchrooms

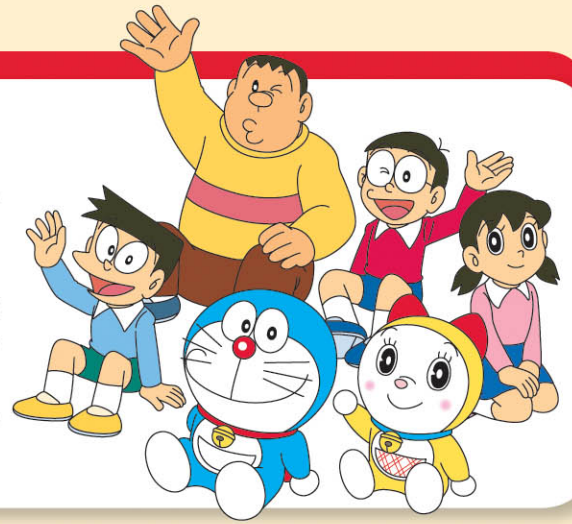


Central Liquefied Petroleum Gas (LPG) Supply System



Editor's Notes

This is already the 14th issue of the E&M Safety Newsletter. We would like to express our heartfelt thanks for your continuous support. In this informative issue, cartoon characters will review with you knowledge of electrical and mechanical safety, including the safe use of escalators and amusement rides, user tips for domestic washing machines, safety requirements for switchrooms, the energy efficiency labelling scheme, central LPG supply system and its periodic safety inspection, and how to handle a suspected gas leak. With the New Year approaching, we would like to wish you a joyous holiday.



