Possible Countermeasures by Water Utilities against COVID-19

- Based on Experiences of Japanese Water Utilities -

1. Ten Recommended Actions of Water Utilities against COVID-19

Providing information to citizens

1. Providing information to citizens regarding the importance of proper handwashing and gargling, and the safety of tap water
2. Preventing the spread of false information and fraud related to water supply

Preventing infection of the staff and continuing the business

3. Preventing infections within staff members (thorough prevention measures such as avoiding close or face-to-face contact between staff and residents, wearing masks, washing hands and thorough disinfection)
4. Ensuring continuation of the water services even when staff members are infected or may possibly be infected
5. Minimizing the impact on work performance caused by the infection or the possibility of infection of those employees who belong to the outsourcing contractor
6. Preventing spread of the infection through operations that gather people such as cancellation of events, closure of facilities for public relations and minimization of counter service

Providing disinfection solutions

7. Providing chlorine solution

Keeping water supply to the needy people

8. Continuing water services to users who are unable to pay water tariff due to economic deterioration and increasing unemployment
9. Providing safe water to the areas where piped water supply is not available, and to important facilities such as public health centers, hospitals, schools, and facilities where people usually gather
10. Minimizing the impacts on supply chain (e.g. budget and/or chemicals for water supply)

2. Countermeasures to be taken by Japanese Water Utilities

Provision of Information to Residents/Citizens

1 Information provision to residents/citizens regarding the importance of proper handwashing and gargling, and the safety of tap water

- Issuance of publicity regarding the importance and correct way of handwashing
- Issuance of publicity regarding the safety of tap water with statements like: “It is said that chlorination is highly effective for disinfection against viruses such as the new corona virus. Therefore, viruses have no impact on the safety of tap water because all water treatment plants thoroughly perform proper water treatment and chlorination”. (Utsunomiya City Homepage: Https://Www.City.Utsunomiya.Tochigi.Jp/josuido/news/1023025.Html)

2 Prevention of spread of false information and fraud related to water supply

- Issuance of alert to users through the internet

Prevention of Infection of Personnel and Disruption of Business Operations

3 Prevention of infection among business staffs

[At Main Office, Branch Office]

- Thorough handwashing and cough etiquette
- Rotation work through multiple grouping systems, staggered working hours, teleworking
- Limitation of face-to-face meetings and business trips, utilization of telecommunications (e.g. skype), setting-up of satellite offices
- Reporting of health status and body temperature of employees, restriction of office attendance of staffs with poor physical condition, check of physical condition of family members of staffs and status of close contact with someone who is infected
- Submission of daily activity records for easy tracking of infection route
- Wearing of face mask at the workplace
- Disinfection and ventilation of counters, doorknobs, elevators, and handrails
- Installation of transparent partition at counters

An example of the transparent partition
(Source: Website of Kurashiki City)

[At Water Purification Plants]

- Conduct of temperature checks on all people and prohibition of entry of any person with a temperature of 37.5 degrees Celsius or higher
- Temporary suspension of contractual work
- Adoption of teleworking and rotation system for day-work staffs except for shift work staffs

- Wearing of face masks, handwashing and disinfection of hands with alcohol for all visitors
- Securing supplies and chemicals necessary for water purification and water quality testing
- Limitation of face-to-face contact, securing a distance of 2 meters or more when facing each other

4 Ensuring continuation of water services even when staff members are infected or may possibly be infected

- Preparation of Business Continuity Plan (BCP)
- Disinfection of the facility where the infected person worked
- Prohibition of other groups from interacting with the group to which the infected person belonged
- Different groups to continue the prioritized work of the group to which the infected person belonged
- Information disclosure to dispel citizens' concerns

5 Minimization of impact on work performance caused by the infection or the possibility of infection of employees belonging to the outsourcing contractor

- Preparation of the response policy of the utility and sharing it with the outsourcing contractors
- Request for the outsourcing contractors to cooperate in following thorough preventive measures
- Preparation of an emergency communication channel when an employee of an outsourcing contractor is infected or suspected of being infected
- Flexible responses such as temporary suspension of construction work and extension of construction period

6 Prevention of spread of infection through operations that gather people such as cancellation of events, closure of facilities for public relations and minimization of counter services

- Promotion of use of the Internet and restriction of people from visiting water utility offices through announcements on the Internet
- Start accepting various applications from users via the Internet/postal mail services
- Commencement of payment via smartphone applications
- Reduction of customer center windows
- Closing public relations facilities owned by the waterworks and cancellation of events
- Cancellation of water purification plant tours

Provision of Disinfection Solutions

7 Chlorine solutions

- Provision of generated chlorine solutions (hypochlorous acid water) to medical and public facilities
- Provision of generated chlorine solutions to the residents/citizens

An example of provision of chlorine solution

(Source: Website of Suzaka City)

Continuous Water Supply to Needy People

8 Continuous water supply services to users who are unable to pay water tariffs due to economic deterioration and increasing unemployment

- Issuance of moratorium on water tariff payments for several months for customers who have difficulty in paying water tariff due to the spread of COVID-19 infection or decline in income

3. Countermeasures supposed to be taken in Developing Countries

Continuous Water Supply to Needy People

9 Safe water provision to areas where piped water supply is not available, and to important facilities such as public health centers, hospitals, schools, and facilities where people usually gather

- Water tanker operation
- Utilization of portable, simple water purification equipment
- Installation of public water points, facilities for handwashing, etc.
- Continuation of water supply in important facilities such as public health centers, hospitals, schools, religious facilities, bus terminals and stations
- Extension of water supply time
- Provision of water receiving tanks, equipment for handwashing and other facilities to supply water to important facilities

10 Minimization of impact on supply chain

- Securing stock of chemicals for disinfection, flocculants, etc.
- Negotiation with the central government, municipalities, and other administrative authorities on the preferential allocation of budget for fuel, electricity, chemicals, labor costs, etc., to continue water services