

The Total Coliform Rule (TCR) is the sampling required by the Safe Drinking Water Act to determine microbiological drinking water quality.

Routine Samples-Every water system must submit a certain number of "routine" samples every month according to the number of people served by the water system. Any and all "routine" samples must be taken at sites designated on your sampling plan that you developed and had approved by DWP. "Routine" must be circled on your sampling form. **Exception-In the month following a month when there was an positive sample submitted, at least five routine samples must be taken.**

If you distribute chlorinated water, you must also take a chlorine residual sample and submit results under the DBP Rule. You should try to sample early in each month so that additional sampling (repeat/replacement/etc) can be done if necessary.

Repeat Samples-Repeat samples are taken only after a positive routine sample is submitted. For systems serving less than 1000 people, FOUR repeat samples must be submitted for **each** positive routine sample. For systems serving more than 1000 people, THREE repeat samples must be submitted for **each** positive routine sample. Repeat samples are taken in the immediate area of the original unsafe routine sample. **If you distribute chlorinated water, you must also take a chlorine residual sample at each repeat sample site and submit the results under the DBP Rule.** The locations for repeat samples are-

1. The original positive routine sample site
2. Within five service connections upstream of the original positive routine sample
3. Within five service connections downstream of the original positive routine sample
4. For systems serving less than 1000 people, the fourth repeat sample can be taken anywhere within five service connections of the original positive routine sample

Note that the repeat samples are NOT taken from your routine sample sites except for the one taken at the original positive site. Repeat samples must be taken within 24 hours or on the next lab business day after receiving your results of a positive sample-**Not one or two weeks later.** You will NOT receive a separate letter from DWP asking for repeat samples. Your positive lab result is your notification that repeat sampling must be done. A "repeat" sample that is collected in the following month is still counted toward compliance for the month in which the original positive routine sample is taken. After you submit one set of repeat samples for each positive sample, no more sampling for that month is required. "Repeat" must be circled on your sampling form so that we know why you submitted your sample. **DO NOT CONFUSE REPEAT SAMPLING WITH THE ADDITIONAL ROUTINE SAMPLES THAT MUST BE SUBMITTED IN THE MONTH FOLLOWING A POSITIVE SAMPLE.** As you can see, they are different in that the samples are taken from different locations and for a different purpose. A sample cannot be both a "routine" sample and a "repeat" sample.

All samples must be taken under normal operating conditions. If your system does not chlorinate, you must sample non-chlorinated water. You cannot batch chlorinate your system and then take your samples a couple days later.

An example of a sampling scenario for a system serving 550 people (one routine sample per month required) is as follows-

January-One routine sample taken. Sample is negative. No more sampling for January.

February-One routine sample taken. Sample is positive.* Four repeat samples taken. The repeats are all negative. No more sampling for February.

March-Five routine samples taken because of the positive sample in February. Two of the routine samples for March are positive.* Eight repeat samples are taken (four repeats for each positive routine). No more sampling for March.

April-Five routine samples taken because of the positive sample in March. All of the routine samples are negative. No more sampling for April.

May-One routine sample taken. Only one routine sample is necessary as all samples in April were negative. Sample for May is negative. No more sampling for May.

*If this system is a groundwater system or a consecutive groundwater system, "triggered" samples from each well must be taken in addition to TCR repeat samples under the Groundwater Rule.

All routine samples must be collected in the proper period. For example, a sample that is to be used for January compliance must be collected in January-not December 31 or February 1. You may collect and mail your samples on any Monday, Tuesday, Wednesday, or Thursday of the month; however, watch for holidays where there is no mail delivery.

Do not send in a sample just because you have received sample bottles from your lab. You should have a purpose for each sample that is submitted-either to satisfy the monthly routine monitoring requirements or to satisfy the repeat monitoring following a positive routine sample. DO NOT USE A SAMPLE BOTTLE IF YOU HAVE DOUBTS ABOUT ITS QUALITY, AND DO NOT SUBMIT A SAMPLE IF IT WAS NOT COLLECTED PROPERLY. If you submit a sample, you need to accept the results as DENR will use those results for regulatory purposes.

The submission of water samples is entirely the responsibility of the water system-not your lab or DWP. You need to make sure you have enough microbiological sample bottles available at all times. **It is suggested that you have at least five sample bottles on-hand (plus bottles for GWR "triggered" samples if necessary) at all times. Call your lab for extra bottles if necessary.**

You must read and understand the sample results when they are returned to you so that you can take follow-up action if necessary. You should receive sample results within five days to seven days after you submit a sample. **If you do not have results after that time period, call your lab to see what has happened to your sample. Samples do get lost in the mail on occasion. Do not wait until the end of the month to call your lab if you have not received results.** Samples that are not analyzed must be replaced. Compliance is not based on whether a sample is mailed but based on the lab results of a properly analyzed sample.

When do you have a violation?

1. When you have MORE THAN ONE sample positive for total coliforms in a month-TOTAL COLIFORM VIOLATION
2. When you have a REPEAT sample positive for E. COLI-ACUTE E. COLI VIOLATION*
3. When you have a ROUTINE sample positive for E. COLI followed by a repeat sample positive for total coliforms-ACUTE E. COLI VIOLATION*
4. When you do not submit and have analyzed the proper number of repeat and/or routine samples-FAILURE TO MONITOR VIOLATION

All violations require a public notice and for you to remedy the violation.

* These are Tier 1 violations that require a public notice within 24 hours. You must also contact the DWP within 24 hours.

The Revised Total Coliform Rule (RTCR) will take effect on April 1, 2016. More info will be provided to the systems in the near future.