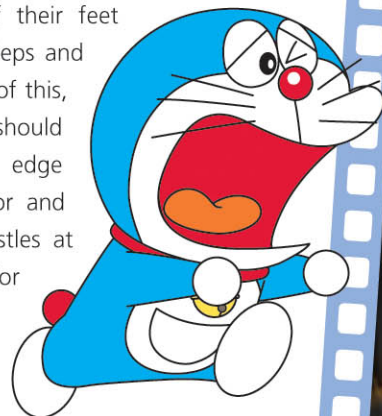
Escalator Safety

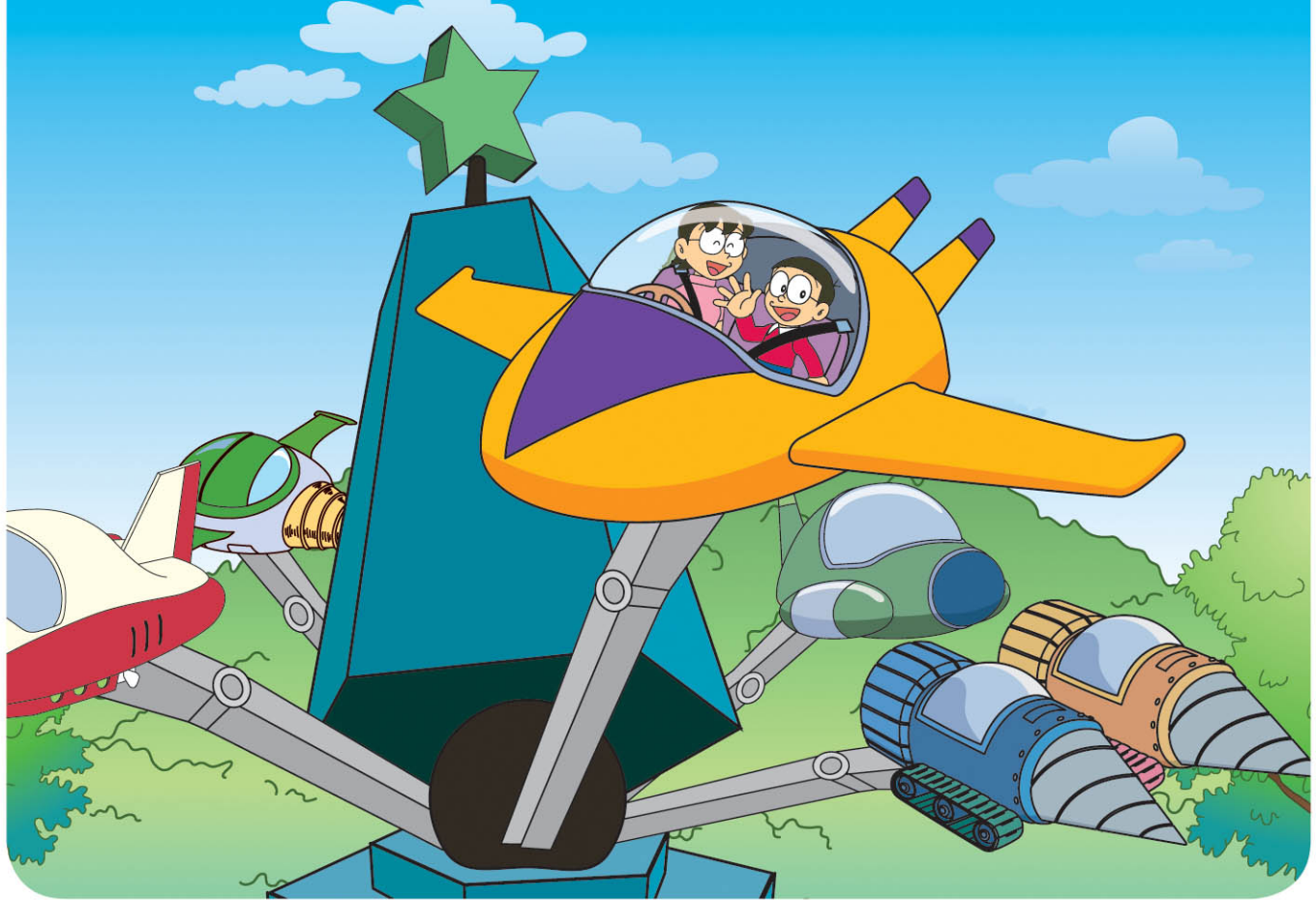
According to the Code of Practice on the Design and Construction of Lifts and Escalators, for all newly installed escalators, brush bristles must be provided on the steel skirt guard at the sides of the steps. Such brush bristles are actually protective devices, the function of which is to prevent the user from standing too close to the step edge.

If a user stands too close to the step edge when using the escalator, the friction between his or her foot and the skirt guard will cause the foot to be trapped in the gap between the moving step and the skirt guard, resulting in foot injury.

Some users, however, wrongly use the brush bristles to brush their shoes. Their feet will thus be in contact with the skirt guard, increasing the risk of injury from entrapment.

In Hong Kong, every year there are dozens of accidents involving users of escalators sustaining injury due to the trapping of their feet between the escalator steps and the skirt guard. In view of this, to avoid accidents, we should keep clear of the step edge when using the escalator and never use the brush bristles at the sides of the steps for brushing our shoes.





Amusement Ride Safety

Know How the Rides Work

To ensure public safety, the design and operation of all amusement rides operating in Hong Kong (in amusement parks or other venues) are governed by the Amusement Rides (Safety) Ordinance. According to the statutory requirements, amusement ride owners have to appoint an independent surveyor to conduct operational tests and safety examinations for the rides. EMSD also monitors the owners of the rides to ensure that the procedures on daily maintenance and inspection are complied with.

Users of amusement rides should read the safety instructions carefully and observe the rules and height restrictions whenever they take a ride. The rules and instructions on the notice board are helpful for users to know how the amusement ride works, so they can decide if it is suitable for them. Users should also understand the necessary precautions in taking an amusement ride to ensure their safety and that of others.

Users of amusement rides must be in a good physical condition. Pregnant women and persons under the influence of drugs or alcohol should not take an amusement ride. As most amusement rides are outdoors, prolonged exposure to the sun

may lead to fatigue for the riders more quickly. Do not take the ride if you feel tired. Avoid high-speed spinning rides if you are prone to dizziness or not in a good condition. You should refuse to accompany someone on those rides even if you are invited to do so.

Some amusement rides are located indoors. One may not be able to gauge how these indoor rides work just by looking at their appearance. Therefore, when deciding whether to take such rides, users should ask the operators about the nature of the ride and make a decision based on their health conditions. One must also be very careful when choosing amusement rides for children and the elderly. Do not let them take the ride if you have any doubts or if the child is feeling scared. Tell the ride operators before boarding and they will direct you to leave through a separate passage.

