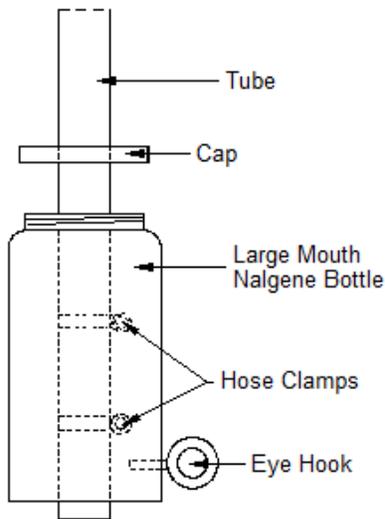


## HOW TO MAKE AN INTEGRATED SAMPLING TUBE



### **MATERIALS:**

- ✓ Tygon tubing or garden hose (1" diameter)
- ✓ Plastic bottle (Nalgene 1L)
- ✓ Eyebolt, nut and two washers
- ✓ Weight material (cement/sand/gravel)
- ✓ Strong glue (epoxy)
- ✓ Small hose clamps

### **INSTRUCTIONS:**

1. Cut the tygon tubing or garden hose (recommended diameter of 1") to desired length (the length of the tubing should exceed the sampling depth by at least 0.5 meters). Mark the tube at every half-meter using a permanent pen.
2. Using a drill very carefully, cut hole slightly smaller than the tube in the cap and bottom of a 1 Liter large mouth Nalgene bottle.
3. Place cap on tube, followed by the hose clamps positioned about 4 to 6 inches from end of tube. Tighten the tube clips so that they will not slip.
4. Place the bottle so that approximately one inch of tube protrudes through the bottom of the bottle. Slide the cap up the tube such that the bottle is open.
5. Screw and secure that eyehook into bottle, using a nut and washers. (You may need to drill a small hole in the bottle first.)
6. Apply epoxy to seal hose and bottle.
7. Mix concrete according to instructions and pour in the bottle around the tube until bottle is filled to the bottom of the neck.
8. Slide cap in place and screw on tight. Apply epoxy to seal hose and cover.
9. Allow sampler to dry for 24 hours before use.
10. When using for sample collection, fasten a calibrated chain or rope to the eye hook. (Note: The chain or rope should be calibrated in half-meters.)

