

Helpful Hints

- ◆ Good sample collection technique can reduce the possibility of having a total coliform-present sample.
- ◆ Make sure to collect every routine and repeat sample.
- ◆ Find and fix any sanitary defects as soon as you are aware of them.
- ◆ Remember to send us your completed Level 1 and Level 2 assessment documentation.
- ◆ If you are a seasonal water system, remember to follow your start-up procedure before providing water to the public at the beginning of each new season.

For more information

Call our regional office:

Eastern Region: Spokane Valley
509-329-2100

Northwest Region: Kent
253-395-6750

Southwest Region: Tumwater
360-236-3030

You can also visit our website at www.doh.wa.gov/CommunityandEnvironment/DrinkingWater



Revised Total Coliform Rule



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The **Revised Total Coliform Rule (RTCR)** will replace the Total Coliform Rule on April 1, 2016. EPA expects the RTCR to protect public health better by requiring systems vulnerable to microbial contamination to “find and fix” problems that allow contamination to enter a water system.

We have always required water systems to look for any maintenance or operational defects that could allow contamination to enter a system. RTCR formalizes the process and requires water systems to submit a water system assessment report to us any time they have total coliform-present sample results.

RTCR Introduces the *E. coli* MCL

RTCR calls the acute Maximum Contaminant Level (MCL) an “*E. coli* MCL.” An *E. coli* MCL violation can occur four ways:

- ◆ A total coliform-present repeat sample follows an *E. coli*-present routine sample.
- ◆ An *E. coli*-present repeat sample follows a total coliform-present routine sample.
- ◆ The lab fails to test a total coliform-present repeat sample for *E. coli*.
- ◆ New. A system fails to take 3 repeat samples following an *E. coli*-present routine sample.

Required Routine Monitoring

Water systems will continue to collect the same number of routine samples at the same frequency as they do now. See your Water Facilities Inventory (WFI) form for your system’s monitoring schedule.

RTCR requires all water systems to collect 3 repeat samples for every total coliform-present routine sample. Systems that collect 1 sample a month will collect 3 repeats instead of 4. Systems that collect 2 or more routine samples will continue to collect 3 repeats. If a system fails to collect 3 repeat samples for every total coliform-present routine sample, RTCR will require it to conduct a water system assessment.

RTCR does not allow any system to use a source sample as both a repeat sample and a groundwater source sample. Instead, it will require all systems to collect a raw water sample from each groundwater source that was in use on the day they collected the routine sample.

RTCR requires water systems to collect their normal number of routine samples the month after a total coliform-present routine sample. Systems that serve 4,100 or fewer people no longer have to collect 5 routine samples.

“Sanitary Defects” and “Defects”

RTCR distinguishes between “sanitary defects” and “defects.” Either might cause a total coliform-present sample, which triggers the assessment requirement.

Sanitary defect: A pathway for contaminants to enter the water system or the failure or imminent failure of an existing barrier.

Defect: An issue identified during an assessment that could have caused total coliform-present samples, such as using an improper sample collection technique.

Assessment Elements

Evaluate anything that might affect water quality in the distribution system, or indicate that quality is impaired, such as:

- ◆ Atypical events.
- ◆ Changes in distribution system operation and maintenance, including water storage.
- ◆ Source and treatment considerations.
- ◆ Existing water quality data.
- ◆ Inadequate sample sites, sample protocols, or sample processing.
- ◆ Others, depending on the size and complexity of the system.

Treatment Techniques Trigger Assessments

A treatment technique trigger is a situation that requires a water system to take action. RTCR requires water systems to conduct an assessment to “find and fix” any sanitary defects whenever a treatment technique trigger occurs. There are two assessment levels. Both evaluate the entire system from the sample collection point to the source of supply.

You can anticipate that a treatment technique trigger might occur any time you collect routine and repeat samples. Therefore, you should be ready to start a system evaluation as soon as the lab notifies you of total coliform-present results, which trigger the assessment requirement.

Don't wait to hear from us. You must complete a Level 1 and Level 2 assessment within 30 days after the treatment trigger occurs.

Level 1 Assessment

A basic water system evaluation an owner, manager, or other knowledgeable person can do. A Level 1 treatment technique trigger occurs any time a water system:

- ◆ Collects fewer than 40 routine samples a month and has 2 or more total coliform-present results the same month.
- ◆ Collects 40 or more routine samples a month and has total coliform-present results in more than 5 percent of its routine and repeat samples.
- ◆ Fails to collect 3 repeats for every total coliform-present routine sample.

Level 2 Assessment

A complex evaluation that only a person with state-required qualifications can do. A Level 2 treatment technique trigger occurs when a water system has:

- ◆ An *E. coli* MCL violation.
- ◆ A second Level 1 treatment technique trigger within a rolling 12-month period.

Seasonal Water Systems

RTCRC recognizes a new noncommunity seasonal water system. RTCRC's seasonal system doesn't operate year-round, totally depressurizes the water lines at the end of each operating season, and has at least one month when it serves no people.

Complete system shutdown creates opportunities for contamination to enter or spread through the distribution system. Therefore, all seasonal water systems must:

- ◆ Have a state-approved start-up procedure by March 31, 2016.
- ◆ Follow the procedure before opening for the season each year.
- ◆ Send us a certificate declaring that they followed the procedure before serving water to the public.

Failure to do so is a treatment technique violation, which requires public notification to water system customers.



Treatment Technique Violations

RTCRC requires public notification within 30 days when a:

- ◆ Water system fails to conduct a required Level 1 or Level 2 assessment within 30 days of learning about the treatment technique trigger.
- ◆ Water system fails to correct a sanitary defect identified in a Level 1 or Level 2 assessment within 30 days of learning about the treatment technique trigger.
- ◆ Seasonal system fails to complete state-approved startup procedures before providing water to customers.

Monitoring Violations

- ◆ A water system fails to collect every routine sample.
- ◆ A lab fails to test a total coliform-present routine sample for *E. coli*.

Reporting Violations

- ◆ Water system fails to submit a monitoring report or completed assessment report in a timely manner.
- ◆ Water system fails to notify us of an *E. coli*-present sample in a timely manner.
- ◆ Seasonal system fails to submit certification of completion of approved start-up procedure.

Water samples under black light.
The positive sample fluoresces.

