



The Revised Total Coliform Rule: A Quick Reference Guide for Maine Public Water Systems

Maine CDC Drinking Water Program • 11 SHS Augusta, ME 04330 • 287-2070 • www.medwp.com

About the Revised Total Coliform Rule (RTCR)

A revision to the 1989 Total Coliform Rule, the RTCR establishes a maximum contaminant level (MCL) for *E. coli* and uses *E. coli* and total coliforms to initiate a “find and fix” approach to address fecal contamination that could enter into the distribution system. It requires public water systems (PWSs) to perform assessments to identify sanitary defects and subsequently take action to correct them.

All PWSs must comply with the RTCR requirements starting April 1, 2016. This document summarizes the major changes and requirements for Maine’s public water systems as a result of the RTCR. Seasonal water systems should refer to the Drinking Water Program (DWP) RTCR Quick Reference Guide for Seasonal Systems. If you have specific questions about how the RTCR will impact your water system, please contact the DWP.

SAMPLING SITE PLANS

The RTCR requires that total coliform samples be collected by PWSs at sites which are representative of water quality throughout the distribution and according to a written sampling site plan subject to State review and approval. Sample site plan requirements under the RTCR include, but are not limited to: establishing sample site locations for routine total coliform samples, repeat total coliform samples, raw water samples, and follow-up total coliform samples. Sample site plans must also identify when samples will be taken during the compliance period.

| | |
|---|---|
| For PWSs serving a population of 1,000 or fewer: | ▶ DWP Field Inspectors will review and work with PWSs to create or modify sample site plans that meet the guidelines set forth in the RTCR during routine sanitary surveys or on-site visits after April 1, 2016. |
| For PWSs serving a population greater than 1,000 | ▶ Systems must submit a revised sample site plan that meets the sample site plan guidelines set forth in the RTCR to DWP by December 31, 2015 for approval. ▶ Guidance on the creation of RTCR sample site plans will be made available. |

ROUTINE SAMPLING

| | |
|--|--|
| For Community systems using groundwater and serving a population of 1,000 or fewer: | <ul style="list-style-type: none"> ▶ The default monitoring frequency for Total Coliform bacteria is monthly ▶ Current sampling frequency for Total Coliform bacteria will remain in effect until next routine sanitary survey after April 1, 2016, at which point a review of sampling frequency will be done. ▶ Sampling frequency may change before next sanitary survey if circumstances arise that warrant an increase in monitoring frequency such as, but not limited to: <i>E. Coli</i> MCL violation, Total Coliform Treatment Technique violation, Failure to Monitor violation for Total Coliform, or absence of a licensed water operator ▶ When sampling frequency is reviewed at a sanitary survey, PWSs must meet the following criteria in order to be approved to reduce to and/or maintain quarterly Total Coliform bacteria monitoring: <ul style="list-style-type: none"> • Designated Licensed operator on staff or contracted • 12 month [running] clean compliance history for Total Coliform bacteria • Free from sanitary defects or have an approved corrective action plan • System meets all approved construction standards • Protected Source ▶ And must meet at least one of the following conditions: <ul style="list-style-type: none"> ✓ Annual Level 2 Assessment conducted ✓ Continuous disinfection ✓ Approved X-Connection Control Program ✓ Demonstration of 4 Log virus removal or inactivation |
|--|--|



Keep Your Drinking Water Safe:

3/2015

✓ *Protect Your Source*

✓ *Take Your Samples*

✓ *Maintain Your Treatment*

✓ *Inspect Your Pipes & Tanks*

ROUTINE SAMPLING (CONT.)

