For additional information on water testing and water quality issues, go to these helpful websites:

World Health Organization
www.who.int/topics/drinking_water/en/

European Commission Directive
ec.europa.eu/environment/water/water-drink/legislation_en.html

Australian Drinking Water Guidelines

Total Coliform Bacteria Test
STEP 1: Dechlorination of Water Samples

Water samples containing chlorine (like tap water) tend to suppress the growth of coliform bacteria when used with this test. A sterile Water Sampling Bag containing a dechlorinating agent is provided to collect the sample and neutralize any chlorine which may be present. This treatment is only necessary for water samples that may contain chlorine.

1. Tear off top of Water Sampling Bag (2-2197) at the scored line.

2. Pull the tabs outward to open the bag.

3. Fill the bag to the 100 mL fill line with the sample water.

4. Pull wire ends to close the bag.

5. Hold tape wire and whirl the bag for 3 complete revolutions. Shake the bag to dissolve the tablet.

6. Unwhirl bag and pull tabs open. Fold one tape wire inward to form a pouring spout.
STEP 2: Test Procedure

Run the test as a quick screening test to determine if coliform bacteria are present in numbers greater or less than 20 colonies per 100 mL of water.

1. Fill the glass tube that contains a tablet (4890) to the 10 mL line with sample water from Step 1. Replace the cap.

2. Stand the tube upright with the tablet flat on the bottom of the tube.

3. Incubate the tube upright at room temperature for 48 hours. Store out of direct sunlight.

4. Compare the contents of the tube to the Coliform Bacteria Colour Chart. If positive, test for E. coli.

STEP 3: E. coli Fluorescence Test

If Total Coliform test is positive:

1. In a darkened room, hold the UV Light** (31633) against the bottom of the tube (as shown).

2. Press the button on the UV Light** to shine the beam through the sample.

3. If E. coli is present, the sample will have a blue glow.

**WARNING: Do not stare directly into the UV light source.

Note: Samples with positive screening results may require additional laboratory testing to define specific health risks.

Coliform Test Disposal

Remove cap. Add 1 mL (1/3 tsp) of household chlorine bleach. Immediately recap. Stand tube upright for 4 hours. Dispose of closed tube in trash. Do not open tube.