

San Gregorio Environmental Resource Center

Water Sample Collection Instructions

Using a Sampling Apparatus with Thermometer and D.O. Bottle

- 1) Remove the peg-shaped stopper from the gray sampler lid. Lift the wire lid retainer up and away from sampler. Carefully remove the lid with the inlet tube attached, sliding it up the rope bridle.
- 2) Insert the D.O. collection bottle, with the cap removed, into the inner chamber of the sampler.
- 3) Press the thermometer into the hole in the floor of the outer chamber and position the scale so it can be read through the clear sampler body.
- 4) Replace the sampler lid, inserting the inlet tube into the D.O. collection bottle. Snap the wire retainer into the grooves on the lid. Press the stopper into the center hole in the lid.
- 5) Attach the weight to the large snap ring at the bottom of the sampler. In the winter attach the hand-held winder to the top of the sampler.
- 6) Submerge the sampling apparatus in an upright position with the lid 6-10 inches below the water surface.
- 7) Use a quick jerk of the line to remove the stopper from the lid of the apparatus. Water will begin filling the D.O. collecting bottle, then overflow and fill the outer chamber, flushing about 5 volumes of the D.O. bottle without contact with air. As air is displaced from the small pore on the side of the outer chamber, bubbles will be observed rising to the surface. When the water sampler is filled, bubbles will no longer appear. Filling takes about one minute.
- 8) Retrieve the sampling apparatus steadily from the water. Decreasing water pressure prevents the exchange of air and water in the sample.
- 9) Proceed to read the water temperature and fix the D.O. sample.
- 10) Do not discard the remainder of the water in the sampler since it will be used for the remaining tests (pH, Conductivity and Turbidity).