

# LCQ10: Quality of coastal waters of Victoria Harbour

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

Question:

Some members of the public have complained to me that coastal waters (particularly in the vicinity of the Hung Hom Promenade) of the Victoria Harbour (the Harbour) give off unbearable stench, causing serious nuisance to members of the public. It is learnt that one of the sources of the stench is the sewage discharged from some private buildings in Hung Hom as their foul water pipes have been wrongly connected to the storm drain systems (misconnections of foul water pipes). On the other hand, a consultancy study on further enhancing the quality of coastal waters of the Harbour (the consultancy study) commissioned by the Environmental Protection Department in 2016 has been substantially completed. In this connection, will the Government inform this Council:

(1) of the annual and monthly compliance rates of the Water Quality Objectives (WQOs) of the Harbour water control zone (WCZ) in each of the past five years (set out in the table below);

| Month      | Compliance rate of WQOs |      |      |      |      |
|------------|-------------------------|------|------|------|------|
|            | 2014                    | 2015 | 2016 | 2017 | 2018 |
| January    |                         |      |      |      |      |
| .....      |                         |      |      |      |      |
| December   |                         |      |      |      |      |
| Whole Year |                         |      |      |      |      |

(2) of the number of cases of misconnections of foul water pipes causing discharge of sewage into the Harbour WCZ which were followed up by the Government in each of the past five years and, among such cases, the number of those which have now been rectified, with a breakdown by District Council district;

(3) among the cases mentioned in (2) of the respective numbers of those in which (i) rectifications were made after the owners had been given warnings/advice, (ii) rectifications were made after the owners had received statutory repair/removal orders or had been prosecuted, (iii) rectifications were yet to be made despite that law enforcement actions had been taken by the Government, and (iv) rectification works were carried out by government contractors; whether it has reviewed the effectiveness of the relevant law enforcement actions; if so, of the outcome; and

(4) when it will publish the report of the consultancy study; of the measures to be taken to follow up the recommendations put forward in the report for improving the quality of the coastal waters of the Harbour, as well as the implementation timetable and estimated expenditure for such measures?

Reply:

President,

The Government has all along been attaching great importance to improving the water quality of Victoria Harbour and has devoted significant resources to improve the sewage collection and treatment system through implementing the Harbour Area Treatment Scheme and works for enhancing the quality of coastal waters of Victoria Harbour, stepping up enforcement on misconnections of sewage pipes, and clearing sediment from the stormwater drainage systems. These efforts have brought noticeable improvement in the water quality of Victoria Harbour.

My reply to the question raised by Dr Hon Priscilla Leung is as follows:

(1) The overall Water Quality Objectives (WQOs) compliance rate of marine water in the Victoria Harbour Water Control Zone (WCZ) in the past five years are tabulated below:

| Year | Overall WQOs compliance rate of marine water in the Victoria Harbour WCZ |
|------|--|
| 2014 | 77%  |
| 2015 | 90%  |
| 2016 | 93%  |
| 2017 | 83%  |
| 2018 | 97%  |

As the overall WQOs compliance rate is based on evaluation of the annual average level of relevant water quality parameters, there is no monthly compliance rate. While the compliance rate of individual years would vary due to influence by weather conditions such as sunshine, temperature and rainfall, the water quality as a whole shows trend of recognisable improvement from the past.

(2) The Environmental Protection Department (EPD), Buildings Department (BD), Drainage Services Department (DSD) and relevant government departments have been jointly following up on each case of sewage pipe misconnection, and urge the respective owners to rectify the problem in the earliest opportunity and reduce its impact on near-shore water quality. In the past five years, the EPD found a total of 348 cases of misconnections of sewage pipes in the Victoria Harbour WCZ. Among them, 267 cases (about 77 per cent) have been rectified and the remaining 81 cases are being processed. Please refer to the Annex for a breakdown of these cases by district.

(3) Among the 348 cases mentioned above, about 80 per cent or 267 cases were rectified after issue of warnings or advice. Among cases of pipe misconnection or stormwater drain pollution in private buildings in the territory followed up by the BD in the past five years, a total of 27 cases were rectified by premises owners after the statutory repair or removal orders were served and, up to 2018, 51 cases have not been rectified after the statutory repair and removal orders were served. There is no rectification works carried out by government contractors in the same period. The BD will continue to follow up on the remaining cases, urge or order the respective owners to fulfil their responsibility to rectify the pipe misconnection problems. For the cases of non-compliance with the orders, the BD will take appropriate enforcement actions according to the circumstances, including consideration to initiate prosecution under the Buildings Ordinance.

(4) The consultancy study on further enhancement of the near-shore water quality and the general environment of Victoria Harbour has been substantially completed. The consultants will submit the study report within this year. The Government is gradually pursuing and implementing some measures in advance based on the survey results and study recommendations in order to speed up the improvement of near-shore water quality of Victoria Harbour.

The findings of field surveys on pollution sources show that the near-shore pollution problems of Victoria Harbour are mainly caused by pollutants discharged from stormwater outfalls. This is probably due to misconnection of sewage pipes to stormwater drains and non-point source pollution (e.g. leakage from ageing sewers, street activities and cleansing of public places). The study recommendations for improvement include rectification of the misconnections, enhancing collaboration between departments, raising public awareness on reducing discharge of pollutants to stormwater drains at source, and providing dry weather flow interceptors (DWFIs) near the stormwater outfalls or at other strategic locations.

The information on sewer misconnections collected in the consultancy study has been passed to the relevant government departments for follow-up. Having regard to the survey findings of the consultancy study, the Government has begun to progressively implement targeted pollution control measures and works, including construction and modification of DWFIs, rehabilitation of ageing sewers, upgrading of sewage treatment works and provision of public sewers, etc. New pollutant removal technology is also being tried.

Regarding the situation along the Hung Hom Promenade, the study team recommended to construct a newly designed DWFI near the outfall of the Kin Wan Street box culvert at Hung Hom. The EPD and the DSD are planning to include this project in the Public Works Programme this year in order to carry out further study on the works. From planning to commissioning, the entire project is anticipated to take about seven to eight years and the initial cost estimate is about several hundred million dollars. Other than the DWFI, the DSD is also conducting trial application of Hydrogel at the outlet of Kin Wan Street box culvert to reduce the odour from the drain.

The Government is also progressively planning similar DWFIs at other near-shore areas along Victoria Harbour (for example at Wan Chai East and Causeway Bay Typhoon Shelter). The estimated construction time and cost of these projects will be similar to the newly designed DWFI at Kin Wan Street. The Government will continue to take enforcement actions and implement projects for reducing the discharge of pollutants from either side of Victoria Harbour to improve the near-shore environmental and odour problems.