



Revised Total Coliform Rule (RTCR) Factsheet

## Level 1 & Level 2 Assessments and Corrective Actions

#### WHO DOES THIS FACTSHEET APPLY TO?

Public water systems (PWSs) that must conduct a Level 1 or Level 2 assessment and take corrective action(s) to IDENTIFY POTENTIAL PATHWAYS OF CONTAMINATION INTO THE WATER DISTRIBUTION SYSTEM.

# RTCR What to Do?

Step 1
What is an assessment?

Step 2
Consult with SD DWP

<u>Step 3</u> Conduct an assessment

> Sanitary Defect Examples

Cracks on a water tank



Rat droppings on wellhead



Seal on wellhead not watertight



FOR ASSISTANCE, PLEASE CONTACT-

SD Drinking Water Program

605-773-3754

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: WHAT IS AN ASSESSMENT?

PWSs must perform an assessment (Level 1 or Level 2) and FIND AND FIX ANY "SANITARY DEFECT" identified when sampling results show the system may be vulnerable to contamination.

 "Sanitary defect" is a defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place.

There are 5 basic elements to assessments:

- Atypical events that may affect distributed water quality or indicate that distributed water quality was impaired;
- Changes in distribution system maintenance and operation that may affect distributed water quality, including water storage;
- Source and treatment considerations that affect distributed water quality, where appropriate;
- Existing water quality monitoring data; and
- Inadequacies in sample sites, sampling protocol and sample processing.

A Level 2 assessment is investigated in greater detail because the incident(s) that triggered it is of a more critical nature and are more likely to result in direct public health impact.

# STEP 2: CONSULT WITH SD DWP ON CORRECTIVE ACTIONS

**CONSULT WITH SD DWP** to develop a plan to correct the sanitary defects identified during the Level 1 or Level 2 assessment. During the corrective action process, you should periodically contact SD DWP to discuss your progress if necessary.

When your system's Level 1 or Level 2 assessment form is submitted, you should have either completed the corrective action(s) or be on track to complete the corrective action(s) according to a state-approved schedule. After COMPLETING EACH SCHEDULED CORRECTIVE ACTION, YOU MUST NOTIFY SD DWP.

### Example of Common Causes and Corrective Actions

Common Cause	Common Corrective Action(s)
Loss of system pressure	<ul><li>Maintenance of adequate pressure</li><li>Valve maintenance</li></ul>
Improper storage tank maintenance, inadequate screening, etc.	<ul> <li>Proper cleaning and maintenance of storage facility</li> <li>Addition of security measures</li> </ul>

#### STEP 3: CONDUCT AND DOCUMENT AN ASSESSMENT

WITHIN 30 DAYS OF LEARNING THAT YOUR PWS TRIGGERED AN ASSESSMENT, a completed assessment form must be submitted to SD DWP. The process for completing and submitting the required form depends on the type of assessment. In both cases, SD DWP will review the completed assessment form to determine if the likely cause of the trigger has been identified and to ensure the problem is corrected.

Treatment Technique Violation requiring a Public Notice is incurred if your PWS:

- Fails to perform an assessment or take corrective action; or,
- Fails to submit the completed assessment form to SD DWP within 30 days of learning that it triggered the assessment



1. Failure to take all repeat samples:

Routine	Repeat
Total coliform-positive (TC+) & <i>E. coli</i> -negative (EC-)	One or more is missing

2. Two or more (or more than 5%) routine/repeat TC+ samples in one month.



Your system conducts the assessment.

**STEP 1**: **Call SD DWP**, and verify the correct person doing the assessment (the assessor).

**STEP 2**: Ask SD DWP for the Level 1 assessment form. It can be submitted by email, fax, or mail.

**STEP 3**: Perform the assessment using the Level 1 assessment form.

**STEP 4**: If sanitary defect(s) found, fix them or propose a schedule for fixing if the sanitary defect can not be corrected within 30 days of triggering the assessment.

 Either the PWS or SD DWP can at any time consult with the other party to discuss the assessment or corrective action(s).

**STEP 5**: Submit the completed assessment form within 30 days of learning that your system triggered the assessment

Level 2

1. E. coli MCL violation:

Routine	Repeat
TC+ & EC-	E. coli-positive (EC+)
	TC+ & No <i>E. coli</i> analyzed
TC+ & EC+	TC+
	One or more is missing

2. Two Level 1 triggers in a rolling 12-month period.

SD DWP approves the party that will conduct the assessment.

<u>STEP 1</u>: Call SD DWP to select the person that will perform the assessment (the assessor):

 Assessors may be the state, a third party or qualified staff from your system.

**STEP 2**: Ask SD DWP for the Level 2 assessment form. It can be submitted by email, fax, or mail.

**STEP 3**: Have the assessment performed.

**STEP 4**: If sanitary defect(s) found, fix them or propose a schedule for fixing if the sanitary defect can not be corrected within 30 days of triggering the assessment.

 Either the PWS or DWP can at any time consult with the other party to discuss the assessment or corrective action(s).

<u>STEP 5</u>: Submit the completed assessment form within 30 days of learning that your system triggered the assessment