

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

TECHNICAL BULLETIN

Topic: COLIFORM SAMPLING PLAN
Bulletin Number: BSDW-92-5

Section/Program: BUREAU OF SAFE
DRINKING WATER

TO: ALL PUBLIC WATER SYSTEMS

The Total Coliform Rule (TCR) requires Public Water Systems to collect coliform samples at sites which are representative of the water throughout the distribution system, according to a written sample siting plan. This plan may be expanded to include Triggered Source Water sampling sites under the Ground Water Rule.

The regulatory requirement for a sample siting plan can be found in the Code of Federal Regulations – 40 CFR 141.21(a) and was adopted by the State Board of Health by reference on July 16, 1992 – Nevada Administrative Code Chapter 445A.454

All Public Water Systems must prepare a written sampling plan according to the following criteria:

1. **Prepare a general schematic of the water system.** This includes:
 - a) Source water location(s) (wells, lakes, streams, springs, etc.)
 - b) Storage facility location(s) (water tanks, pressure tanks, reservoirs)
 - c) Treatment system location(s), if applicable
 - d) Pumping system location(s) and remaining distribution system
2. Select routine and repeat sample sites and indicate their location on the schematic.
 - a) **Sites must be representative of water throughout the distribution system** and of each pressure zone. Do not select sites which have point of use treatment devices.
 - b) Sampling taps must be accessible for routine monitoring, allow for upstream and downstream repeat sampling, and be properly constructed and clean. Swivel faucets, leaky faucets, yard or fire hydrants, faucets with aerators or other attachments are poor sample taps.
 - c) For systems collecting less than one routine total coliform sample per month, four repeat samples must be selected; the original tap, one upstream within 5 connections, one downstream within 5 connections and one additional repeat sample location within the distribution system.
 - d) For systems collecting more than one routine total coliform sample per month, three repeat samples must be selected: the original tap, one upstream within 5 connections and one downstream within 5 connections.
3. **Prepare a Sample Plan Narrative:** This includes:
 - a) Sampling schedule. Sampling should be scheduled early in the month or quarter to allow time for re-sampling, if needed. Systems serving 4,900 persons or more, or systems using surface water, must collect samples at regular time intervals throughout the month (i.e. do not collect all routine samples on a single day).
 - b) List routine sample sites and their appropriate repeat locations.
4. **Groundwater Rule Requirement:** As of December, 2009 if a Routine Total Coliform Rule sample tests present for Total Coliform, all groundwater sources in service at the time of collection of the present sample be sampled for E. coli within 24 hours of notification of the present result. These source samples should be included in your TCR Site Sampling Plan.
 - Systems that collect more than one Routine coliform per month and have multiple groundwater sources (wells/springs) may be able to reduce triggered source water monitoring by preparing and submitting a Ground Water Rule *Representative Triggered Source Water Sampling Plan*. - 40 CFR 141.402 (a)(2)(ii) of the Ground Water Rule, effective December 1, 2009