

# FACTSHEET: Revised Total Coliform Rule (RTCR)

## Level 1 & Level 2 Assessments and Corrective Actions

**Who does this factsheet apply to?** Public water systems (PWS's) that serve 1,000 people or fewer, that must conduct a Level 1 or Level 2 Assessment.

### ATTENTION!

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

### What is an Assessment?

When sampling results show that the PWS may be vulnerable to contamination, PWSs must perform an assessment (Level 1 or Level 2) and **FIND AND FIX ANY "SANITARY DEFECTS"**. A sanitary defect can provide a pathway of entry for microbial contamination into the distribution system or indicate imminent failure in an existing barrier (e.g., cracked tank, rodent droppings on wellheads, or broken seals).

**There are 5 basic elements to investigate during an assessment:**

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

**A Level 2 Assessment is a more comprehensive and in-depth examination compared to a Level 1 Assessment because the cause of the Level 2 Assessment is more critical and likely to result in a direct public health impact.**

- A Level 1 Assessment is typically conducted by the PWS or Certified Operator.
- **A Level 2 Assessment – Contact the regulatory agency to determine who will conduct the assessment.**
- The PWS has a total of 30 days (after learning the PWS triggered the assessment) to complete the assessment, correct sanitary defects found, and submit the **Level 1 Assessment Form** or **Level 2 Assessment Form** (regardless of who conducts the assessment). The deadline is with the PWS, not the regulatory agency.
- For sanitary defects found but NOT fixed within the 30 days, the PWS must obtain a regulatory agency-approved schedule for all incomplete corrective actions.
- **After completing each scheduled corrective action, the PWS must notify the regulatory agency to avoid violations.** Throughout the assessment process consult with the regulatory agency to discuss progress.

FOR ASSISTANCE, PLEASE CONTACT THE SYSTEM'S REGULATORY AGENCY:  
**ADEQ 602-771-4572**  
**MCESD 602-506-6935**  
**PDEQ 520-724-7400**

Examples of Common Causes of Contamination	Example Common Corrective Action(s)
Loss of system pressure	<ul style="list-style-type: none"> <li>✓ Maintenance of adequate pressure</li> <li>✓ Valve maintenance</li> <li>✓ Addition or upgrade of on-line monitoring &amp; control</li> </ul>
Cross connections	<ul style="list-style-type: none"> <li>✓ Maintenance of adequate pressure</li> <li>✓ Installation of backflow prevention assembly/device</li> <li>✓ Implementation/upgrade of cross connection control program</li> </ul>
Cracks in well seal, casing, etc.	<ul style="list-style-type: none"> <li>✓ Replacement/repair of well components</li> </ul>

**What to do if the PWS triggered an Assessment?** Within **30 days** after the PWS learned it has triggered an assessment: an assessment must be completed, all sanitary defects corrected, and the completed assessment form must be submitted to ADEQ. The process for completing and submitting the required form depends on the type of assessment. In both cases, the regulatory agency 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.

## Level 1 Assessment

The PWS triggers a Level 1 Assessment if it:

1. Fails to collect and analyze at least three (3) repeat samples for each routine TC+; or
2. Has two or more TC+ samples (use routine and repeat results in the compliance calculation) in one month.



## Level 2 Assessment

The PWS triggers a Level 2 Assessment if it has either:

1. An *E. coli* MCL violation; or

Routine	Repeat
TC+ & EC-	<i>E. coli</i> -positive (EC+)
TC+ & EC-	TC+ but not analyzed for EC
TC+ & EC+	TC+
TC+ & EC+	One or more samples is missing

2. Two Level 1 triggers in a rolling 12-month period, or for systems on annual monitoring, a Level 1 trigger in two consecutive years.

The system or certified operator conducts the Level 1 Assessment.

**STEP 1:** Call the regulatory agency.

**STEP 2:** Ask for the Level 1 Assessment form and determine the process for submission.

**STEP 3:** Perform the assessment.

**STEP 4:** If sanitary defect(s) are found, fix them or propose and gain a regulatory agency-approved schedule for fixing, if the sanitary defect(s) cannot be corrected within 30 days of triggering the assessment.

- After completing each scheduled corrective action the PWS must notify the regulatory agency.
- The PWS or regulatory agency (at any time) may consult with each other to discuss progress or the corrective action(s) identified.

**STEP 5:** Submit the completed assessment form to the regulatory agency and copy ADEQ within 30 days of learning that the PWS triggered the assessment.

The regulatory agency approves the party that will conduct the Level 2 Assessment.

**STEP 1:** Call the regulatory agency. During this call, the regulatory agency will determine the appropriate person to conduct the assessment (the assessor) based upon the Level 2 trigger.

**STEP 2:** Ask for the Level 2 Assessment form and determine the process for submission.

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

**STEP 4:** If sanitary defect(s) are found, fix them or propose and obtain a regulatory agency-approved schedule for fixing, if the sanitary defect(s) cannot be corrected within 30 days of triggering the assessment.

- After completing each scheduled corrective action the PWS must notify the regulatory agency.
- The PWS or regulatory agency (at any time) may consult with each other to discuss progress or the corrective action(s) identified.

**STEP 5:** Submit the completed assessment form to the regulatory agency and copy ADEQ within 30 days of learning that the system triggered the assessment.

**NOTE:** A PWS will receive a treatment technique violation if the PWS

- Fails to perform an assessment or take corrective action; or,
- Fails to submit the completed assessment form to the regulatory agency and send a copy to ADEQ within 30 days of learning that it triggered the assessment.

The PWS must provide Tier 2 public notice within 30 days in response to a treatment technique violation.