

LCQ21: Improving quality and odour of coastal waters of Victoria Harbour

Following is a question by Dr the Hon Priscilla Leung and a written reply by the Secretary for the Environment, Mr Wong Kam-sing, in the Legislative Council today (May 11):

Question:

Regarding the efforts to improve the quality and odour of coastal waters of the Victoria Harbour (the Harbour), will the Government inform this Council:

(1) of the annual Water Quality Objectives compliance rate of the Harbour Water Control Zone (WCZ) in each of the past five years;

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

(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 still not yet made after the Government had taken law enforcement actions, and (iv) rectification works were carried out by government contractors;

(4) of the following information on the Harbour WCZ sewerage improvement projects which (i) were completed in the past five years, (ii) are now under construction and (iii) are pending funding approval by this Council: project name, year of completion/expected year of completion, as well as cost/estimated cost; and

(5) of the latest implementation progress of the various proposals set out in the consultancy report on "Further Enhancing Quality of Coastal Waters of Victoria Harbour"?

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 systems 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 the 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 |
|------|--------------------------------------------------------------------------|
| 2017 | 83 per cent |
| 2018 | 97 per cent |
| 2019 | 97 per cent |
| 2020 | 90 per cent |
| 2021 | 100 per cent |

(2) The statistics of Government's follow-up actions on foul sewer misconnection in various districts in the past five years are tabulated below:

Cases of foul sewer misconnection found in Victoria Harbour WCZ

| District | Number of foul sewer misconnection cases (Number of cases rectified) | | | | |
|---------------------|-------------------------------------------------------------------------|------------------|-----------------|----------------|-----------------|
| | 2017 | 2018 | 2019 | 2020 | 2021 |
| Central and Western | 9 (8 cases) | 10 (3 cases) | 6 (4 cases) | 4 (2 cases) | 9 (2 cases) |
| Eastern | 3 (2 cases) | 15 (9 cases) | 11 (7 cases) | 4 (2 cases) | 12 (7 cases) |
| Wan Chai | 10 (8 cases) | 15 (13 cases) | 7 (3 cases) | 3 (1 case) | 4 (1 case) |
| Kowloon City | 64 (59 cases) | 15 (14 cases) | 8 (7 cases) | 6 (2 cases) | 7 (0 case) |
| Kwun Tong | 3 (All) | 10 (9 cases) | 0 | 3 (1 case) | 5 (1 case) |
| Sham Shui Po | 6 (2 cases) | 7 (6 cases) | 1 (All) | 6 (2 cases) | 5 (All) |
| Wong Tai Sin | 4 (All) | 7 (All) | 5 (All) | 2 (All) | 2 (0 case) |

| | | | | | |
|---------------|--------------------|--------------------|-------------------|------------------|-------------------|
| Yau Tsim Mong | 27 (24 cases) | 45 (33 cases) | 63 (30 cases) | 45 (18 cases) | 46 (11 cases) |
| Kwai Tsing | 0 | 2 (All) | 0 | 2 (All) | 4 (2 cases) |
| Tsuen Wan | 10 (6 cases) | 7 (4 cases) | 7 (5 cases) | 3 (2 cases) | 13 (7 cases) |
| Total | 136 (116 cases) | 133 (100 cases) | 108 (62 cases) | 78 (34 cases) | 107 (36 cases) |

(3) Among the 562 cases mentioned in (2) above, 223 cases were rectified by owners after issuance of warnings or advice, 125 cases were rectified by owners after the statutory repair or removal orders were served, while 106 cases have not been rectified after statutory repair or removal orders were served. There were no rectification works carried out by government contractors in the same period. We 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 cases of non-compliance with the orders, the Buildings Department will take appropriate enforcement actions according to the circumstances, including consideration to initiate prosecution under the Buildings Ordinance.

