instructions regarding replicate samples (multiple field samples collected under identical circumstances). Please note that some kits may have containers that are already filled—these are field blanks used by the laboratory for quality control.

STEP TEN

Many laboratories require that "chain-of-custody" procedures be followed for compliance monitoring samples. The typical "chain-of-custody" form establishes the whereabouts of, and person responsible for, the sample at any point in time. This form is to be completed by field personnel at the time that the samples are collected. The information on the "chain-of-custody" form must match the information on the container label. Print or write legibly.

STEP ELEVEN

Pack and transport the samples. Pack the containers in the same manner that they were received to avoid breakage. Samples must be kept at or below the required temperature (but not allowed to freeze). If they need to be refrigerated, cool them with sufficient ice, or pre-frozen chemical cold packs (blue ice), to keep them below the proper temperature (4°C or 39°F). To protect samples from breakage or freezing, packing materials (such as bottle holders, cardboard, and polystyrene foam) should be used. Ice should not be used as a packing material, since it will melt and leave space, leading to breakage of the bottles during shipping (the melted water may also contaminate the samples). If the samples are collected within a reasonable driving distance of the laboratory, and refrigeration is required, a cooler may be used as a sample carrying case. Samples shipped by commercial carrier must be cooled to the proper temperature, in addition to being protected against breakage or spillage by a suitable shipping case.

STEP TWELVE

Pack and transport samples to the laboratory (or have them picked up) the same day or by overnight courier . The temperature of most samples must be kept at or below 4°C or 39°F during shipping and before analysis. Make sure you include the laboratory sample and "chain-of-custody" forms with the samples.

If you have questions about sampling collection procedures, contact your regional office:

SW Regional Office
(360) 236-3030

NW Regional Office
(253) 395-6750

Eastern Regional Office
(509) 329-2100

GENERAL

SAMPLING PROCEDURE

Washington State Department of Health
ENVIRONMENTAL HEALTH PROGRAMS
DIVISION OF DRINKING WATER

July 2003
DOH PUB #331-219

GENERAL SAMPLING PROCEDURE

The provisions of the federal Safe Drinking Water Act requires public water supplies to collect microbiological and chemical samples at various frequencies. This sample collection frequency is determined by each source's water quality history, compliance with previous monitoring requirements, and waiver status. To assist water systems on when to sample and what types of samples to collect, the Division of Drinking Water sends out an annual Water Quality Monitoring Report to Group A systems.

This brochure provides general information on how to collect a water sample. Steps and procedures can vary depending on the laboratory that is used so you should follow the instructions that are provided by the laboratory you are using.

The general sampling procedure for water sample collection is as follows:

STEP ONE

Inspect the sampling kit and read the laboratory instructions carefully.

STEP TWO

Sampling containers may contain a preservative. Do not rinse them prior to sample collection. Do not add preservatives to the sample unless specifically instructed to do so by the laboratory . If cold packs will be used, freeze them prior to sample collection.

STEP THREE

Carefully choose the sampling point. In most cases locate a sampling tap that is after treatment (if present), but prior to entry to the distribution system.

STEP FOUR

Do not fill sample bottles near gasoline cans, gasoline-powered motors, paint cans, lighter fluid, paint strippers, pesticide bottles, exhaust fumes from running engines or recently painted faucets. Fumes and vapors may contaminate the samples.

STEP FIVE

Collect the samples immediately prior to shipment to the laboratory.

STEP SIX

Remove any attachment such as a hose, filter, screen, or aerator from the tap.

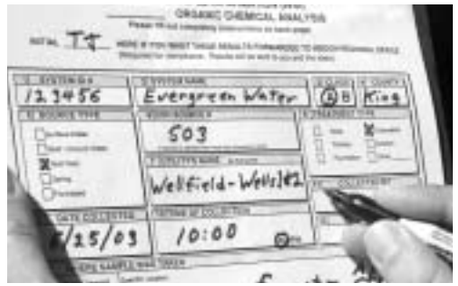
STEP SEVEN

Flush the tap for more than 10 minutes or until the water temperature becomes stable. This helps ensure a representative water sample.

STEP EIGHT

While the water is running and before collecting the sample, fill out COMPLETELY the laboratory form (often called the "Water Sample Information Form") and sample label. Laboratory forms vary but the following information is very important to complete:

- Water System ID number
- Water System name
- DOH source number (i.e., SO1)
- Sample type and sample purpose (usually "RC" for routine compliance)
- Collection date and time the sample was taken
- Sample location (specific location where the samples were collected, for example "pumphouse tap")
- System type (i.e., Group A or B)
- Sample type (i.e., pre-treatment/ raw or post-treatment/finished)



STEP NINE

Carefully follow the instructions for filling the sample container -- different types of samples have different requirements for the actual collection of the sample. Do not touch the inside of the cap, and do not over-tighten. If your sample kit contains additional empty bottles, follow the laboratory