

## LCQ9: Air quality in train compartments and railway stations

Following is a question by the Hon Chan Kin-por and a written reply by the Secretary for Transport and Housing, Mr Frank Chan Fan, in the Legislative Council today (June 26):

Question:

Railway is a major mode of public transport used by members of the public on a long-term basis. The findings of a research conducted by a university, which were published last year, showed that (i) when train doors opened, the concentrations of fine suspended particulates at the door-side surged, and (ii) those particulates contained metals which, after being breathed into the lungs, might cause respiratory and cardiovascular diseases, and even lung cancer. In this connection, will the Government inform this Council:

(1) whether it knows the timetable for and other details of the regular tests currently carried out by the MTR Corporation Limited (MTRCL) on the air quality of train compartments and railway stations, and the latest concentration levels of air pollutants obtained from such tests;

(2) whether it knows if MTRCL conducted any study in the past three years on ways to reduce the concentration levels of air pollutants in train compartments and railway stations; if MTRCL did, of the details; if not, the reasons for that; and

(3) given that MTRCL currently monitors the air quality in railway facilities according to the Practice Note for Managing Air Quality in Air-conditioned Public Transport Facilities: Railways published in 2003 by the Environmental Protection Department (EPD), whether EPD has updated the Practice Note since 2003; if not, when EPD will update the Practice Note?

Reply:

President,

Having consulted the Environmental Protection Department (EPD) and the MTR Corporation Limited (MTRCL), my reply to the Hon Chan Kin-por's question is as follows:

(1) and (2) In 2003, the EPD issued the "Practice Note for Managing Air Quality in Air-conditioned Public Transport Facilities – Railways (Practice Note 2/03)" (Practice Note) to assist railway service providers in monitoring and managing air quality in railway facilities. According to the Practice Note, railway service providers should ensure ventilation of its railway facilities in order to achieve and maintain a good air quality. Carbon dioxide is the monitoring indicator of the effectiveness of ventilation system. Moreover, railway service providers should establish a framework and

action plan to achieve and maintain a good indoor air quality in their facilities.

As railway service providers, the MTRCL has all along complied with the Practice Note in managing the air quality of its facilities, providing a safe and comfortable environment for passengers travelling on and waiting for MTR trains. Specifically, MTR stations and train compartments are equipped with ventilation systems and air filters, bringing in outdoor fresh air to stations and train compartments to improve ventilation. The MTRCL also regularly arranges for cleansing or replacement of ventilation system filters and air-conditioning systems so as to maintain a good indoor air quality.

As regards to monitoring, the MTRCL, in accordance with the Practice Note, has been conducting regular checking of the air quality of train compartments and all train stations at least once a year, in order to monitor the air quality of its facilities. Meanwhile, the MTRCL also conducts checking on its railway facilities (including new stations and trains, relevant facilities and locations of public concern) as and when necessary. Based on the results of the relevant checking, in 2018, the air quality of MTR trains compartments and all stations reached Level 1, the highest level representing good air quality under the Practice Note, which means that the hourly average concentration of carbon dioxide is below 2 500 parts per million (4 500 milligrams per cubic metre). This indicates that MTR train compartments and stations are adequately ventilated and the air quality therein is good.

The MTRCL will continue its work in managing and monitoring air quality. It welcomes views from the Government, the trades, other professional bodies and the public in this respect, and will continue to strive to provide a good indoor air quality and safe and comfortable environment for passengers travelling on MTR trains.

(3) According to the EPD, it is studying the latest developments of various countries on the management of indoor air quality of transport facilities, with a view to reviewing whether the Practice Note requires any updating.