New Term of the Vehicle Maintenance Technical Advisory Committee Takes Office

Contents

(2) From the Editor: New Term of the Editorial Working Group

As the 7th term of the Vehicle Maintenance Technical Advisory Committee (VMTAC) commenced, members of the new term of the Editorial Working Group are also ready to collect information on various aspects of the trade, introduce the latest updates and development trends of the voluntary registration schemes as well as promoting publicity activities, training news and information relating to the vehicle maintenance trade among trade members.

This year marks the third anniversary of the Voluntary Registration Scheme for Vehicle Maintenance Workshops (VRSVMW). In the light of the latest developments of and views from the vehicle maintenance trade, the VMTAC has revised the Practice Guidelines for Vehicle Maintenance Workshops (Practice Guidelines) and added more appropriate contents, including the directions and procedures of safety practices to be noted by owners or persons-in-charge of workshops for handling vehicle batteries and maintaining electric vehicles and hybrid vehicles (particularly work on high-voltage section), with a view to providing registered workshops with more comprehensive and informative guidelines, thereby raising the service standards of the trade. The latest revised Practice Guidelines has been uploaded to the website of the Electrical and Mechanical Services Department (EMSD) for public reference. To promote the latest revised Practice Guidelines and publicise the voluntary registration schemes for vehicle maintenance, the EMSD and the VMTAC will jointly organise a quiz competition and a four-panel story-telling photography competition on the Practice Guidelines. For details, please stay tuned for the next issue of RVM Newsletter!

This issue of RVM Newsletter is informative and covers a broad array of topics, including the objective and arrangement of audit inspections; members of the 7th term of the VMTAC formally taking office; latest updates on the registration of Type Four workshops; matters to note and environmental protection requirements for compliance by workshops; occupational safety and health requirements to be noted by workshops during spraying processes; as well as the registration and latest developments of the two voluntary registration schemes. The introduction of the Government's first five-axle heavy recovery vehicle in the last issue of newsletter was well-received by the trade. In this issue, we have invited trade practitioners to give an overview of the fleet of special purpose vehicles and the EMSD's Vehicle Engineering Sub-division to share information on ambulance maintenance and management. Do not miss these interesting stories!

The new term of the Editorial Working Group will stay committed to exploring more updated information and technology of the trade for sharing with readers so as to make the RVM Newsletter more interesting and practical. We believe that the trade is full of hidden experts, to whom we would like to appeal for actively contributing articles to share their experience, views or expertise on vehicle maintenance, making the newsletter richer in content and more relevant to the needs of trade members, thus fully realising its role as a bridge for communication.

Mr YIP Sui-pong, Ponthey
Chief Editor

(3) Sharing: Strengthening Audit Inspections to Help Enhance the Service Standards of the Trade

During the promotion of the voluntary registration schemes for vehicle maintenance, apart from actively publicising and promoting the two schemes to attract registration applications from vehicle maintenance workshops and mechanics, the Vehicle Maintenance Registration Unit has also carried out audit inspections to inspect the compliance by registered vehicle maintenance workshops and mechanics with the Practice Guidelines and the Code of Conduct.

In order to prepare for mandatory legislation in the future, it is necessary for us to further understand and analyse the operation of the trade, provide appropriate directions and support to practitioners who have yet to comply with the Practice Guidelines and the Code of Conduct, and urge them to make improvements, so as to facilitate a smooth transition to the mandatory registration system in the future as well as enhancing the service standards and professional image of the trade.

Starting from this year, audit inspections of registered workshops and registered mechanics will be strengthened to help the trade get ready for the legislation of the mandatory registration system. The audit inspections aim to get a picture of the compliance of registered workshops and mechanics with the Practice Guidelines and the Code of Conduct, as well as provide guidelines and appropriate support to the registered workshops and mechanics concerned for improvement of their operation and services, so as to facilitate a smooth transition to the mandatory registration system in the future. Through audit inspections, we can provide directions and necessary support to workshops which have yet to comply with the Practice Guidelines and mechanics who fail to meet the Code of Conduct to help them make improvement for compliance with the relevant requirements. All registered workshops and their registered mechanics will be covered under the audit inspections. The scope of inspection includes reviewing the registration details of the workshops and their compliance with the Practice Guidelines and the Code of Conduct. We will arrange an appointment with the workshop concerned before conducting the audit inspection in order not to affect its operation.