| | |
|---|---|
| <p>Non-Community systems using groundwater and serving a population of 1,000 or fewer:</p> | <ul style="list-style-type: none"> ▶ The default monitoring frequency for total coliform bacteria is quarterly ▶ Current sampling frequency for Total Coliform bacteria will remain in effect until next routine sanitary survey after April 1, 2016, at which point a review of sampling frequency will be done. ▶ Sampling frequency may change if circumstances arise that warrant an increase in monitoring frequency to monthly such as, but not limited to: <i>E. Coli</i> MCL violation, Total Coliform Treatment Technique violation, or 2 or more Failure to Monitor violations for Total Coliform in 12 month period ▶ A water system that has been placed on monthly Total Coliform bacteria monitoring may return to quarterly monitoring by meeting the following criteria: <ul style="list-style-type: none"> ✓ 12 month [running] clean compliance history for Total Coliform ✓ Sanitary Survey or Level II Assessment within the past 12 months ✓ Protected Source ✓ Free from sanitary defects |
| <p>All other systems:</p> | <ul style="list-style-type: none"> ▶ Routine monitoring for Total Coliform bacteria is monthly, no reduction in frequency is allowed. |

REPEAT SAMPLING FOLLOWING A POSITIVE TOTAL COLIFORM RESULT

| | |
|---|---|
| <p>All PWS:</p> | <ul style="list-style-type: none"> ▶ Within 24 hours of learning of a positive Total Coliform bacteria (TC+) routine sample, at least 3 repeat samples must be collected at repeat sites identified in System's Approved RTCR Sample Site Plan and analyzed for Total Coliform bacteria ▶ If any repeat TC+ sample is also positive for <i>E. coli</i> bacteria, the sample result must be reported to state by the end of the day that the PWS is notified |
| <p>PWSs on quarterly monitoring:</p> | <ul style="list-style-type: none"> ▶ Must take a minimum of three additional routine samples the month following a TC+ routine or repeat sample |

ASSESSMENTS AND CORRECTIVE ACTIONS

The RTCR requires PWSs that have an indication of Total Coliform bacteria contamination (e.g. as a result of TC+ samples, *E. Coli* MCL violations, performance failure) to assess the problem and take corrective action. There are two levels of assessments (Level 1 and Level 2) based on the severity or frequency of the problem.

| | |
|--|--|
| <p>Triggering an Assessment</p> | <p>Level 1 Assessments are triggered by:</p> <ul style="list-style-type: none"> ◆ 2 or more TC+ routine/repeat samples in the same month <u>OR</u> for systems collecting 40 or more samples each month: greater than 5% of routine/repeat samples positive ◆ Failure to take required repeat sample(s) after any single TC+ <p>Level 2 Assessments are triggered by:</p> <ul style="list-style-type: none"> ◆ <i>E. coli</i> MCL violation ◆ Second trigger of a Level 1 Assessment within a rolling 12 month period |
| <p>Conducting an Assessment</p> | <p>Level 1 Assessments can be performed by:</p> <ul style="list-style-type: none"> ◆ For PWSs not required to have a licensed operator: PWS Owner or responsible party, or DWP personnel or approved entity. ◆ For PWSs required to have a licensed operator: a licensed operator at a grade comparable to or higher than the grade of the PWS, or DWP personnel or approved entity. <p>Level 2 Assessments can be performed by:</p> <ul style="list-style-type: none"> ◆ For systems not required to have a licensed operator: a licensed operator holding both a Class II Treatment <u>and</u> Class I Distribution license or higher, or DWP personnel or approved entity. ◆ For PWSs required to have a licensed operator: a licensed operator holding a license with treatment and distribution classes equal to or higher than that of the PWS, at a minimum Class II Treatment <u>and</u> Class I Distribution, or DWP personnel or approved entity |
| <p>Corrective Actions</p> | <p>When sanitary defects are identified during a Level 1 or Level 2 Assessment, they should be corrected as soon as possible to protect public health. The PWS must complete correct actions by one of the following timeframes:</p> <ul style="list-style-type: none"> ◆ No later than the time the assessment form is submitted to State, which must be within 30 days of triggering the assessment, or ◆ Within state-approved timeframe which was proposed in the assessment form |