(4) The Government has all along been planning and implementing pollution control and sewerage projects in the Victoria Harbour WCZ. Relevant works projects completed in the past five years and under construction are listed below:

(i) Works projects completed in the past five years:

| | Project | Completion Year | Project Cost (Note 1) |
|---|---------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------------|
| 1 | Habour Area Treatment Scheme Stage 2A – Upgrading of Stonecutters Island Sewage Treatment Works and Preliminary Treatment Works | 2018 | \$7,910 million |
| 2 | Upgrading of West Kowloon and Tsuen Wan Sewerage – Phase 1 | 2022 | \$280 million |

Note 1: The project costs stated are approved project estimates.

(ii) Works projects under construction:

| | Project | Expected Completion Year | Project Cost (Note 2) |
|---|---------------------------------------------------------------------------|--------------------------|-----------------------|
| 1 | Construction of Dry Weather Flow Interceptor at Cherry Street Box Culvert | 2022 | \$660 million |

| | | | |
|---|---------------------------------------------------------------------------------------|------|-----------------|
| 2 | Upgrading of Kwun Tong Preliminary Treatment Works | 2022 | \$350 million |
| 3 | Enhancement Works for Kwun Tong Sewage Pumping Station | 2022 | \$1,050 million |
| 4 | West Kowloon and Tsuen Wan Village Sewerage – Phase 1 | 2023 | \$100 million |
| 5 | Sewerage to Lei Yue Mun Village | 2023 | \$260 million |
| 6 | Revitalisation of Tsui Ping River (Associated Works for Dry Weather Flow Interceptor) | 2024 | \$50 million |
| 7 | Upgrading of Central and East Kowloon Sewerage – Phase 3 | 2024 | \$680 million |
| 8 | Upgrading of West Kowloon and Tsuen Wan Sewerage – Phase 2 | 2026 | \$2,290 million |

Note 2: The project costs stated are approved project estimates.

Regarding works projects that are pending for funding approval by the Legislative Council (LegCo), the Government will submit a funding application to the LegCo in June this year for a project for the construction of village sewerage at Lo Wai, Chuen Lung and Kau Wa Keng Old Village to cut down sources of pollutants being discharged into the Tsuen Wan Bay and Rambler Channel and to improve environmental hygiene of rural areas. The project is expected to complete in 2025, and its estimated cost is around \$170 million. Furthermore, the planning of newly designed dry weather flow interceptors to be installed along Victoria Harbour has fully commenced, with those projects located in Hung Hom, Wan Chai East, Causeway Bay Typhoon Shelter, Shau Kei Wan Typhoon Shelter and Tsuen Wan Bay included in the Public Works Programme in 2019 and 2020 for proceeding with the associated investigation and design works in full swing. Subject to support from local communities and completion of relevant procedures, and with funding approved by the LegCo in the coming two years, these projects are expected to be commissioned and completed in stages between 2026 and 2028, with an estimated project cost of about several hundred million dollars each. Other projects under planning include Enhancement Works for Preliminary Treatment Works at Harbour Side and Construction and Rehabilitation of Trunk Sewage Rising Mains in Cheung Sha Wan, which are expected to be completed in 2030, and their project estimates will be assessed upon completion of their designs.

(5) The Government has completed the consultancy study on Further Enhancing Quality of Coastal Waters of Victoria Harbour and has been progressively implementing a series of measures based on the study recommendations to improve the near-shore environment of Victoria Harbour. In addition to the work on rectification of sewer misconnections and relevant pollution control projects mentioned in the replies to items (2) to (4) above, the Government is carrying out inspection, maintenance and desilting of public sewers and stormwater drainage systems on a regular basis. The Government has also started in March 2021 regular and extensive application of Malodour Control Hydrogel at stormwater outfalls along the shorelines of Victoria Harbour and

nearby locations with potential odour problems to mitigate odour. Malodour Control Hydrogel is a new technology jointly developed by the Drainage Services Department and the Hong Kong University of Science and Technology, and has been proven through on-site tests to be effective in reducing odour in drains.

The Government will continue to take enforcement actions to rectify sewer misconnections, implement works projects for reducing the discharge of pollutants into Victoria Harbour and implement odour mitigation measures in order to improve the near-shore environmental and odour problems.