The first round of inspections is expected to complete within 12 months, covering a total of nearly 2 000 registered workshops and the random audit inspection of their registered mechanics. In addition to providing the necessary tips and guidance to registered workshops during individual inspections, we will also summarise the inspection results, analyse the compliance of and difficulties encountered by the workshops and mechanics in following the Practice Guidelines and the Code of Conduct, with a view to formulating appropriate support measures. In the long run, the inspection results will facilitate us in analysing and determining the indicators and requirements for raising the service standards of the trade.

Members of the trade are appealed to support and co-operate during the audit inspections, and join hands in leading the vehicle maintenance trade towards a new milestone!

Vehicle Maintenance Registration Unit, EMSD

(4) Latest Developments of the Registration Schemes

1. Special notice – upcoming events! To promote the latest revised Practice Guidelines and publicise the voluntary registration schemes for vehicle maintenance, the EMSD and the VMTAC will jointly organise a quiz competition and a four-panel story-telling photography competition on the Practice Guidelines. For details, please stay tuned for the next issue of RVM Newsletter. Do not miss the chance to win the attractive prizes!

2. The VMTAC decided at its 29th meeting to revise the Practice Guidelines. More guidelines on the handling of retired batteries, matters to note on the maintenance of electric vehicles and hybrid vehicles as well as other appropriate contents have been added. The latest revised Practice Guidelines is available at the EMSD website:

https://www.emsd.gov.hk/filemanager/en/content_651/Practice_Guidelines_for_Vehicle_Maintenance_Workshops.pdf

3. Updating the total number of vehicle maintenance workshops in Hong Kong: In order to more accurately evaluate the effectiveness of the registration scheme and the trade's support to the scheme, the VMTAC endorsed at its 29th meeting (5 July 2018) that the total number of vehicle maintenance workshops in Hong Kong would be updated to 2 822, with reference to the information provided by different government departments and that of new vehicle maintenance workshops registered by the Registration Unit, as well as the cancellation of registration information of workshops which have winded up. The percentages calculated based on the current and updated number of workshops are set out in the following table:

Workshops – as at end-July 2018		
Number of registered workshops	Percentage in the total number of workshops	
2 052	Current total (2 882)	Updated total (2 822)
	71.2%	72.7%

4. We are now inviting applications for the VRSVMW. For details, please refer to the EMSD website: https://www.emsd.gov.hk/en/supporting_government_initiatives/registration_scheme_for_vehicle_maintenance/voluntary_for_vehicle_maintenance_workshops/index.html

Information on the Voluntary Registration Scheme for Vehicle Mechanics (VRSVM):	
Total number of vehicle mechanics	10 382 Note 1
Number of registered vehicle mechanics (as at end-July 2018)	9 303
Information on the VRSVMW:	
Total number of vehicle maintenance workshops	2 822 Note 2
Number of registered workshops (as at end-July 2018)	2 052

Note 1: 2016 Manpower Survey Report (updated on 25 August 2017) by the Vocational Training Council and the Automobile Training Board.
Note 2: Database of the Registration Unit (updated on 5 July 2018).

If you wish to help protect our environment by receiving the electronic version of RVM Newsletters and leaflets, please send us the completed reply slip by e-mail or WhatsApp (vmru@emsd.gov.hk or WhatsApp: 9016 3185). We will contact you by means of e-mail or mobile communication as far as possible.

Reply Slip

I/My company would like to receive the RVM Newsletters and other information leaflets by □ e-mail / □ WhatsApp.

Please provide the relevant contact details based on the above selected means of communication:

E-mail address: _____ WhatsApp：

_____

The electronic version of RVM Newsletters is also available at the EMSD website:

https://www.emsd.gov.hk/en/supporting_government_initiatives/registration_scheme_for_vehicle_maintenance/publications_and_circulars/rvm_newsletter/index.html

(5) Committee Members Assuming Office – Members of the 7th Term of the Vehicle Maintenance Technical Advisory Committee Formally Takes Office

The VMTAC has reached the 7th term since its establishment in 2006. Members of the new term of the VMTAC already took office on 1 June 2018 for a period of two years. To maintain its broad representation, the VMTAC, as in the past, comprises members from different trade associations, professional institutions, training institutes, transport operators employing a large number of vehicle mechanics, vehicle suppliers' associations, vehicle owners' association, representatives from relevant government departments, and an independent person, with a view to advising the Government on the vehicle maintenance registration schemes. In addition to the 20 members and Chairman of the VMTAC, there are also six co-opted members of the Sub-Committees to mainly offer professional advice on the registration schemes for individual special industries in the trade to the Management and Review Sub-committee and the Research and Development Sub-committee. The list of members of the new term of VMTAC and the list of co-opted members are set out in the following tables:

