

# Sampling Drinking Water from a Faucet for Bacteriological Analysis (Total Coliforms, *E. coli*, Heterotrophic Plate Count)

Please read and understand this entire procedure prior to beginning any sampling.

[NOTE: Collect samples just prior to delivery to the laboratory. The maximum holding time (HT) between the time of sample collection and the time of analysis by the laboratory is 30 hours for total coliform and *E. coli*, and 8 hours for heterotrophic plate count and source water compliance samples.]

## SAMPLING PROCEDURE

### BEFORE YOU BEGIN

- (1) Select a faucet that will be representative of the water supply to be tested (kitchen, bathroom, etc.). Collect only COLD water from the selected faucet.
- (2) If present, remove any purification device, aerator, strainer, attachments, or debris from the faucet.
- (3) If needed, disinfect the faucet tap with chlorine bleach and rinse.
- (4) Before sampling, allow the water to flow for 5 or 6 minutes or until the water has reached a constant temperature.

Fill bottle to the base of its neck.

### SAMPLING STEPS

- (1) After allowing the system to flush, reduce the water stream to a modest, non-splashing flow about a pencil width in diameter.
- (2) Discard the plastic seal around the cap. Uncap the sample bottle, taking care not to contaminate the bottle or cap. Hold the cap by its outside edge, inside surface facing down. Do NOT set the cap down.
- (3) Fill the bottle PAST the 100-mL mark to the base of its neck [see Figure 1]. DO NOT RINSE OR OVERFILL the container.
- (4) Place the cap on the sample bottle and seal securely.

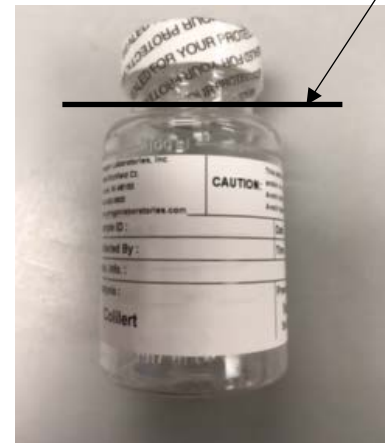


Figure 1

### FINAL STEPS

- (1) Record the sampling Date, Time, Sample ID, and name of the person the sample was Collected By on the bottle label [items A-D in Figure 2] and on the Chain-of-Custody Record (FORM-N0013A).
- (2) Begin to chill all samples within 15 minutes of collection to below 10 degrees C ( $\leq 10$  °C;  $\leq 50$  °F) by placing the samples in a sample refrigerator or in a cooler with ice. Do NOT allow samples to freeze.
- (3) When transporting or shipping samples back to Paragon, be sure the shipping container is secure and protected from leaking and damage. Samples must be returned on ice to meet temperature requirements – ice must still be present at receipt at the laboratory – but samples must not freeze.

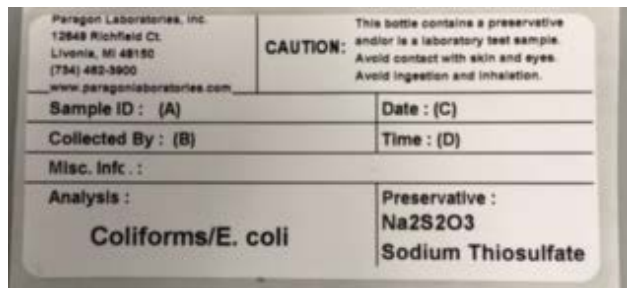


Figure 2

## ACKNOWLEDGEMENT

I hereby acknowledge that I \_\_\_ have or \_\_\_ have not (check one) collected all submitted samples for Total Coliforms, *E. coli*, and/or Heterotrophic Plate Count analysis as summarized above. I understand that not collecting samples using the above procedure may jeopardize the validity of any results obtained.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

**Submit this document with the completed Chain-of-Custody Record that accompanies samples.**

**Attachment 1**  
**Reference Information for**  
**Sampling Drinking Water from a Faucet for Bacteriological Analysis**  
**(Total Coliforms, *E. coli*, Heterotrophic Plate Count)**

**Bottles & Supplies:**

PROVIDED ROUTINELY:

- (1) One sterile 120-mL Poly bottle containing powdered, or 1 tablet of, sodium thiosulfate ( $\text{Na}_2\text{S}_2\text{O}_3$ )

**References:**

- (1) USEPA. Region 8 Laboratory. 2016. Quick Guide to Drinking Water Sample Collection. Second Edition. Golden, Colorado: USEPA, September.
- (2) USEPA. 2018. *Code of Federal Regulations (CFR)*. National Primary Drinking Water Regulations. Title 40, Part 141 (40CFR141), various subsections. Washington: GPO. [also available on the internet at <http://www.ecfr.gov>]