4 Chlorina

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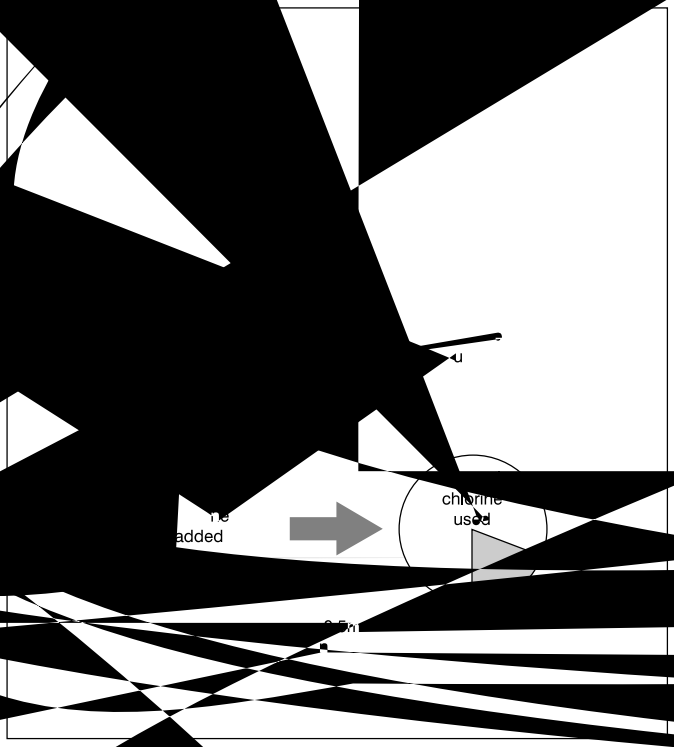

Testing for chlorine residual

The most common test is the dpd (diethyl paraphenylene diamine) indicator test, using a comparator. This test is the quickest and simplest method for testing chlorine residual.

With this test, a tablet reagent is added to a sample of water, colouring it red. The strength of colour is measured against standard colours on a chart to determine the chlorine concentration. The stronger the colour, the higher the concentration of chlorine in the water

Several kits for analysing the chlorine residual in water, such as the one illustrated in Figure 2, are available commercially. The kits are small and portable.

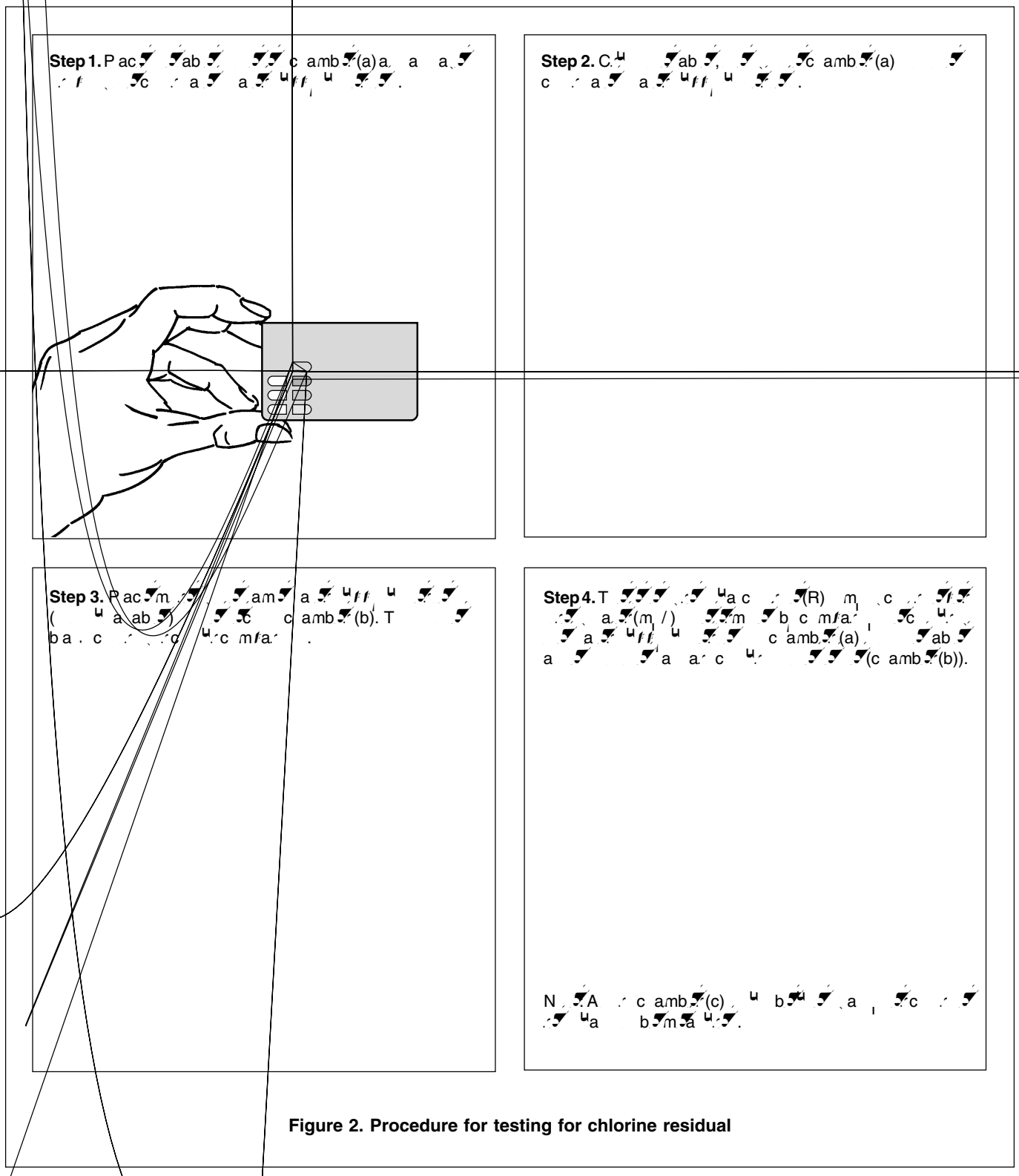

Figure 2. Procedure for testing for chlorine residual

Chlorinating water supplies

Chlorine is available in many forms — as chlorine gas and in compounds such as bleaching powder, high test hypochlorite (HTH), tablets, granules, and liquid bleach.

Each product contains a different amount of usable chlorine, so different quantities of each will be required for the same purpose. In addition, the chlorine content of each product will reduce over time as the source is exposed to the atmosphere. All products should be carefully stored to minimize deterioration.

The best practical method of chlorinating a supply of water is to use two storage tanks of suitable size alternately, one filled from the source, while the other is used for supply.

A chlorination checklist

- Chlorine needs *at least* half an hour contact time with water to disinfect it. The best time to apply it is after any other treatment process, and before storage 2 -1.2 TD0.0003 Tc0.02 Tw(othe5.01 338 Tm0 Tc0 Tw()Tj290.1 Tf10 0 0 1

Modified Horrocks' method of chlorination

With most chlorination methods the operator should make up a solution of known concentration. For the reasons

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