**Section 465.370 Sample Collection, Handling and Preservation**

When the laboratory has been delegated responsibility for sample collection, handling, and preservation, there shall be strict adherence to correct sampling procedures, complete identification of the sample, and prompt transfer of the sample to the laboratory as specified in "Standard Methods for the Examination of Water and Wastewater." In addition, the following standards for sample collection, handling, and preservation of potable water samples shall be met:

a) For the sample to be representative of the potable water system, the sampling program shall include examination of the finished water at selected sites that systematically cover the distribution network.

b) Minimum sampling frequency shall be as specified in Revised Total Coliform Rule, 40 CFR 141.

c) Water shall be sampled from cold water taps that are free of aerators, strainers, hose attachments, and water purification devices. Prior to sampling, a steady flow of water shall be maintained from the tap for two to three minutes to clear the service line.

d) The sample bottle shall be filled allowing at least 1 inch of air space from the top to provide space for mixing. A minimum sample volume of 100 mL shall be collected. If a sample bottle is filled too full to allow for proper mixing, rather than pouring off and discarding a portion of the sample, the entire sample shall be poured into a larger sterile container and mixed properly, and the analysis shall proceed.

e) The sample report form shall be completed in indelible ink immediately after collecting the sample and shall contain the following information: name of system (public water system site identification number, if available); sample identification (if any); date and time of collection; sample site location; sample collector's name and organization (if not the water system); persons transporting the samples from the system to the laboratory (if not the sampler); sample type (e.g., routine, repeat); and total/free chlorine residual (if applicable).

f) When sample containers are prepared within the laboratory, the dechlorinating agent, 0.1 mL of a 3% solution of sodium thiosulfate shall be added to a 120 mL bottle to neutralize up to 5 mg/L. Volume added to larger bottles shall be adjusted to provide the same level of neutralization. Stock sodium thiosulfate solution shall be free of turbidity.

g) When the sample is delivered to the laboratory:

1) The following information shall be added to the sample report form:

A) Date and time of sample arrival; and

B) Name of the person receiving the sample for the laboratory; and

2) Each sample shall be assigned a unique laboratory number. If the sample is a repeat or replacement sample, the number assigned to the original sample shall also be recorded.

h) Records necessary to establish chain-of-custody of the samples shall be maintained.

i) For the analysis of total coliform in drinking water, the time between sample collection and the placement of the sample in the incubator shall not exceed 30 hours.

j) The time from sample collection to placement of sample in the incubator (i.e., the holding time) for total coliforms and fecal coliforms in surface water sources and heterotrophic bacteria in drinking water shall not exceed eight hours for samples being analyzed in compliance with the Surface Water Treatment Rule (40 CFR 141.74(a)(1)).

k) Samples of potable water for heterotrophic plate count analysis shall be refrigerated and delivered to the laboratory within six hours after collection, and analyzed within two hours after receipt in the laboratory.

l) Source water samples shall be received and tested at <10º C, verifying with a temperature control. Time of initiation of analyses shall not exceed eight hours from time of collection.

(Source: Amended at 46 Ill. Reg. 19150, effective November 17, 2022)