PH2D: Establish drinking water quality failure event management procedures and protocols

REGULATORY FUNCTION: PUBLIC HEALTH

PH2D

ACTION CARD PH2D

OBJECTIVE PH2

Regulatory compliance with water and sanitation safety plans is monitored through collected information on water quality

ESTABLISH DRINKING WATER QUALITY FAILURE EVENT MANAGEMENT PROCEDURES AND **PROTOCOLS**

COST: Low **FREQUENCY:** One time

TARGET GROUPS: Regulators, service operators, consumer associations, ministries of health

DESCRIPTION

Regulators respond and activate event management protocols and procedures when alerted to a drinking water quality compliance failure by a service operator or by consumers. In accordance, regulators develop these protocols and procedures and specify conditions and circumstances which may trigger their activation. In general, protocols outline different types of failure, steps to be taken for each of them, and the roles of different institutions involved in the procedures. Although such procedures are often conducted by regulators, overall responsibility of addressing failures that cause public health concerns remains exclusively under national health institutions, in most cases ministries of health. In consequence, regulators perform this action in close coordination with public health sector actors.

EXPECTED OUTCOMES

- Dangerous impacts on public health are prevented.
- Analyses and results of monitoring are compared.
- Service operators are corrected when regulatory requirements are not met.

EXAMPLE 1: SINGAPORE

In Singapore, the Food Agency developed the Code of Practice on Drinking Water Sampling and Safety Plans in 2019. This states that water providers prepare management procedures (including corrective actions) to be taken in response to variations that occur during normal operational conditions, and during specific 'incident' situations where a loss of control of the supply system may occur. This includes unforeseen and emergency situations such as when it is necessary to issue advice (e.g. 'boil water', 'do not drink', 'do not use water'), or when a non-compliance with water quality standards occur. Where any water quality incident occurs that is likely to pose a potential danger to human health, providers shall, as soon as practicable, make reasonable efforts to inform the public or persons to whom water was sold or supplied, about the health risk and measures that should be taken to address the risk as a part of remedial action. Where necessary, providers may issue a statement or a notice to be delivered through an appropriate mode (e.g. by hand, email, or briefings), and publish it on the providers' websites, or advertise them on bulletin boards near to where water was provided, or advertise through appropriate media (radio, television, newspapers, social media).

EXAMPLE 2: IRELAND

In Ireland, when Irish Water find a microbiological or chemical failure during water quality monitoring, , they must notify the Environmental Protection Agency (EPA) and investigate why the failure occured. The EPA oversees investigations to ensure that a satisfactory solution is found, and Irish Water keep the EPA informed throughout the process. Early in each investigation, Irish Water consult with the national health services to check if the failure might impact on people's health, and may advise the issuing of a 'boil water' or water restriction notice on a supply, and if so, Irish Water must inform consumers as quickly as possible. When the cause of the failure is fixed, Irish Water consult the health service again and any notice is removed, while informing the public

that water is safe to drink or use again. Notices can apply to all or part of a supply, and how long they last will depend on how long it takes to fix the problem. Irish Water may also issue precautionary notices even when no water quality failure has been found, if they are concerned that a problem in the supply might cause a failure.

IF THERE IS A PROBLEM



LINKS

Singapore: https://www.sfa.gov.sg/docs/default-source/food-retailing/practices-and-guidelines/code-of-practice-on-drinkingwater-sampling-and-safety-plans-sfa-apr-2019.pdf

Irish Water web page: https://www.water.ie/docs/2017-DW-Report_web_Final.pdf

INTERNAL CAPACITIES NEEDED AND THE ROLE OF PARTNERS

To establish drinking water quality failure and event management protocols, technical capacity to understand public health implications of failure and contamination events is required. Further technical skills are needed by regulators to establish different pathways of response. Development partners could provide technical assistance in supporting the development of protocols.