BIS' Draft Standard

Why in news?

The Bureau of Indian Standards (BIS) has prepared a draft standard for the supply system of piped drinking water.

What is the draft?

- The draft is labelled as 'Drinking water supply quality management system - requirements for piped drinking water supply service'.
- It has been prepared by the BIS' Public Drinking Water Supply Services Sectional Committee.
- It has been developed keeping in view the Centre's Jal Jeevan Mission.
- [Jal Jeevan Mission wants to provide safe and adequate drinking water to all rural households by 2024 through tap connections.]

What is the focus of the draft?

- The draft **outlines the process of water supply**, from raw water sources to household taps.
- The standard is expected to make the process of piped water supply more uniform, especially in rural and underdeveloped areas of the country.
- At present, the standard is not expected to be made mandatory.
- After the draft is notified, states or water utilities planning to implement the standard can approach BIS for a license.

What does the draft say?

- It **outlines the requirements** for a water supplier or utility.
- These requirements are regarding how they should establish, operate, maintain and improve their piped drinking water supply service.
- The process begins with identification of a water source.
- The source can either be groundwater or surface water sources such as rivers, streams or reservoirs.
- It states that after treating, the drinking water should conform to the BIS' Indian Standard (IS) 10500.
- [IS 10500 outlines the acceptable limit of various substances in drinking water, like heavy metals such as arsenic.
- It also sets the limits on parameters like the pH value of water, its turbidity,

the total dissolved solids in it, and the colour and odour.]

- The draft standard also contains **guidelines for top management** of the water utility.
- These guidelines are in terms of accountability and customer focus, establishing a quality policy for their service, monitoring the quality of water released to people, and conducting a water audit.

What does the draft say about the water supply process?

- **Source identification** - The supply system as outlined in the draft should begin with the identification of a raw water source.
- Water should then be pumped into the treatment plant and treated to achieve the acceptable drinking standards.
- After the water is released from the plant, there should be,
    1. Reservoirs in the distribution system for storage of this water, and
    2. Disinfection facilities to get rid of contamination at any stage of distribution.

- **Accessories** - The draft says that, if necessary, the pumping stations could be provided with accessories shall be installed throughout the distribution system.
- These accessories shall be used as control devices and for water audit.
- **Automation** - The draft reads that the emphasis should be given to operate the systems on automation mode.
- **DMA** - The document also states that the concept of district metering area (DMA) should be adopted where possible.
- DMA would control the leakages in the water network, which is divided into a number of sectors.
- Here, flow meters are installed to detect leaks.
- **Water audit** - The water supplier/utility may provide bulk water meters in the water distribution system to ensure water audit.
- However, the provisions should be made for domestic meters also.
- It shall ensure that the consumers do not have direct access to the meters to avoid possible tampering of the meters.
- It reads that the provision should be made to have automatic meters at household level which shall support in water audit.
- **Quality assurance** - The draft mentions that water should be sampled at the treatment plant every four hours against quality parameters.
- In the distribution system, the sampling should be done every 8 hours at the water reservoirs.
- Random sampling should also be done at household levels.

What’s there in the draft in addition to the water supply process?

- It states that a water audit should be conducted on a quarterly basis.
- [Water audit is a calculation of the amount of water put into distribution against the amount that is consumed.]
- It says that effort should be made by the water agency to bring down the water loss up to 15% of the total water supplied in the system.
- The water utilities are required to conduct surveys among consumers and obtain feedback on their service as per the draft.

Source: The Indian Express

SHANKAR IAS PARLIAMENT
Information is Empowering