List of Members of the 7th VMTAC

Mr LI Tak-fat (professional institution)	Mr CHAN Sze-tat (professional institution)	Mr CHAN Ho-man (vehicle suppliers' association)	Mr CHOI Chun-ho, Daniel (vehicle suppliers' association)
Mr TAI Kwok-keung (workers union)	Mr CHONG Tze-keung (workers union)	Mr TAM Kum-fai (workers union)	Mr LEE Chi-hung (workers union)
Mr TANG Wing-hong, Madison (training institute)	Mr YIP Sui-pong, Ponthey (training institute)	Ms SHAR Wing-suen (training institute)	Ms WONG Wai-yee, Lily (independent person)
Mr YEUNG Ka-wo (trade association)	Mr WONG Kin-fai (trade association)	Mr CHAN Koon-tong (trade association)	Mr LIU Keung (vehicle owners' association)
Mr HO Sai-lok (transport operator)	Mr HO Kin-san (transport operator)	Representative from the Transport Department (government department)	Representative from the Environmental Protection Department (government department)

Note: The VMTAC is chaired by the Director of Electrical and Mechanical Services.

List of Co-opted Members of the VMTAC

Mr WONG Koon-wai, Max (professional institution)	Mr MOK Chi-fai (trade association)	Mr CHAN Kwok-tin (trade association)
Mr LO Sik-keung (trade association)	Mr LEE Ping-sun (trade association)	Mr LEUNG Chun (trade association)

As the new term begins, the VMTAC will continue to promote the VRSVM and the VRSVMW, while reviewing the contents, effectiveness and development directions of the two voluntary registration

schemes, so that they can keep abreast of the times and fulfil public aspirations. Starting from this year, the VMTAC will step up audit inspections of registered mechanics and registered workshops to oversee the trade's compliance with the Code of Conduct and the Practice Guidelines, as well as assisting mechanics or workshops that fail to meet the requirements in making improvements, thereby facilitating the trade to enhance its service standards and a smooth transition to the mandatory registration system in the future.

In the new term, the VMTAC and the Vehicle Maintenance Registration Unit of the EMSD will continue to strive to enhance the image and standards of the vehicle maintenance trade. We look forward to receiving staunch support from the trade!

Secretariat, VMTAC

(6) Close of Application for Registration as Type Four Workshops

As registration applications from workshops located at residential buildings or composite buildings with residential portions would no longer be accepted upon implementation of the VRSVMW for three years (i.e. after 15 July 2018), we called on workshops to apply for registration before the deadline via different means and channels in the past six months, including issuing invitation letters, notification cards of reminder and RVM Newsletter, sending mobile messages, organising talks and visits, as well as visiting Type Four workshops which were yet to be registered. **Application for registration as Type Four workshops is now closed.**

Thanks to the enthusiastic response and active participation from trade members, we received new applications for registration from a total of 155 Type Four workshops in 2018, of which 107 were successfully registered. As at end-July 2018, 2 052 vehicle maintenance workshops were successfully registered, accounting for about 72.7% of the total number of vehicle maintenance workshops in Hong Kong. The number of vehicle mechanics employed by these registered workshops made up approximately 81.2% of the total number of vehicle mechanics in Hong Kong. **The registration rate of Type Four workshops reached 77.7%**. The figures of various types of registered vehicle maintenance workshops are available in the following table.

Type of workshops	Total no. of workshops	No. of registered workshops (%*)		Growth (no.)
		End-December 2017 (%)	End-July 2018 (%)	
Type One	107	85 (79.4%)	87 (81.3%)	+2
Type Two	123	109 (88.6%)	110 (89.4%)	+1
Type Three	1 385	854 (61.7%)	920 (66.3%)	+66
Type Four	1 207	824 (68.3%)	935 (77.7%)	+111
Total	2 822	1 872 (66.3)%	2 052 (72.7%)	+180

* Taking the total number of workshops for the relevant type of workshops as the base.

