



RTCR

Revised Total Coliform Rule (RTCR) Factsheet

Repeat Monitoring Requirements

WHO DOES THIS FACTSHEET APPLY TO?

Public water systems (PWSs) are required to conduct repeat monitoring when a routine water sample is **POSITIVE FOR TOTAL COLIFORM (TC+) BACTERIA**.

RTCR What to Do?

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



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 lab 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 end of the next business day or 605-280-6831 on weekends and tell them you received an EC+ result.

Sampling Location

Your PWS must collect 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. 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 routine 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.

FOR ASSISTANCE, PLEASE
CONTACT-

SD Drinking Water
Program
605-773-3754

Frequency & Timing

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



Within 24 hours of
receiving the TC+ result

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 SD DWP to determine if additional repeat samples will be necessary.	No Violation
TC+ EC-	&	TC+ EC?	CONDUCT A LEVEL 2 ASSESSMENT. Contact SD DWP 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 SD DWP 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 SD DWP so we can help you determine which type of assessment is required.	No Violation
TC+ EC+	&	TC+	CONDUCT A LEVEL 2 ASSESSMENT. Consult with SD DWP 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 SD DWP 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 SD DWP within 24 hours

If the following occurs, by the end of the day (or by the end of the next business day if SD DWP office is closed):

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