



RTCR

Revised Total Coliform Rule Factsheet

Repeat Monitoring Requirements

WHO DOES THIS FACTSHEET APPLY TO?

Public water systems (PWSs) serving **LESS THAN OR EQUAL TO 1,000 PEOPLE** that are required to conduct repeat monitoring when a routine water sample is **POSITIVE FOR TOTAL COLIFORM (TC+) BACTERIA**.

RTCR What to Do?

April 1, 2016: All PWSs must comply with the RTCR.
SD Drinking Water Program (DWP) 605-773-3754 denr.sd.gov/des/dw/dwhome.aspx

STEP 1: COLLECT 3 REPEAT SAMPLES AFTER A TC+ ROUTINE SAMPLE

Beginning on April 1, 2016, your PWS **MUST COLLECT 3 REPEAT SAMPLES FOR EACH ROUTINE TC+ SAMPLE RESULT**. Your PWS must also analyze all TC+ samples to determine if *E. coli* bacteria are present.

Alert

The lab must **ANALYZE ALL ROUTINE AND REPEAT TC+ SAMPLES FOR *E. COLI***.

If *E. coli* bacteria are present ***E. coli*-positive (EC+)** it is an indicator of fecal contamination. You must **CALL SD DWP** on the same day you learn of the EC+ result, or by the end of the next business day or [placeholder for state after-hours phone line or an alternative notification procedure] and tell them you received an EC+ result.

Sampling Location

Your PWS must collect 1 repeat sample at the original location, 1 repeat sample within five service connections upstream and 1 repeat sample within five service connections downstream of the TC+ sample. Your PWS must collect 3 repeat samples within 24 hours for each TC+ sample. TC+ samples must also be tested for *E. coli*.

2



Site B = 1 repeat
5 connections
upstream

1



Site A = 1 repeat
Original location

3



Site C = 1 repeat
5 connections
downstream

Alert

COLLECT ALL 3 REPEAT SAMPLES.

If you do not collect all 3 samples for each TC+ routine sample, you will have to perform a Level 1 or Level 2 assessment.

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

Frequency & Timing

Collect all 3 repeat samples **WITHIN 24 HOURS AFTER RECEIVING NOTIFICATION FROM THE STATE-CERTIFIED LAB OF EACH TC+ SAMPLE RESULT**. The repeat samples must be taken on the same day.



Within 24 hours of receiving the TC+ result

Step 1

Collect 3 repeat samples after a TC+ Routine Sample?

Step 2

What to Do after Collecting Repeat Sample(s)

Sample at taps in the distribution system



FOR ASSISTANCE, PLEASE CONTACT YOUR STATE:

NAME/DEPT.:

PHONE:

EMAIL:

STEP 2: WHAT TO DO AFTER COLLECTING REPEAT SAMPLE(S)

See the [RTCR Factsheet: Level 1 & Level 2 Assessments and Corrective Actions](#)

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

If Routine Sample Is:	And	Any Repeat Sample Is:	Action: What do your sample results mean?	Violation
TC+ EC-	&	TC+ EC-	CONDUCT A LEVEL 1 OR LEVEL 2 ASSESSMENT. Consult with the state to determine if additional repeat samples will be necessary.	Contact your state
TC+ EC-	&	TC+ EC?	CONDUCT A LEVEL 2 ASSESSMENT. Contact the state within 24 hours. The presence of total coliform bacteria in both your original routine sample and in your follow-up repeat sample means the water may not be safe to use.	<i>E. coli</i> MCL violation
TC+ EC-	&	EC+	CONDUCT A LEVEL 2 ASSESSMENT. Contact the state within 24 hours. The presence of <i>E. coli</i> bacteria in your water means the water may not be safe to use.	<i>E. coli</i> MCL violation
TC+ EC-	&	Any missing repeat sample	CONDUCT A LEVEL 1 OR LEVEL 2 ASSESSMENT. Contact the state so we can help you determine which type of assessment is required.	Contact your state
TC+ EC+	&	TC+	CONDUCT A LEVEL 2 ASSESSMENT. Consult with the state to determine if additional repeat samples will be necessary.	<i>E. coli</i> MCL violation
TC+ EC+	&	Any missing repeat sample	CONDUCT A LEVEL 2 ASSESSMENT. Contact the state within 24 hours. The presence of <i>E. coli</i> bacteria in your water means the water may not be safe to use.	<i>E. coli</i> MCL violation

E. coli MCL Violation Occurs with Any of These Sampling Result Combinations

Routine Sample Result	Repeat Sample Result
TC+/EC+	TC+
TC+/EC+	Any missing repeat sample
TC+	TC+/EC+
TC+	TC+ (but no <i>E. coli</i> analyzed)



What to do next?

CALL YOUR STATE (IMMEDIATELY)

If the following occurs, by the end of the day (or by the end of the next business day if the state office is closed and does not have after-hour notification procedures):

- Routine or repeat sample is EC+; and/or
- Your system has an *E. coli* MCL violation