Application to Become Competent Persons (Class 6) by Registered Vehicle Mechanics

Vehicle mechanics may apply to the EMSD for becoming Competent Persons (Class 6) (i.e. CP6) upon completion of the LPG Vehicle Servicing Programme provided by the Vocational Training Council and receiving relevant on-the-job training. A CP6 is qualified to undertake maintenance and repair work on the fuel system of LPG vehicles (mainly taxis and light buses), including (i) replacement of LPG fuel tank, or (ii) maintenance, repair or replacement of vaporiser, pipework, pressure regulator, mixer and associated components.

The EMSD started to replace new certificates and identification cards for existing CP6 in April this year. These new certificates and identification cards are classified into gold and silver cards to replace the "white cards" issued in 2015. CP6 with gold cards are qualified to repair and maintain the fuel system of LPG vehicles equipped with an internal fuel pump, while CP6 with silver cards also possess the relevant qualification, but excludes the repair and maintenance of the fuel system equipped with an internal fuel pump. The EMSD organised four seminar-cum-sharing sessions in March and April

this year for vehicle mechanics to better understand the arrangement of card replacement. Trade members' attendance at the events is much appreciated.

Fast Fact: As at end-July 2018, of the 906 CP6 in Hong Kong, 682 were already registered as vehicle mechanics.

Please scan the QR code on the right for more information on CP6.

(7) Sharing on Vehicle Engineering - A Mini Encyclopedia of Ambulance Maintenance and Management

We all know that there are lives in deadly danger when we see the flashing light and hear the siren of an ambulance. Safe and reliable ambulances play an important role in delivering ambulance services for which every second counts. Ambulances are available day and night throughout the year with very frequent starting/stopping, which greatly accelerates the wearing and ageing of their components, posing challenges for the maintenance and repair of ambulances.

Maintenance Management System

At present, our Maintenance Workshop in Kowloon Bay, three servicing stations and five emergency servicing stations are responsible for the maintenance of about 410 ambulances under the Fire Services Department. As some ambulances have travelled a total mileage of over 400 000 kilometres, general regular inspections and preventive maintenance are insufficient to ensure the reliability of ambulances. Therefore, we have tailored a maintenance system for ambulances and introduced at the same time the ISO 55001 asset management model to manage the ambulance fleet. The relevant management model is largely divided into four areas:

1. In the event of ambulance breakdown, analyse and record the cause and the malfunctioned components, then upload the information to the central asset management system;
2. Monitor any repeated breakdowns within a short period of time;
3. Identify the components which seriously affect the reliability or safety of the ambulance, and conduct risk assessment on breakdown probability and severity;
4. Develop and implement a component pre-replacement scheme.

Interesting Facts

In addition to maintenance, we also review and improve the design of ambulances from time to time to enhance their performance and safety, such as using light-emitting diode (LED) lamps to reduce electricity consumption, increasing the number of additional batteries and remotely monitoring the status of batteries, etc.

In order to reduce the breakdown probability due to battery failure, we have replaced the original maintenance-free lead-acid auxiliary batteries on ambulances with deep-cycle batteries. Besides, a spiral battery is added to support the daily electricity consumption mode of ambulances. The deep-cycle batteries are uniquely designed for frequent cycles of discharging. This type of battery is commonly used for storing electricity in renewable energy (e.g. solar energy and wind energy, etc.) power generation systems, and is very suitable for supplying electricity to various types of equipment on ambulances; it can also withstand the daily operation of multiple cycles of discharging and charging. Despite charging at a very low capacity, the battery is still not easy to lose efficacy. This is what "deep" means in the term deep-cycle batteries. As for spiral battery, high-pressure compact columnar rolling is applied upon thinning of the positive and negative panels and the water-absorbing panels to increase the effective functioning area of the positive and negative panels, enabling lower internal impedance and stronger discharging current when compared to conventional lead-acid batteries of the same

volume and size. When the capacity of the original main battery is running low, the spiral battery can provide sufficient power to enable starting engine.

As the saying goes, "small changes make huge improvements", the safety and stability of ambulances can be greatly enhanced simply by changing the type of auxiliary battery.

If you want to know more about our work and the interesting facts of government vehicles, please pay attention to "Sharing on Vehicle Engineering" in the next issue!

