

Level 1 & Level 2 Assessments and Corrective Actions

WHO DOES THIS FACTSHEET APPLY TO?

WATERWORKS 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 Waterworks on Monthly Monitoring
- Requirements for Small Waterworks on Quarterly Monitoring
- Requirements for Seasonal Waterworks
- Repeat Monitoring Requirements for Small Waterworks

ATTENTION!

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

- ✓ Are you a waterworks owner? To contact the appropriate ODW field office, go to: <http://www.vdh.virginia.gov/odw> and search using the “**Contact Information**” Tab

WHAT IS AN ASSESSMENT?

When sampling results show that your waterworks may be vulnerable to contamination, assessments must be performed (either Level 1 – by the waterworks owner or Level 2 – by ODW field staff), 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 protective barrier (e.g. atmospheric tank missing vent cover or screen, well cap or sanitary seal missing from wellhead, or uncovered chemical solution tanks).

THERE ARE 5 BASIC ELEMENTS TO INVESTIGATE DURING AN ASSESSMENT:

1. Atypical events that may affect or indicate that distributed water quality was impaired;
2. Changes in distribution system maintenance and operation, including practices;
3. Water source and treatment operations that affect distributed water quality;
4. Sample site conditions, sampling protocol and sample transport; and
5. 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 from a situation that may have a direct public health impact.

- A Level 2 Assessment will be conducted by the ODW field office staff in coordination and collaboration with the waterworks owner. A Level 1 Assessment is typically conducted by the waterworks owner/operator.
- You have 30 days (after learning that you triggered the assessment) to complete, correct sanitary defects found, and submit the assessment form. For sanitary defects found but NOT fixed within the 30 days, you must obtain a ODW-approved schedule for completing corrective actions. **AFTER COMPLETING EACH SCHEDULED CORRECTIVE ACTION, YOU MUST NOTIFY YOUR ODW FIELD OFFICE.** Throughout the assessment process, either ODW or the waterworks owner may initiate consultation on all relevant information/issues.

Examples	Corrective Action
Loss of or low pressure event	Determine cause and correct (e.g., leak detection & repair)
Cross connection	Evaluate hazard and provide appropriate protection measure
Lack of wellhead sanitary integrity	<ul style="list-style-type: none"> ✓ Repair/replace sanitary seal ✓ Replace missing seal bolts ✓ Seal other openings, e.g., power supply cables to well pump

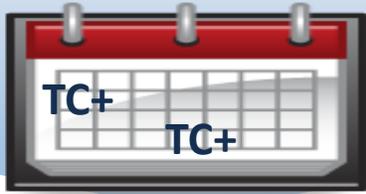
WHAT TO DO IF EVENT TRIGGERED AN ASSESSMENT?

WITHIN 30 DAYS OF LEARNING THAT YOUR WATERWORKS TRIGGERED AN ASSESSMENT, a completed ODW assessment form must be submitted to your ODW field office. The process for completing and submitting the required form depends on the type of assessment. Your ODW field office 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

A Level 1 Assessment is required if you:

1. Fail to collect and analyze at least 3 repeat samples for each routine TC+; or
2. Have two or more TC+ samples (use routine and repeat results in your calculation) in one month.



Level 2 Assessment

A Level 2 Assessment is required if you have either:

1. *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.

The waterworks owner or suitable designee is required to conduct the assessment.

STEP 1: Call your ODW field office (if necessary) to verify if the person conducting the assessment (i.e., the assessor) is appropriate.

STEP 2: Ask the ODW field office for the Level 1 Assessment form (or how to obtain it) and determine the process for submission.

STEP 3: Perform the assessment.

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

- After completing each scheduled corrective action you must notify your ODW field office.
- The waterworks owner or ODW field office (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 ODW field office within 30 days of learning that your waterworks triggered the assessment.

The ODW Field Office staff will initiate and conduct the Level 2 Assessment collaboratively with the waterworks owner.

STEP 1: Call your ODW field office (if necessary) to be clear on the coordination/collaboration with respect to conducting the assessment.

STEP 2: The ODW field office will transmit the completed Level 2 Assessment form to the waterworks owner for concurrence, concurrence of problem found, necessary corrective action(s) and schedule to fix problem(s), and return the signed assessment form to the ODW field office.

STEP 3: Resolve any/all problems and issues from Step 2.

STEP 4: If sanitary defect(s) are found, fix them by the deadline(s) listed in the schedule.

STEP 5: After completing each scheduled corrective action you must notify your ODW field office.

IMPORTANT: The waterworks owner or ODW field office (at any time) may consult with each other to discuss the progress of any corrective action(s) that have been identified.

NOTES—Your waterworks 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 ODW field office 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.