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.

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

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 PWS staff.
• After learning that you triggered the assessment, you have 30 days to complete the assessment, correct sanitary defects found, and submit the form to the Drinking Water Program. For sanitary defects found but NOT fixed within the 30 days, you must work with the Drinking Water Program to establish an approved schedule for all incomplete corrective actions. After completing each scheduled corrective action, you must notify the Drinking Water Program to avoid violations. Throughout the Assessment Process consult with the Drinking Water Program to discuss progress.

Examples of Common Causes of Contamination | Example Common Corrective Action(s)
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Loss of system pressure | ✓ Maintain adequate pressure
✓ Valve maintenance
✓ Addition or upgrade of on-line monitoring & control
Cross connections | ✓ Maintain adequate pressure
✓ Installation of backflow prevention assembly/device
✓ Implementation/upgrade of cross connection control program
Cracks in well seal, casing, etc. | ✓ Replacement/repair of well components

For assistance, please contact the proper Alaska Drinking Water office:

**Anchorage**
Phone: (907) 269-7623 or (866) 956-7656 toll-free outside of Anchorage.

**Fairbanks**
Phone: (907) 451-2108 or (800) 770-2137 toll-free outside of Fairbanks.

**Seldovia**
Phone: (907) 262-5210

**Wasilla**
Phone: (907) 376-1850

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

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**ATTENTION!**
Starting April 1, 2016, all public water systems (PWSs) must comply with the RTCR.
**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 the Drinking Water Program. The process for completing and submitting the required form depends on the type of assessment. In both cases, the Drinking Water Program 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.

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**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. Have two or more TC+ samples (use routine and repeat results in your calculation) in one month.

**STEP 1:** Call the Drinking Water Program, and verify the appropriate person to conduct the assessment (the inspector).

**STEP 2:** Ask the Environmental Program Specialist 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 provide documentation/notification to the Drinking Water Program.
   - 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 Drinking Water Program within 30 days of learning that your system triggered the assessment.

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**Level 2 Assessment**

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

1. *E. coli* MCL violation:

<table>
<thead>
<tr>
<th>Routine</th>
<th>Repeat</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC+ &amp; EC-</td>
<td><em>E. coli</em>-positive (EC+)</td>
</tr>
<tr>
<td>TC+ &amp; EC-</td>
<td>TC+ but not analyzed for EC</td>
</tr>
<tr>
<td>TC+ &amp; EC+</td>
<td>TC+</td>
</tr>
<tr>
<td>TC+ &amp; EC+ One or more samples is missing</td>
<td></td>
</tr>
</tbody>
</table>

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

**STEP 1:** Call the Drinking Water Program to select the appropriate person to conduct the assessment (the inspector).

   - Inspectors may be the state or an approved third party.

**STEP 2:** The inspector will obtain the Level 2 assessment form.

**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 provide documentation/notification to the Drinking Water Program.
   - 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 Drinking Water Program within 30 days of learning that your system triggered the assessment.

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**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 Drinking Water Program within 30 days of learning an assessment was triggered.

You are required to provide Tier 2 public notice within 30 days in response to a treatment technique violation.

For more information, visit our website at: [http://dec.alaska.gov/eh/dw/RTCR.htm](http://dec.alaska.gov/eh/dw/RTCR.htm)