

LCQ6: Air pollution problem in Tsuen Wan and Kwai Tsing Districts

Following is a question by the Hon Chan Han-pan and a reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (May 26):

Question:

The Government installed four dry weather flow interceptors (DWFIs) in Tsuen Wan one and a half years ago to intercept effluent flow in stormwater drains and drainage channels in dry weather and divert it to the sewerage system. However, the seawater near the waterfront of Tsuen Wan still gives off stench from time to time. Besides, container vessels continue to emit pollutants after berthing at the Kwai Chung Container Terminals (KCCTs), causing air pollution problem. In this connection, will the Government inform this Council:

- (1) whether it will consider requesting the operators of KCCTs to install onshore power supply facilities, so that container vessels may switch to using electricity after berthing; if so, of the details and timetable; if not, the reasons for that;
- (2) whether it has gained an understanding as to why the aforesaid DWFIs have failed to solve the problem of the seawater giving off stench, and what other solutions are in place; and
- (3) given that there are often strong smells of petrol near the waterfronts of Tsuen Wan and Kwai Chung, whether the Government has deployed staff to regularly inspect the berthing spaces for vessels carrying dangerous goods, so as to prevent lawbreakers from illegally selling fuel there, and whether it has considered relocating such berthing spaces; if so, of the details; if not, the reasons for that?

Reply:

President,

As regards the question raised by the Hon Chan Han-pan, having consulted the Drainage Services Department (DSD) and the Marine Department (MD), my response is as follows:

- (1) To improve air quality, the Government controls the use of marine fuel in vessels to reduce their emissions of sulphur dioxide and suspended particulates. Starting from July 1, 2015, Hong Kong was the first port in Asia to mandate ocean-going vessels (OGVs) to switch to low sulphur fuel (i.e. fuel with sulphur content not exceeding 0.5 per cent) while at berth in Hong Kong waters. From January 1, 2019, the Government further collaborated

with the Mainland to jointly set up a Domestic Emission Control Area (DECA) in the Pearl River Delta region. All vessels (including OGVs) within the DECA (including Hong Kong waters) are required to use compliant fuel (including low sulphur fuel), irrespective of whether they are sailing or berthing, which was a year earlier than the implementation of the global sulphur cap (i.e. limiting the sulphur content in fuel to not exceeding 0.5 per cent) by the International Maritime Organisation on January 1, 2020. Since the implementation of the above measures, the annual average concentration of sulphur dioxide recorded in 2020 at the Kwai Chung Air Quality Monitoring Station in the vicinity of the KCCTs has reduced by about 70 per cent as compared with 2014, indicating that the control measures have been effective.

As regards the Hon Chan's question on whether onshore power supply (OPS) facilities can be installed at the KCCTs so that container vessels can switch to use electricity while at berth, it should be noted that vessels must be equipped with appropriate OPS facilities for connecting to the OPS systems at the terminals. Currently, there are few OGVs in the world equipped with OPS facilities and such installation is not common. The installation of OPS facilities at the KCCTs at this moment will not bring along any apparent improvement in air quality. We will continue monitoring the international development of OPS and other emission reduction technologies so as to timely consider the need of providing OPS facilities at the KCCTs for OGVs.

(2) Similar to many old urban areas in Hong Kong, Tsuen Wan is a densely populated district packed with new and old buildings and vibrant city activities. This unavoidably result in some polluted surface run-off entering the Tsuen Wan Bay via the stormwater drainage system, causing odour problem to the near-shore waters. In order to improve the coastal water quality of old districts along Victoria Harbour including Tsuen Wan, the Government commissioned a consultancy study on Further Enhancing the Quality of Coastal Waters of Victoria Harbour to conduct a holistic review of the situation in various districts and to develop necessary improvement measures.

The provision of dry weather flow interceptors (DWFIs), in location such as Kai Tak Nullah, has been demonstrated as an effective measures in preventing polluted water from entering the sea through stormwater drainage system. The four DWFIs mentioned by Hon Chan are located at Tsuen Wan Market Street, Wo Di Street, Hoi Pa Street and Chung On Street. These DWFIs built by the DSD in October 2019 are part of an advanced project implemented by the Government for early improvement of the coastal water quality of Tsuen Wan Bay. At present, these DWFIs have been intercepting some pollutants from entering Tsuen Wan Bay as designed. Furthermore, we are constructing another eight DWFIs in Kwai Chung and Tsuen Wan to intercept the wastewater from the rural areas and prevent it from entering the marine waters in Tsuen Wan via stormwater drainage system. These DWFIs will be progressively completed by 2023.

In order to resolve the odour problem at Tsuen Wan Bay in the long term, we are planning some newly designed large-scale dry weather interception facilities at downstream location of the box culverts of Tai Ho Road and Ma Tau Pa Road as recommended in the consultancy study. These facilities aim to

cover the largest rainwater catchment area in Tsuen Wan District and intercept the maximum amount of pollutants. The works project has been included in the Public Works Programme, and the investigation and design work is underway. Subject to support from the local community and funding approval by the Legislative Council, the project is expected to be completed in 2027/28 the earliest.

In addition, the DSD and the Hong Kong University of Science and Technology has developed a new technology on "odour-control hydrogel" which was found effective in reducing odour in drainage systems during the on-site tests. We commenced in stages since March 2021 the deployment of "odour-control hydrogel" at stormwater outfall locations of Tsuen Wan waterfront and their vicinity where there are potential odour problems.

Looking ahead, we will continue to implement various measures to enhance the quality of coastal waters and improve the overall environment of Tsuen Wan Bay, which include tracing pollution sources; stepping up our enforcement actions; rectifying sewer misconnections; clearing and desilting drains; rehabilitating underground sewers progressively; and conducting publicity and education on prevention of near-shore water pollution.

(3) The MD deploys patrol launch to conduct routine patrol duties in Tsuen Wan and Kwai Chung water areas. Apart from routine ship safety inspection, the MD will also carry out educational/promotional activities such as distribution of safety leaflets and anti-littering operation from time to time. The MD did not find any illegal fueling activity at the Tsuen Wan Dangerous Goods Anchorage (TWDGA) in the past few years.

The TWDGA was established in 1968 for the berthing and sheltering of local oil carries. As the TWDGA is located in sheltered waters, it is the only DGA in Hong Kong with private moorings (70 in total) for the local oil carriers. Since the TWDGA is operating well, the MD has no plan for relocation at the moment.

Thank you, President.