

## Level 1 & Level 2 Assessments and Corrective Actions

### WHO DOES THIS FACTSHEET APPLY TO?

PUBLIC WATER SYSTEMS (PWSs) SERVING 1,000 OR FEWER PEOPLE that must conduct a Level 1 or Level 2 assessment.

### RTCR What to know?

- What is an Assessment?
- Throughout the Assessment Process.
- What to do if you are triggered to conduct an assessment.



#### Additional RTCR Factsheets:

- Requirements for Small Systems on Monthly Monitoring
- Requirements for Small Systems on Quarterly/Annual Monitoring
- Requirements for Seasonal Systems
- Repeat Monitoring Requirements for Small Systems

FOR ASSISTANCE, PLEASE CONTACT  
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#### ATTENTION!

**April 1, 2016, all public water systems (PWSs) must comply with the RTCR.**

✓ Are you a PWS? Contact your TDEC Region Office at 1888-891-8332.

### WHAT IS AN ASSESSMENT?

When sampling results show that your 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, rat 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 2 assessment must be conducted by the state or a party approved by the state. A Level 1 assessment is typically conducted by the PWS.
- You have 30 days (after learning that you triggered the assessment) to complete, correct sanitary defects found, and submit the State-form. For sanitary defects found but NOT fixed within the 30 days, you must obtain a state-approved schedule for all incomplete corrective actions. **AFTER COMPLETING EACH SCHEDULED CORRECTIVE ACTION, YOU MUST NOTIFY YOUR STATE TO AVOID VIOLATIONS.** Throughout the Assessment Process **CONSULT WITH YOUR STATE** to discuss progress.

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 YOU TRIGGERED AN ASSESSMENT?

**WITHIN 30 DAYS OF LEARNING THAT YOUR PWS TRIGGERED AN ASSESSMENT**, a completed state assessment form must be submitted to your TDEC Region Office. The process for completing and submitting the required form depends on the type of assessment. In both cases TDEC 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

**You have to do a Level 1 Assessment if you:**

1. Fail to collect and analyze at least 3 repeat samples for each routine TC+; or
2. For systems taking fewer than 40 samples per month, two or more TC+ samples in one month. (use routine and repeat results in your calculation)
3. For systems taking 40 or more samples per month, you exceed 5% TC+ samples for the month. (use routine and repeat results in your calculation)

Your system may conduct the assessment.

**STEP 1:** Call your TDEC Field Office, and verify the appropriate person to conduct the assessment (the assessor).

**STEP 2:** Ask TDEC 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 state-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 you must notify TDEC.
- The PWS or TDEC (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 state within 30 days of learning that your system triggered the assessment.

### Level 2 Assessment

**You have to do a Level 2 Assessment if you have either:**

1. *E. coli* MCL violation:

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.

TDEC approves the party that will conduct the assessment.

**STEP 1:** Call your TDEC Field Office to select the appropriate person to conduct the assessment (the assessor).

— Assessors may be the state, or a third party approved by the state

**STEP 2:** Ask the state 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 gain a state-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 you must notify your state.
- The PWS or state (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 state within 30 days of learning that your system triggered the assessment.

**NOTES—Your PWS will get a treatment technique violation if you:**

- Fail to perform an assessment or take corrective action; or,
  - Fail to submit the completed assessment form to the state within 30 days of learning that it triggered the assessment.
- You are required to provide Tier 2 public notice within 30 days in response to a treatment technique violation.