Moreover, users must obey the instructions of the ride operators, especially when boarding and alighting from the ride. To avoid accidents, do not try to leave the seat to take photos when the ride is about to start or before it comes to a complete stop.

Safety requirements for switchrooms

Most people would have come across a switchroom near their home. Do you know what its safety requirements are?

According to the Electricity (Wiring) Regulations and the Code of Practice for the Electricity (Wiring) Regulations,

- ⚠️ A switchroom must not be used for storage purpose.
- ⚠️ An identification label (for example "SWITCHROOM") must be displayed prominently at its every entrance with a warning notice bearing the words "DANGER – ELECTRICITY, UNAUTHORISED ENTRY PROHIBITED" on the outside of its door.
- ⚠️ The owner and person in charge of a switchroom (such as the owners' corporation or property management agency of the building) must ensure that unauthorised entry into the switchroom is prevented. Non-registered electrical workers (such as security guards or cleaners) authorised to enter a switchroom are not allowed to carry out any electrical work (i.e., installation, inspection, testing, maintenance, modification or repair of an electrical installation) inside.



Safe Use of Washing Machines

Washing machines are our household helpers. But do you know how to use a washing machine safely? The following are some safety tips on using washing machines:-

- ⚠️ If any anomaly (such as noise generated from slipping belt, odour or tripping of power supply) is detected, stop the machine immediately and arrange for inspection and repair by an experienced technician.
- ⚠️ Do not exceed the rated washing capacity of the washing machine. Avoid continuous use which will cause its components to overheat.
- ⚠️ Only use washing powder suitable for use in the washing machine. Do not use other improper washing agents.
- ⚠️ Allow sufficient space around a washing machine for heat dissipation.
- ⚠️ Remove articles from the pockets of your clothes before washing them.
- ⚠️ Do not place a washing machine in a humid environment (such as a balcony or a bathroom) so its internal components will get wet and affect its normal operation.
- ⚠️ Arrange for regular inspection and maintenance of the washing machine by an experienced technician to ensure its normal operation.





The Mandatory Energy Efficiency Labelling Scheme

Look for the Energy Label Save Electricity, Save Money

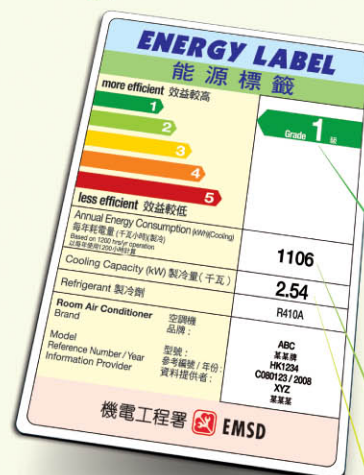
Apart from paying attention to safety when using electrical products, we should also take heed of their energy performance when buying them. To facilitate the public to choose energy efficient products and to raise public awareness of energy conservation, the Government has introduced the Mandatory Energy Efficiency Labelling Scheme (MEELS) through the Energy Efficiency (Labelling of Products) Ordinance (Cap. 598). The Ordinance requires that all prescribed products being supplied in Hong Kong must bear an energy label to inform consumers of the energy performance of the products.

The initial phase of the MEELS, which has already been fully implemented, covers room air conditioners, refrigerating appliances and compact fluorescent lamps. When buying these three types of electrical products, the public may refer to the energy performance shown on the energy label to select for energy efficient products. The second phase of the MEELS with an 18-month grace period commenced on 19 March 2010, and extends coverage to washing machines and dehumidifiers. After the grace period, washing machines and dehumidifiers being supplied in Hong Kong must also bear an energy label.

Energy efficient products not only consume less energy, they also help protect the environment and save consumers

money. The energy label classifies the energy performance of a product type into five grades, so as to help consumers choose energy efficient products. Products with a Grade 1 energy label are among the most energy efficient. For details of the MEELS, please visit the EMSD website at <http://www.emsd.gov.hk>. Enquiries can also be made to the Energy Efficiency Office of EMSD at 2808 3465.