Vehicle Engineering Sub-division, EMSD

(8) A Fleet of Special Purpose Vehicles - Overview of Special Purpose Vehicles

At present, there are about 1 700 licensed vehicles designed for specific tasks or special environments in Hong Kong. They are called special purpose vehicles (SPVs), with some less common ones being bridge inspection vehicles, tunnel wall cleansing vehicles, vehicles for testing the coefficients of friction of airport runways, runway rubber removal and cleaning vehicles. In this issue, I will briefly introduce the design, technology and application of SPVs to enhance readers' understanding of such vehicles.

To design and build a safe and efficient SPV, appropriate chassis and equipment are both indispensable and have to be combined into one. The assembling process requires technical support on multiple aspects and this is definitely no easy task.

The SP (special purpose) of each SPV refers to the vehicle's mechanical equipment, such as the commonly-seen derricks, working platforms at height, trailers, lifting tailgates, mud compartments, etc., and the part which enables the movement of such equipment is the chassis. Choosing a suitable chassis does involve extensive knowledge and considerations, including using a "single chassis" or a "twin chassis", the number of axles depending on the total weight of the chassis, size of the chassis, distance between the axles, total weight of each individual axle in the weight distribution of the entire SPV, selection of suspension system, compatibility of the layout of the exhaust system with the equipment, as well as future maintenance arrangement, etc., all of which are to be carefully considered, calculated, and planned when selecting the chassis.

For instance, frequently-seen refuse collection vehicles (commonly known as "RCVs") are a type of SPVs. RCVs are basically made of a truck chassis installed with an enclosed metal refuse collection compartment and a sump tank. The number of axles required for the chassis is decided based on the needs of the jobs subject to the conditions of the total weight of the chassis and the area of operation. In order to leave the available space for the installation of refuse collection compartments and sump tanks, "single chassis" are usually adopted for RCVs. The operation of the refuse compartment is mainly controlled by a hydraulic system, which is connected to a power take-off (PTO) for torque conversion to be exported to the hydraulic pump through the engine or gearbox, and the hydraulic oil in the hydraulic tank of the refuse compartment is then carried to the multi-functional hydraulic valve for controlling the operation of the hydraulic pump on the refuse compartment, thereby driving the movement of various parts in the compartment, the open and close of the compartment end as well as the lifting of the bin lift, thereby achieving refuse collection and unloading the loaded refuse from the landfill.

The repair and maintenance of SPVs also differ from general vehicles in the way that they need to be handled by trained and dedicated operators and maintenance teams. Besides, special tools required for the management and maintenance of vehicle parts shall be properly arranged and handled. Apart from building an SPV that meets users' needs, it is the ultimate philosophy of the SPV project to facilitate the operation of equipment by users and provide regular maintenance!

YEUNG Ka-wo
Hong Kong Vehicle Repair Merchants Association Limited

(9) Mini Theatre of Environmental Protection – Practical Tips on Replenishing Refrigerants to Protect the Ozone Layer

Scene: Three car owners are having discussions on matters relating to air-conditioning of vehicles in the hot summer

Mr A: When summer comes, the air-conditioning unit of my jalopy is not cooling well. Is it necessary to add refrigerants?

Mr B: You should have it checked at a garage. If there is a leakage in the cooling system, you need to have it mended before adding refrigerants.

Mr A: I heard that refrigerants will cause damage to the ozone layer, is that true?

Mr B: Yes. Some of the refrigerants will destroy the ozone layer, exposing the earth's surface to more ultraviolet radiation, which will affect human health and the environment. While the import of certain highly polluting products is already prohibited by legislation in Hong Kong, some older cars may still be using ozone-depleting refrigerants, such as CFC-12.

Mr C: Garages should use devices approved by the Environmental Protection Department (EPD) for recovery or re-use of refrigerants, and keep records of refrigerant consumption. Indiscriminate emission of controlled refrigerants into the atmosphere may be a criminal offence.

Mr A: Well, I'll get my car checked early to avoid leakage of refrigerants which will cause damage to the environment.

Smart Tips on Environmental Protection

Pursuant to the Ozone Layer Protection (Controlled Refrigerants) Regulation, anyone who recovers or recycles controlled refrigerants shall:

- use refrigerant recovery machines approved by the EPD to recover and re-use refrigerants
- operate the equipment according to the instructions of the recovery machine manufacturer
- exercise care in examining refrigerant recovery machines and all pipe joints to avoid leakage of refrigerants
- maintain proper and detailed refrigerant consumption records

For details, please refer to the Guidance Note for Recovery and Minimising the Release of Hydrochlorofluorocarbons (HCFCs) Refrigerant produced by the EPD. The Guidance Note has been uploaded to the EPD website:
https://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/air/ozone_layer_protection/files/common/GN2014P015-2016ar-e.pdf

Environmental Protection Department

(10) Mini Theatre of Occupational Safety and Health

On: Hi, Chuen Gor, my name is On, I am new here and would very much appreciate your guidance.

