HK's drinking water testing programme conducted in strict compliance with international standards

In response to a media report about impurities found in drinking water samples from various districts, a spokesman for the Development Bureau pointed out that the tests mentioned in the report were not conducted in strict compliance with the international standards adopted by Hong Kong's drinking water testing programme.

The spokesman said that, as understood, the media organisation had mainly collected samples of impurities from aerators of water taps (commonly known as strainers), and then placed the samples into water for laboratory testing. Aerators are a kind of filter accessory commonly installed at household water taps and shower heads to help block impurities. The presence of impurities in the samples is simply a result of the function of the strainer, and is not abnormal. In the past, the Water Supplies Department (WSD) had received similar inquiries, and staff members were deployed immediately to conduct onsite inspection, arrange flushing of consumers' water meter, remind consumers to cleanse the strainers, and check if there were any irregularities in water quality. If there was a suspected water quality issue, the WSD would collect drinking water samples for testing and notify consumers about the results. In fact, only a few of such cases required water sample testing in the past three years, and testing results showed that the water samples complied with Hong Kong Drinking Water Standards (HKDWS).

The spokesman stressed that water quality testing must be conducted in accordance with international standards, including making reference to ISO5667 of the International Organization for Standardization (ISO) for sampling and referencing Chinese National Standard GB/T 5750 and American Public Health Association's (APHA) in testing methods and procedures. The samples tested must be drinking water samples, not those collected from strainers as arranged by the relevant media organisation. In other words, the type of samples, methods and procedures will affect the validity and representativeness of the tests.

The spokesman said that, as mentioned in the report, impurities collected from the strainers include resin, plastic, and silicone. It may relate to materials peeling off from pipes or fittings of the inside service of the building. These substances are not soluble in water. If such substances are found, the inside service should be cleansed as soon as possible. Generally, regular and proper cleansing and maintenance of the inside service of the building can effectively prevent excessive sediments accumulation and reduce impurities in strainers. Drinking water supplied by the WSD undergoes strict treatment and meets HKDWS. However, materials may peel off from public or inside service pipes of buildings due to aging or

water pressure, necessitating the installation of strainers at pipes. Property owners, registered agents, and management offices must carry out regular and proper maintenance of building's inside service, including cleansing sump and rooftop tanks to avoid sediments or rust accumulation, and regularly operating valves, cleansing filters, and flushing concealed water pipes to maintain good drinking water quality at the consumers' taps.

To ensure the quality of drinking water in Hong Kong, the WSD runs a routine drinking water testing programme, randomly collecting water samples from over 28,000 publicly accessible consumers' taps (such as those in shopping centres, community facilities, sports venues, and government offices) for testing every year. The sampling rate is based on international standards and the water quality parameters are drawn up in accordance with World Health Organization guidelines. Moreover, the WSD randomly selects about 670 residential and non-residential water accounts each year to collect drinking water samples at their water taps and test for six metals (antimony, cadmium, chromium, copper, lead, and nickel) to ensure compliance with HKDWS. Relevant test results are regularly published on the WSD's website.

The spokesman added that the WSD had requested more detailed information for follow-up with the consumer when enquiries were received from the media organisation. Such information is still awaited. The WSD will deploy staff to investigate and assist with flushing the inside service if the media organisation provides more information (including sampling locations). Water samples will also be taken for testing as needed to ensure water safety. For enquiries regarding drinking water quality, the public may call the WSD's 24-hour hotline: 2824 5000.