Energy Label for Room Air Conditioners



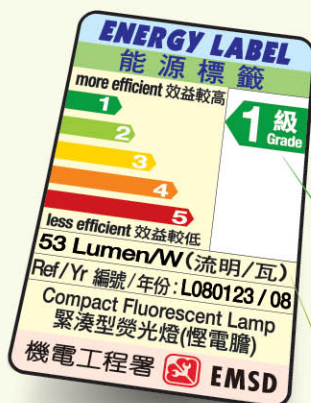
Grade 1 products are the most efficient (green) and Grade 5 products are the least efficient (red).

Compare the annual energy consumption of different models and see how much you could save.

Cooling capacity of the model at full load.

A "Grade 1" room air conditioner of 1HP could save up to \$480 in electricity cost each year when compared to a "Grade 5" model.

Energy Label for Compact Fluorescent Lamps (CFLs)

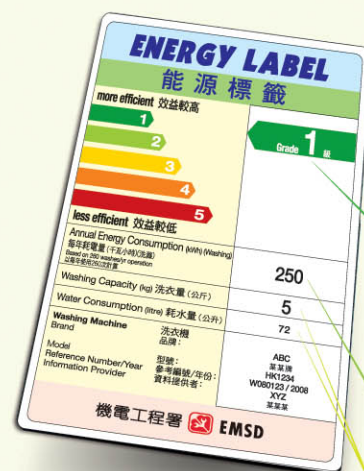


Grade 1 products are the most efficient (green) and Grade 5 products are the least efficient (red).

Lamp luminous efficacy of the model. A higher number indicates that the product is more efficient.

CFLs save around 75% of electricity compared to incandescent lamps and on average last up to 6 to 8 times or more. A household of 4 people could save up to \$440 of electricity cost each year by replacing incandescent lamps with energy efficiency CFLs.

Energy Label for Washing Machines



Grade 1 products are the most efficient (green) and Grade 5 products are the least efficient (red).

Compare the annual energy consumption of different models and see how much you could save.

Washing capacity and water consumption.

A "Grade 1" horizontal drum type washing machine with a washing capacity of 5kg could save up to \$170 in electricity cost each year when compared to a "Grade 5" model. The energy label also shows water consumption information for consumers' easy comparison.



Figure 1: Vaporiser

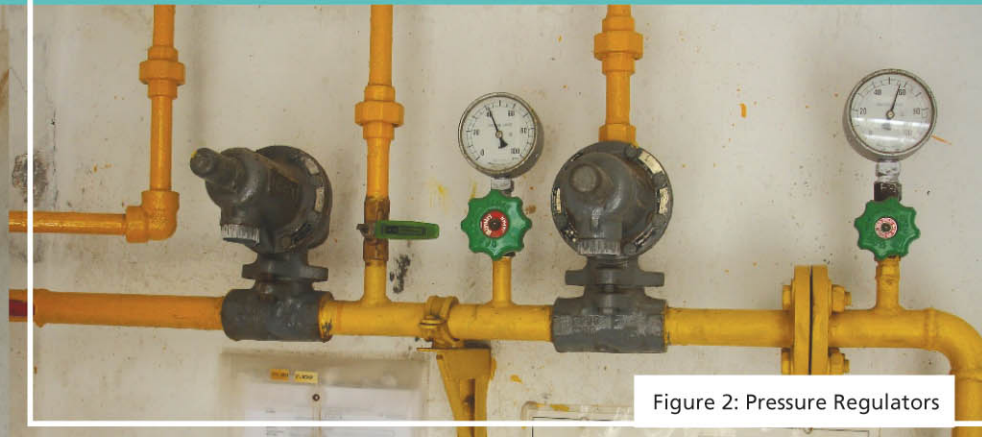
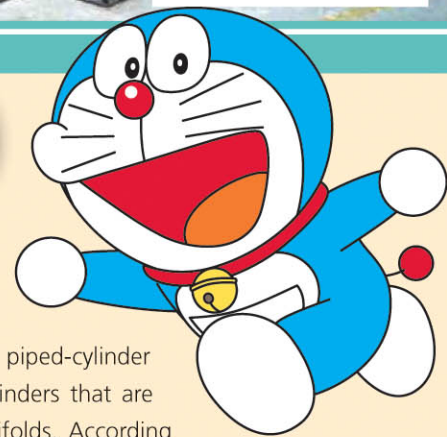


Figure 2: Pressure Regulators



Figure 3: LPG Compound

Central Liquefied Petroleum Gas (LPG) Supply System



Currently, there are about 200,000 users who are using central piped LPG as gaseous fuel in Hong Kong. Most of them are domestic users.

