

LCQ12: Air quality in Tung Chung

Following is a question by the Hon Chan Chi-chuen and a written reply by the Acting Secretary for the Environment, Mr Tse Chin-wan, in the Legislative Council today (May 22):

Question:

In its reply to a question raised by me on February 28 last year, the Government said that the air quality in Tung Chung continued to improve from 2013 to 2017. However, quite a number of Tung Chung residents have recently relayed to me that they feel that the air quality in Tung Chung has continued to deteriorate in recent months (especially after the commissioning of the Hong Kong-Zhuhai-Macao Bridge). In this connection, will the Government inform this Council:

(1) of the respective numbers of exceedances of concentrations of various pollutants (including respirable suspended particulates (i.e. PM10), fine suspended particulates (i.e. PM2.5), ozone, sulphur dioxide, nitrogen dioxide and carbon monoxide), as recorded by the air quality monitoring station in Tung Chung last year, against the Air Quality Objectives or other relevant objectives, and the details of the exceedances of each type of pollutants, including the respective average and maximum extent of exceedances and concentrations;

(2) of the measures to be implemented to ensure that the air quality in Tung Chung will not further deteriorate; and

(3) whether it has regularly reviewed the effectiveness of the various air quality improvement measures for improving the air quality in Tung Chung; if so, of the outcome; if not, the reasons for that?

Reply:

President,

My consolidated responses to the questions raised by the Member are as follows:

The overall air quality of Hong Kong (including Tung Chung) has been improving in recent years. From 2014 to 2018, the annually average concentration of key air pollutants including respirable suspended particulates (RSP or PM10), fine suspended particulates (FSP or PM2.5), sulphur dioxide (SO2) and nitrogen dioxide (NO2) recorded at the Tung Chung Air Quality Monitoring Station has dropped by about 20 to 30 per cent, while the ozone (O3) level remained flat. The details are set out in Annex I and Annex II.

Ozone is a complicated regional air pollution problem. It is not directly emitted from pollution sources but formed by photochemical reactions of nitrogen oxides and volatile organic compounds from various pollution

sources in the region under sunlight. It can be transported by wind and affect different areas in the region.

In addition to our efforts to reducing local emissions, the Hong Kong Special Administrative Region Government is working with the Guangdong Province to tackle the regional air pollution. According to the monitoring data in Annex II, it can be seen that the downward trend of key pollutant concentrations in Tung Chung is discernible while the concentration of PM_{2.5}, as an indicator of the regional smog problem, also showed a declining trend. With the progressive reduction in the concentration of various pollutants, it is anticipated that the photochemical reactions resulting in formation of O₃ will slow down gradually in the future. The Government will continue to monitor the air quality of various districts in Hong Kong including Tung Chung and evaluate the effectiveness of the control measures.