## **Taking Bacteriological and Chemical Samples from Drinking Water Supplies**

Sample bottles are obtainable from the Laboratory.

- Blue-capped plastic bottles supplied are for samples requiring bacteriological analysis.
  They are sterile and the liquid in the bottle is a preservative which must not be emptied out.
- Orange-capped bottles are for samples requiring chemical analysis.
- Blue-capped glass bottles are for samples requiring Taste and Odour analysis.

## Check that

- the seal on the cap of the bacteriological sample bottle is not broken
- that the bottle is not damaged
- that it has not passed its expiry date.

To disinfect the tap, a syringe and length of tubing will be supplied by the Laboratory. You will need to provide some domestic bleach (the simple, unscented, thin type) and some kitchen roll.

Please read the following instructions carefully.

## Warning

Household bleach is classed as an IRRITANT.

- Do not use it with other products as chlorine gas may be liberated
- Keep it (and the used syringe) out of the reach of children
- Do not mix with acids or any other cleaning product
- Avoid contact with skin or eyes
- If swallowed, seek medical advice immediately and show the container
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- In case of contact with skin, rinse immediately with plenty of water
- Throughout the sampling process,
  - o FACE PROTECTION IS ESSENTIAL.
  - Wear suitable rubber gloves.

## **Procedure**

Samples should be taken from the kitchen tap unless there are special reasons for using a different one; e.g. the tap cannot be cleaned or the gland is leaking and water runs down the outside of the tap. Mixer taps are very difficult to clean and should be avoided if at all possible.

- Remove any rubber spouts, hoses or filters from the tap.
- Run the tap gently for half a minute to flush. Ensure that there are no leaks on the outside of the tap or from the gland that could get into the sample bottle and contaminate the sample. Turn off the tap.
- Clean the outside of the tap, using a piece of kitchen roll wetted with the bleach.

- Make sure the tubing is attached to the syringe. Insert the open end of the tubing into the bottle of bleach and fill the syringe.
- Push the tube as far into the tap as it will go and squirt about 10 ml of bleach into the tap. Leave for five minutes.
- Run tap with a smooth flow at a medium speed for five minutes. After this point, do not adjust the flow rate of the tap.
- Take the bacteriological bottle. Hold the base of the bottle in the fingertips of one hand and with the fingertips of the other hand unscrew the cap of the bottle, breaking the seal. Do not touch the top of bottle or the inside of the cap. Keep hold of the cap, keeping it the right way up. Do not put the cap down.
- Without adjusting the tap hold the mouth of the bottle in the water stream and fill the bottle to about an inch below the top.
- Do not let the mouth of the bottle touch the tap.
- Do not rinse out the bottle, nor overfill it.
- Using the fingertips only, replace the cap firmly.
- Without adjusting the tap fill the Chemical and Taste & Odour bottles (if necessary).
- Turn off the tap.
- Label the sample bottle or bottles and ensure that it/they cannot be confused with samples from any other source. Please supply a separate list of samples with details of sources and sampling times. Return the bottle or bottles to the Laboratory as soon as possible and certainly within 2 hours of taking the sample or samples.
- Rinse out the syringe and return it with the bottle.

04/07/17