LPG Storage Installations

The central LPG supply system provides uninterrupted supply of LPG to users. This is how the system works. LPG in liquid form is first transferred from the storage installation to a vaporiser (Figure 1) for heating. The LPG will convert to gas form and its pressure will be adjusted to a suitable level by the pressure regulator (Figure 2). It is then conveyed through the piping network to the users. LPG storage installations are classified into LPG compounds (Figure 3) and piped-cylinder stores (Figure 4) in accordance with the storage arrangements and scale. Most of the LPG compounds store LPG in underground

bulk tanks. While for the piped-cylinder stores, LPG is stored in cylinders that are connected together by manifolds. According to the Gas Safety Ordinance (Cap 51), the owners of LPG storage installations are responsible for maintaining the installations to ensure their safety. They are also required to operate the installations in a safe manner. In addition, the owners of LPG installations should also employ competent persons to conduct annual inspections of the installations.

Regular Inspection of Gas Pipes

The LPG in gas form is conveyed from the storage installation to the gas appliances of users via a piping network. The latter include the vertical service pipes on the external walls of buildings (Figure 5) and the installation pipes inside



Figure 4: Piped-cylinder Store

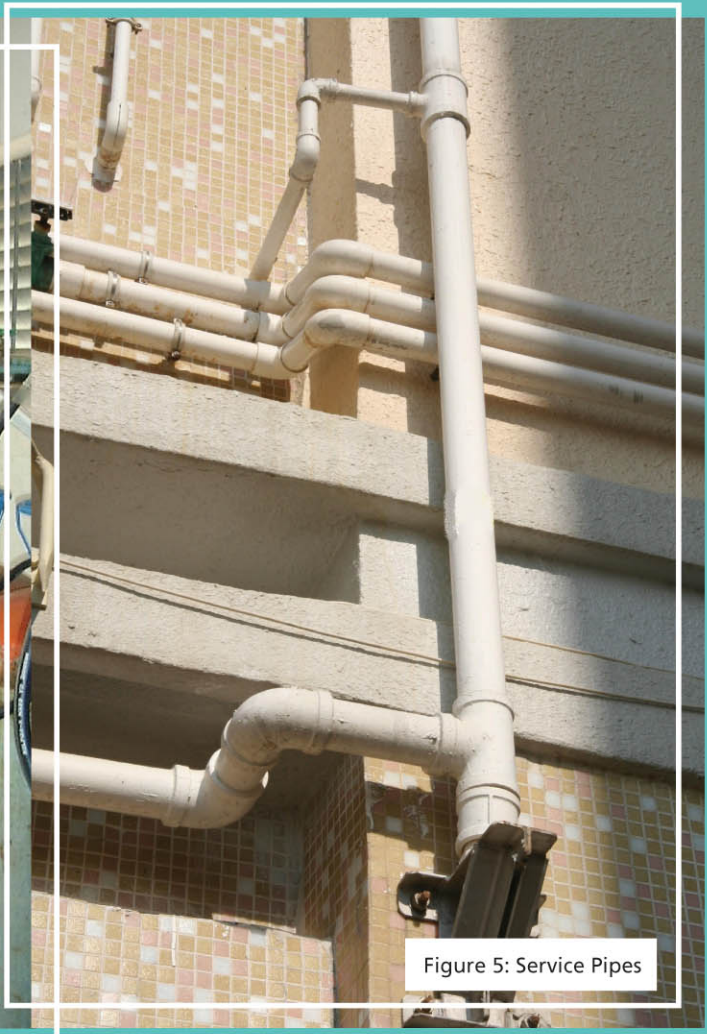


Figure 5: Service Pipes

the houses. To ensure gas safety, the LPG supply company or its agent should arrange for a registered gas installer to carry out safety checks once every 18 months on the gas appliances and gas pipes of users, including basic inspections of the service pipes and the installation pipes. The gas supply company will carry out further inspections, testing and maintenance if necessary.

