



Repeat Monitoring Requirements

WHO DOES THIS FACTSHEET APPLY TO?

ALL PUBLIC WATER SYSTEMS (PWSs) are required to conduct repeat monitoring when a routine water sample is POSITIVE FOR TOTAL COLIFORM (TC+) BACTERIA.

ATTENTION!

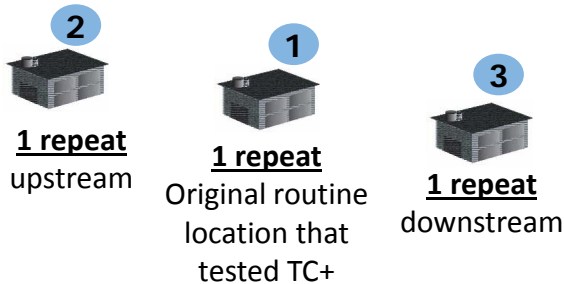
All PWSs must comply with the RTCR requirements starting April 1, 2016.

STEP 1: COLLECT 3 REPEAT SAMPLES FOR EACH ROUTINE TC+ SAMPLE

YOU MUST COLLECT A SET OF 3 REPEAT SAMPLES AFTER EACH TC+ ROUTINE SAMPLE. You must continue to collect a set of 3 repeat samples until either TC is not detected in one complete set of repeat samples or you trigger an assessment.

Repeat Sampling Locations

Collect at least 3 repeat samples at the locations described in your coliform sampling plan and any triggered Ground Water Rule (GWR) source samples (if applicable). The repeat samples must consist of 1 repeat sample at the original routine location, 1 repeat sample within five service connections upstream, and 1 repeat sample within five service connections downstream of the TC+ sample. If there is no upstream or downstream location available, you must still collect three repeats using alternative repeat sampling locations. Alternate repeat locations may be identified and used on a situational basis with MassDEP approval.



COLLECT ALL 3 REPEAT SAMPLES.

If you do not collect and analyze at least 3 repeat samples (for each routine TC+) you will have to perform a Level 1 or Level 2 assessment.

See the **RTCR Factsheet: Level 1 & Level 2 Assessments and Corrective Actions.**

Frequency & Timing

Collect all repeat samples **WITHIN 24 HOURS** AFTER RECEIVING NOTIFICATION FROM THE MASSACHUSETTS-CERTIFIED LAB OF THE TC+ SAMPLE RESULT.** The repeat samples must be taken on the same day.

Remember the lab must begin analyzing the drinking water sample no later than the 30th hour from the collection time. Refrigerate or ice the sample using “blue” ice (cooled to about 4° to 10° C) until it reaches the lab.

REMINDER: ANALYZE ALL REPEAT TC+ SAMPLES FOR *E. COLI*.*

NOTES

*Call your MassDEP Regional Office on the same day you learned of the *E. coli*-positive (EC+) result, or if outside of regular business hours call the Department’s Emergency telephone number, 1-888-304-1133

**Contact your MassDEP Regional Office for an approved extension if logistical problems prevent collection within 24 hours.

FOR ASSISTANCE,
PLEASE CONTACT
MASSDEP AT:

CERO: 508-792-7650

NERO: 978-694-3200

SERO: 508-946-2700

WERO: 413-784-1100

BOSTON: 617-292-5770

PROGRAM.DIRECTOR-DWP@STATE.MA.US

STEP 2: CONDUCT ACTIONS REQUIRED AS A RESULT OF YOUR REPEAT SAMPLING

- **TC+** = Total coliform positive or present; **TC-** = Total coliform negative or absent
- **EC+** = *E. coli* positive or present; **EC-** = *E. coli* negative or absent; **EC?** = *E. coli* not analyzed

Missing repeat samples after an *E. coli* positive routine sample or total coliform positive repeat samples that were not analyzed for *E. coli* are treated as MCL violations, because it is unknown whether the water is safe to use.

If Routine Sample Is:	And	Any Repeat Sample Is:	Action: What do your sample results mean?	Violation
NOTE THAT IN ALL CASES, SYSTEMS MONITORING QUARTERLY must also collect three routine samples the following month.				
TC+ EC-	&	TC+ EC-	<p>SYSTEMS TAKING 40 OR FEWER ROUTINE SAMPLES PER MONTH: A LEVEL 1 OR LEVEL 2 ASSESSMENT MUST BE CONDUCTED.* Contact your MassDEP regional office to determine which assessment is required.</p> <p>SYSTEMS TAKING MORE THAN 40 SAMPLES PER MONTH: A LEVEL 1 OR LEVEL 2 ASSESSMENT MUST BE CONDUCTED* <u>only if</u> more than 5% of the samples are TC+. Contact your MassDEP regional office to determine which assessment is required.</p>	No violation
TC+ EC-	&	TC+ EC?	<ol style="list-style-type: none"> 1. NOTIFY MASSDEP REGIONAL OFFICE within 24 hours of receiving results. 2. A LEVEL 2 ASSESSMENT MUST BE CONDUCTED.* 3. ISSUE TIER 1 PUBLIC NOTICE (PN). 	<i>E. coli</i> MCL violation**
TC+ EC-	&	TC+ EC+	<ol style="list-style-type: none"> 1. NOTIFY MASSDEP REGIONAL OFFICE within 24 hours of receiving results. 2. IF <i>E. COLI</i> PRESENT IN THE SOURCE WATER, comply with applicable Ground Water Rule requirements. 3. A LEVEL 2 ASSESSMENT MUST BE CONDUCTED.* 4. ISSUE TIER 1 PUBLIC NOTICE (PN). 	<i>E. coli</i> MCL violation**
TC+ EC-	&	Any or all repeat samples missing	<ol style="list-style-type: none"> 1. A LEVEL 1 OR LEVEL 2 ASSESSMENT MUST BE CONDUCTED*. Contact your MassDEP Regional Office to determine which assessment is required. 	No violation
TC+ EC+	&	TC+ EC+ or EC-	<ol style="list-style-type: none"> 1. NOTIFY MASSDEP REGIONAL OFFICE within 24 hours of receiving results. 2. IF <i>E. COLI</i> PRESENT IN THE SOURCE WATER, comply with applicable Ground Water Rule requirements. 3. A LEVEL 2 ASSESSMENT MUST BE CONDUCTED.* 4. ISSUE TIER 1 PUBLIC NOTICE (PN). 	<i>E. coli</i> MCL violation**
TC+ EC+	&	Any or all repeat samples missing	<ol style="list-style-type: none"> 1. NOTIFY MASSDEP REGIONAL OFFICE within 24 hours of receiving results. 2. IF <i>E. COLI</i> PRESENT IN THE SOURCE WATER, comply with applicable Ground Water Rule requirements. 3. A LEVEL 2 ASSESSMENT MUST BE CONDUCTED.* 4. ISSUE TIER 1 AND TIER 3 PUBLIC NOTICE (PN). 	<i>E. coli</i> MCL violation** and monitoring violation

NOTES *Level 2 Assessment may be conducted by MassDEP or a party approved by MassDEP.

** You are required to provide Tier 1 public notice within 24 hours in response to an *E. coli* MCL violation or *E. coli* source detection for ground water PWS without 4-log treatment for viruses.