Chuen: Hello, On. You're welcome. We are simply exchanging ideas with each other. Well, have you ever worked in the vehicle maintenance trade before?

On: Chuen Gor, to be frank, I am really new to the trade, but I will learn on the job!

Chuen: It doesn't matter, On. Let me tell you some safety tips regarding the vehicle maintenance process today. Do you know what task is performed in the room at the front?

On: It should be…

Chuen: Haha, it's okay. The room in front of us is the spraying room. Any paint spraying of flammable liquid must be carried out in the spraying room. A special spraying area should be zoned for this purpose if there is no such spraying room in the workshop. In addition, effective and sufficient mechanical ventilation equipment should be installed in the area concerned to remove any flammable gas arising from the spraying process. Besides, the electrical equipment must be specially constructed, designed, installed and maintained to prevent the ignition of such flammable gases.

On: I see.

Chuen: You should remember that smoking is not allowed and the use of naked flames or other items that may cause the ignition of flammable gases is prohibited within six meters of any spraying room or spraying area. At least two notices of "NO SMOKING – NO NAKED FLAMES 不准吸煙 – 不准點燃無遮蓋之燈火" shall be displayed. Moreover, please remember that relevant fire extinguishing appliances are required at the spraying area, they shall be placed or fitted in an easily accessible location as well as regularly checked and maintained!

On: Got it.

Chuen: The flammable liquid used for paint spraying should be stored in a suitable container, for example, a metal container fitted with a self-closing lid, while appropriate wordings should be written on the outside of the container, such as the English characters "FLAMMABLE LIQUID" and Chinese characters "易燃液體". Please remember to properly dispose of used cotton waste too!

On: Sure, I will pay extra attention to this, please don't worry.

Chuen: You are very obedient, let me give you a useful booklet – A Guide to the Factories and Industrial Undertakings (Spraying of Flammable Liquids) Regulations, you will be perfectly safe if you follow the Guide closely.

Smart Tips on Occupational Safety

Before carrying out paint spraying and other related coating processes, to ensure safety and health at work of employees working with hazardous paint substances and spraying processes, a carefully planned chemical safety programme is essential. In the programme, the hazards of the materials and processes used in the workplace should be known and communicated to all affected employees. The risks arising from the hazards have to be assessed and responsive controls set up with their effectiveness monitored. The chemical safety programme also includes other elements, such as personal protective equipment, emergency planning and training for employees. The above aspects of the chemical safety programme should be well organised and integrated into the safety management system of the

workplace. In other words, the company should have its safety policy, responsible personnel and resources on the development, implementation and maintenance of the chemical safety programme.

For details, please refer to the following documents prepared by the Occupational Safety and Health Branch of the Labour Department and the Occupational Safety and Health Council:

1. A Guide to the Factories and Industrial Undertakings (Spraying of Flammable Liquids) Regulations
   https://www.labour.gov.hk/eng/public/os/A/SFLReg.pdf

2. Chemical Safety in the Workplace - Guidance Notes on Paint Spraying and Related Coating Processes
   https://www.labour.gov.hk/eng/public/os/C/B123.pdf

Occupational Safety and Health Council

(11) Prize Quiz (Issue No. 22)

Q1. What was the number of registered vehicle mechanics as at end-July 2018?
A. 2 052
B. 9 303
C. 2 882
D. 10 382

Q2. Which type of vehicle maintenance workshops has now closed its application for registration as registered workshops?
A. Type One
B. Type Two
C. Type Three
D. Type Four

Q3. Which of the following refrigerants will cause damage to the ozone layer?
A. CFC-12
B. R134a
C. R410A
D. None of the above

Q4. Within how many metres of any spraying room or spraying area is smoking not allowed and the use of naked flames or other items that may cause the ignition of flammable gases prohibited?
A. 6 metres
B. 60 metres
C. 5 metres
D. 50 metres

Q5. Which of the following types of batteries has the EMSD replaced for new ambulances?
A. Maintenance-free lead-acid batteries
B. Deep-cycle batteries
C. Lithium-ion batteries
D. All of the above

How to participate? (Issue No. 22)

Please complete the form below, circle the correct answers, and send it to the Vehicle Maintenance Registration Unit (VMRU) by fax or e-mail (fax: 3521 1565 or e-mail: vmru@emsd.gov.hk).
Deadline: 17 September 2018

Question	Answer
1	A. B. C. D.
2	A. B. C. D.
3	A. B. C. D.
4	A. B. C. D.
5	A. B. C. D.