Replacement of Flexible Gas Tubing

Flexible gas tubing (Figure 6) is commonly used to connect a domestic cooking appliance to the gas supply point. There are currently 3 types of flexible gas tubing:

- Type 1 – rubber tubing;
- Type 2 – rubber tubing with stainless steel braiding or armouring; and
- Type 3 – stainless steel tubing.

With the exception of stainless steel tubing, all other tubing normally have a service life of 3 to 10 years. The users should arrange for a registered gas installer employed by a

registered gas contractor to replace the tubing before the expiry of its service life. If it is found that the tubing is approaching the end of its service life during a safety check, the registered gas contractor will remind the user to replace the tubing.



Figure 6: Flexible Gas Tubing

Suspected Gas Leak

In the event of a suspected gas leak, extinguish all naked flames and open all windows and doors wide immediately to disperse the gas. Do not use the telephone or operate any electrical switches when still indoors. Promptly call the gas supply company or its agent to come and handle the gas leak.

E & M Safety Quiz

Please fill in the reply slip below with **the most appropriate answers** and send it by post or by fax to the Editor, E & M Safety Newsletter (please see the bottom of this page for contact information). The first 500 of the quiz participants^[1] submitting correct answers to all questions will receive a souvenir.

- Which of the following is the safe way to use an escalator?**
 - Walk or run on the escalator.
 - Lean beyond the escalator.
 - Keep clear of the step edge and do not brush your shoes with the brush bristles.
 - Stand near or touch the step edge.
- Which of the following is incorrect?**
 - A switchroom must not be used for storage purpose.
 - A warning notice bearing the words "DANGER – ELECTRICITY, UNAUTHORISED ENTRY PROHIBITED" should be displayed in both English and Chinese on the outside of the door of a switchroom.
 - Only authorised persons are allowed access to the switchroom.
 - All those with authorised access to the switchroom can carry out electrical work inside.
- Which of the following is/are not suited to take an amusement ride?**
 - Persons suffering from high blood pressure or heart problems.
 - Pregnant women.
 - Persons under the influence of drugs or alcohol.
 - All of the above.
- Which of the following electrical product is not covered in the Mandatory Energy Efficiency Labelling Scheme?**
 - Refrigerating appliance
 - Room air conditioner
 - Clothes dryer
 - Dehumidifier
- What should be the frequency of safety checks on domestic gas appliances and gas pipes by the registered gas installer?**
 - Every 6 months
 - Every 12 months
 - Every 18 months
 - Every 24 months
- What should the user do in the event of a suspected gas leak?**
 - Extinguish all naked flames and open all windows and doors wide immediately.
 - Avoid using the telephone or operate any electrical switches when still indoors.
 - Promptly call the gas supply company or its agent to come and handle the gas leak.
 - All of the above.

REPLY SLIP ^[2]					
Name:			Tel.:		
Hong Kong Address:					
Answers:					
Q1	Q2	Q3	Q4	Q5	Q6
Where did you get this <i>E&M Safety Newsletter</i> ?					
Residential estate	School	District Office	New immigrant centre		
Others (please specify):					

[1] Only the first 500 of the quiz participants sending in the Reply Slip with all answers correct will be notified.

[2] The personal data provided in the Reply Slip will only be used for the E & M Safety Quiz purpose. It will be kept confidential and will not be disclosed to any third party. You have the right to request in writing to check whether EMSD is keeping your personal data, to access or correct it, and to enquire about our policy and procedures in the use of such data as well as the types of personal data we are keeping. The above terms do not affect your rights as set out in the Personal Data (Privacy) Ordinance.

Answers to last issue's quiz: 1.D 2.B 3.A 4.A 5.B 6.D

Feedback

Your comments and suggestions, whether on editorial style or contents, are most welcome. Tell us how we can improve and make the E & M Safety Newsletter a truly informative and interesting publication for you. Both the English and Chinese versions of the E&M Safety Newsletter are available on our website at <http://www.emsd.gov.hk>. Please contact us should you need a printed copy.

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