6.2.7 PROTOCOL FOR SAMPLING WITH USE OF A MULTI-SAMPLER

Overview

The multi-sampler (See examples in Photo 7 and Figure 7) is an option for collecting several sample containers at one time. This ensures that the equivalent mass of water is collected for analyses at the same time.

Sources

Environment Canada and B.C. WLAP (2005 c), Ministère de l'Environnement, Gouvernement du Québec (2000), Environment Canada (2003 c)

At a glance

1 The multi-sampler should be rinsed at least once in the site water to remove any loose dust/debris and contaminants. Once rinsed load the sample bottles.

2 Loosen the caps on the bottles when placing them in the sampler. Each bottle has a designated location in the sampler, it is secured by the sampler top and the opening should be above the top surface.

each bottle has a designated position

3 Assemble the sampler (including the lid, handle and rope, as necessary). Ensure to remove the caps from the bottles just before sampling. If applicable, place the tops in the plastic bag to keep them free from contaminants.

4 The lid from the multi-sampler prevents dirt/water from the rope, from entering the sample after collection. Please note that during high flow, the lid may cause substantial drag.

5 The sampler Plexiglas top should fit well over the bottles and the holes in the top should be aligned with the upright posts of the sampler. Ensure that the handle is securely tightened, it may twist off in swift currents.

6 **Collecting Replicate Samples:** Collect an additional sample in exactly the same manner and location as completed for the initial (regular) sample. Ensure there is no floating debris to disturb the sample. Add preservatives to applicable bottles.

7 **Field Blanks: These should be processed first (i.e. before regular or replicate samples) to ensure that no potential contamination occurs from any residual river water that may remain on the sampling equipment.** Remove bottles containing water from kit and place in sampler in the normal manner. For example, if bottles are loaded on the bridge then load the field blanks on the bridge as well.

8 When ready to process the blanks, remove the caps from the bottles and store them in a plastic bag. Lower sampler to the surface of the water body (approximately 1 metre above the water's surface if sampling from a bridge).

9 Bring up the sampler, and replace the caps. Preserve the blanks as normal for regular samples, if required. Complete the data card as usual. Store the multi-sampler in a clean container.

10 Re-pack the sampling kit in the normal fashion and ship it to the laboratory along with the regular and replicate samples.

Photo 7. Assembled multi-sampler (Environment Canada and B.C. WLAP (2005 c))

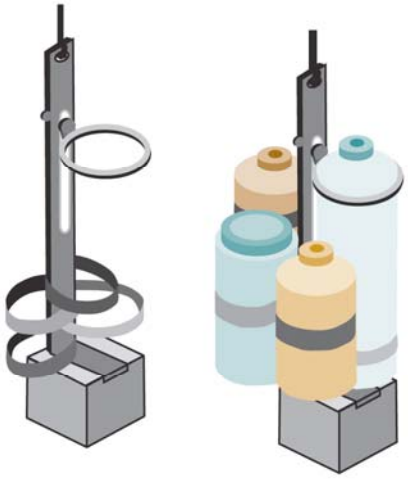

Figure 7. Multi-sampler (Source: Ministère de l'Environnement, Gouvernement du Québec (2000))