Name: _____ Vehicle Mechanic Registration No.: VM_____

E-mail Address: _____Contact Telephone No.: _____

- Each winner will receive a souvenir. As there are ten souvenirs in all, the winners will be decided by lottery if more than ten participants answer all the questions correctly.
- Only registered vehicle mechanics with valid registration may participate, each not more than once in each quiz.
- The decision of the VMRU on the quiz will be final.
- The correct answers and list of prize winners will be announced in the next issue of the RVM Newsletter. Prize winners will also be notified by the VMRU individually.

Result of the prize quiz in RVM Newsletter Issue No. 21

The ten winners who answered all the questions correctly and were drawn by lottery are:
MEN Kuen Wai, FONG Ka Ho, NG Man Hon, LI Chi Keung, CHOW Chi Keung,
MOK Wai Yin, CHAN Man Po, WONG Chuen Hung, WONG Chun Yip and LO Ho Wing

The answers of the prize quiz in RVM Newsletter Issue No. 21 are as follows:

Question	1	2	3	4	5
Answer	A	C	A	D	D

The answers of the Continuing Professional Development 2017 (Test) are as follows:

Question	1	2	3	4	5	6	7	8	9	10
Answer	C	B	C	B	D	C	D	A	C	B

(12) Training Institutes Providing Continuing Professional Development Courses for Vehicle Mechanics (in random order)

Name of training institute	Website / Contents	Enquiry Tel. No.	QR Code
Traffic Services Employees Association	http://www.facebook.com/tseahk	2575 5544	
Pro-Act Training and Development Centre (Automobile)	http://www.proact.edu.hk/proact/html/en/centres-and-programmes/automobile/about/index.html The Certificate in Vehicle Mechanical Repair programme# run by the Pro-Act Training and Development Centre (Automobile) may serve as another means for qualifying as registered vehicle mechanics. Mechanics who are interested in enrolling in the above programme may visit the Centre's website. # For details and latest developments of the programme, the information issued by the Pro-Act Training and Development Centre shall prevail.	2449 1310	
The Institute of the Motor Industry Hong Kong	http://www.hkimi.org.hk The Institute is organising a training and development seminar at the VTC Kwai Chung Complex from 9:30 am to 12:00 noon on 15 September and 15 December 2018 (Saturdays) to provide members with continuing professional development. For details, please visit the above website or call the enquiry telephone number.	2625 5903	
Hong Kong Vehicle Repair Merchants Association Limited	https://www.facebook.com/HKVRMA/	2399 7977	
Hong Kong Vehicle Repairing Industry Employee General Union	http://www.vrunion.hk	2393 9955	
Occupational Safety and Health Council	https://eform.oshc.org.hk/course/eng/course/CourseDetail.asp?CouID=463	2311 3322	
The Society of Operations Engineers (Hong Kong Region)	http://www.soe.org.hk/	2617 0311	
Qualifications Framework recognised courses	http://www.hkqr.gov.hk/HKQRPRD/web/hkqr-en/index.html	2836 1700	

Gentle Reminder

The contents in each issue help you catch up on the development of the registration scheme and enhance the quality of service. Please stay tuned! Each issue can be downloaded from the EMSD website at:

https://www.emsd.gov.hk/en/supporting_government_initiatives/registration_scheme_for_vehicle_maintenance/publications_and_circulars/rvm_newsletter/index.html

Adjustment of Principal Postage Rates by Hongkong Post

Hongkong Post adjusted the principal postage rates on 1 January 2018. When posting the application form or supplementary documents, please confirm the new rate according to the weight of the mail item and ensure that it bears sufficient postage and a return address has been written to enable smooth delivery. If the postage is insufficient, Hongkong Post will return the mail item to the sender. Mail items with no return address will be disposed of without opening.

For enquiries on the contents of the RVM Newsletter, please contact the EMSD's VMRU.
Fax: 3521 1565 / E-mail: vmru@emsd.gov.hk / Tel: 2808 3545