

Sample Stations

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Access into private homes for coliform sampling seems to be becoming more difficult. It seems a lot of residents work out of town and the days of not locking your house when you're not home are long gone. Recently several operators have asked my opinion about sample stations. The questions range from "Where should I install the stations?" to "Can they be properly disinfected once I have them in?"

If you decide to utilize sample stations I would like to offer a couple of suggestions to consider. First thing you will want to do is find representative sites in your distribution system. A good site would be a site that has easy access to the water main. Under a paved street would be cost prohibitive. Perhaps a water main in the right of way would be more cost effective. Never tap a sampling station to a fire hydrant lead, because you will be sampling a dead end. This is never a good idea. Once you have found good sites you will want to submit a map to the Health Department for approval. There is no use installing a sampling station only to find out you can't use it for routine samples.

Disinfecting a sample station once it's installed shouldn't be a problem. The best way to disinfect any sample tap is to insure all internal surfaces have been in contact with chlorine. An easy way to accomplish this is with the use of a new two gallon garden sprayer. Adapt the wand end of the sprayer to fit the 1/4 inch tube on the sample station. Fill the sprayer with chlorine bleach and attach the wand end to the 1/4 inch tube. Fill the entire tap with the chlorine until the chlorine comes out of the tap. Finish off the process by using a baggie with chlorine to disinfect the outside of the tap. After three to five minutes of contact or until you are sure there has been sufficient contact time, you will be ready to flush the hydrant. Flush until you are sure you have fresh water from the water main. Shut the stream down to a pencil-sized stream and collect the sample. Be sure to wash all brass fixtures with clear water as chlorine is very aggressive on brass.

The main disadvantage to sampling outdoors is you are subject to the elements. You will have to watch the forecast for a good, calm day or at least have a pop up tent available to break the wind.