

LCQ7: Draining pipe testing with dye powder

Following is a question by the Hon Steven Ho and a written reply by the Secretary for Environment and Ecology, Mr Tse Chin-wan, in the Legislative Council today (June 11):

Question:

It has been reported that on February 15 this year, the water of Tuen Mun River turned red extensively, causing panic among members of the public. The Government's initial investigation revealed that there was draining pipe testing with red dye powder. Upon arrival of the Government's investigating officers at the scene, they found that the river water had resumed normal and no fish deaths were found. They collected water samples on the same day for testing and found that the water quality indicators remained normal as well. However, it is learnt that similar incidents also occurred on Lam Tsuen River in Tai Po and Shing Mun River in Tai Wai in August 2023 and November 2022 respectively, which have aroused widespread concern in the community. In this connection, will the Government inform this Council:

(1) of the number of the aforesaid similar incidents in the past five years, as well as the government department(s) involved in the investigation of each incident, the average manpower involved, the time taken for the investigations and the public expenditure involved;

(2) as there are views that although the test results have indicated that the aforesaid incident has not caused impact on the environment, water quality and fish for the time being, the incident has still caused panic among members of the public, whether the Government will take further actions to follow up the incident, so as to enhance protection for the public; and

(3) whether the Government has formulated detailed guidelines on draining pipe testing with dye powder at present; if so, of the details, including whether non-compliance with the relevant guidelines will constitute any offence or attract penalty; if not, whether it will consider formulating the guidelines and enhancing the relevant notification mechanism, so as to avoid causing misunderstanding or panic among members of the public in the event of an incident?

Reply:

President,

The reply to the question raised by the Hon Steven Ho is as follows:

(1) and (2) In the past five years, the Environmental Protection Department (EPD) received a total of 21 cases of inquiries related to dye test. Upon

receiving relevant complaints, the EPD will promptly dispatch personnel to conduct investigation on site, including measuring the dissolved oxygen content and pH level in the water, as well as collecting water samples for further testing to determine the cause of water coloration and whether pollution has occurred. The EPD will also check in the vicinity of the site concerned for any fish deaths or other unusual circumstances, and trace the source of pollution along the stormwater drains. Depending on individual circumstances, the Drainage Services Department (DSD) may also assist in the tracing investigation. If illegal discharges of wastewater are found, the EPD will take appropriate enforcement actions in accordance with the law. The investigation of water coloration incidents is part of the EPD's integrated enforcement efforts and the duration of investigation may also vary depending on the location and scope of individual case. Therefore, there is no breakdown of the expenditure involved.

To foster protection to the general public, the EPD will respond to inquiries from complainants and the media as soon as there are preliminary results of the investigation, in order to enhance information transparency and alleviate public concerns. Depending on individual circumstances, the EPD may also return to the site the day after collecting water samples to inspect whether there have been any changes and to further follow-up as required.

(3) Conducting dye tests is an effective method to check the sewer systems for misconnections to stormwater drains or leakage. When the EPD personnel conduct tests to examine sewer misconnection issues, they will use the minimum amount of dye possible to reduce the impact on nearby rivers and bays.

For the trades and private buildings, as well as housing estates, the EPD, the Buildings Department (BD), and the Food and Environmental Hygiene Department (FEHD) have developed relevant guidelines for dye tests for pipe testing respectively (which can be downloaded from the websites of the EPD, the BD and the FEHD). Through promotion and education, we also remind the trades, including property management companies and building contractors, about the precautions and pollution prevention measures associated with dye tests. These include strictly adhering to the recommendations of the dye manufacturers during testing, arranging for personnel supervision, and notifying the property management company of the testing site and nearby residents in advance to avoid giving rise to public concerns. The above guidelines are administrative measures. However, we must emphasise that the dye used is a biodegradable and non-toxic substance, and does not affect water quality. In this regard, conducting dye test does not violate the Water Pollution Control Ordinance (Cap. 358).

Regarding the notification mechanism, we understand that dye test may lead to public misunderstanding. Therefore, the DSD will issue notifications on its website before conducting regular dye tests to inform the public about the arrangements for these dye tests. The purpose of these regular tests is to ensure the integrity of the submarine outfalls of sewage treatment plants. Since conducting dye tests on submarine outfalls requires a larger amount of dye and involves a wider area, it is more likely to attract public attention.

Based on the complaint and specific circumstances of the case, the EPD occasionally needs to use dye tests to check on sewage misconnection issues or carry out enforcement actions. Yet these circumstances would involve a smaller amount of dye used and a smaller impact area which in general would not cause any impact.