



### WHAT CAN GO WRONG AND WHAT ARE THE CONSEQUENT EFFECTS ?

- 💧 Use of a contaminated water source can occur when:
  - ✓ Water is used directly from contaminated water sources, such as rivers, boreholes or springs
  - ✓ When supplied water is secondarily contaminated during distribution or storage
- 💧 The most likely type of contamination that can occur during home treatment is microbial contamination. Other than this, salts, metals or organic contaminants may also occur.
- 💧 The consequence of drinking bacteriologically contaminated water is typically an increased incidence of gastro-enteritis and other water-borne diseases, with typical symptoms such as diarrhoea and fever.
- 💧 The intake of chemical contaminants can result in negative health effects, which may occur either immediately or many years later.

### HOW WILL YOU KNOW?

- 💧 Evidence of contamination of water may in some cases:
  - ✓ Be obvious, such as a change in the appearance of the water, e.g. cloudy when you open the tap
  - ✓ Only be inferred from an increase in the incidence of water borne diseases in the consumers,
  - ✓ Be an inference from the analyses of water sample, where medical staff suspects water borne disease from the symptoms of the patients.
- 💧 In some parts of the country, the water may be milky when poured from the tap into a glass, especially during winter. This does not mean that the water is contaminated, it is merely tiny bubbles of air that appear when the pressure inside the distribution system is released when opening the tap. The water normally clears very quickly as the air bubbles escape from the water.

### WHAT TO DO?

- 💧 Where the cause of the contamination is bacteriological (faecal pollution of the water), home treatment is easy, and one of the following home treatment options may be used:
  - ✓ **Boil** the water continuously for at least 5 to 10 minutes
  - ✓ Disinfect the water by adding one teaspoon of **domestic bleach** in a bucket (20 litres) of water, mix well and leave for 1 hour before use. Water with a high turbidity should be left for at least 2 hours before use, or filtered through a fine cloth prior to addition of bleach.
  - ✓ Use a **suitable home treatment device**, e.g. a fine filter, which is capable of filtering out bacteria.
  - ✓ Where possible, use **safer and a properly disinfected and treated water** source.

References: DWAF (2002). Quality of domestic water supplies. Volume 5: Management Guide. WRC No. TT 162/01, pp. 34 and 35.