### RTCR Assessment Triggers Quick Reference

Use this table as a guideline to taking action if your water system has a positive Total Coliform (TC) or *E. coli* sample during routine sampling. **At least 3 repeat samples must be collected and analyzed within 24 hours after receiving a TC positive result.**[2]

The Public Water System must notify the state ASAP (but within 24 hours) when you are notified of a positive *E. coli* result.

Kentucky Division of Water numbers to call for *E. coli* Positive notification:
- **502-782-7049** - RTCR and GWR Compliance Officer
- **1.800.928.2380** - After Hours Hotline

<table>
<thead>
<tr>
<th>If Routine Sample Is:</th>
<th>And</th>
<th>Any Repeat Sample Is:</th>
<th>Action: What do your sample results mean?</th>
<th>Violation</th>
</tr>
</thead>
</table>
| TC+ EC-               | &   | TC+ EC-                | The presence of total coliform bacteria in both your original routine sample and in your follow-up repeat sample suggests there could be a problem and your water may not be safe to use.  
1. **Conduct a Level 1 or Level 2 assessment** *(1)* | No MCL violation |
| TC+ EC-               | &   | TC+ EC?                | The presence of total coliform bacteria in both your original routine sample and in your follow-up repeat sample suggests there could be a problem and because *E. coli* was not tested, it is unknown whether or not the water is safe to use.  
1. **Notify the state** within 24 hours of receiving sample results *(2)*  
2. **Conduct a Level 2 assessment** *(1)*  
3. **Issue a Public Notice (PN).** | *E. coli* MCL violation |
| TC+ EC-               | &   | TC+ EC+                | The presence of *E. coli* bacteria in your water is an indicator of fecal contamination and your water may not be safe to use.  
1. **Notify the state** within 24 hours of receiving sample results *(2)*  
2. **Conduct a Level 2 assessment** *(1)*  
3. **Issue a Public Notice (PN).** | *E. coli* MCL violation |
| TC+ EC-               | &   | Any or all repeat samples missing | The presence of total coliform bacteria in your original routine sample suggests there could be a problem and because repeat samples were not tested, it is unknown whether or not the water is safe to use.  
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1. CFR §141.859 Coliform treatment technique triggers and assessment requirements for protection against potential fecal contamination (Partial)
   (a) **Treatment technique triggers.** Systems must conduct assessments in accordance with paragraph (b) of this section after exceeding treatment technique triggers in paragraphs (a)(1) and (a)(2) of this section.
      (1) **Level 1 treatment technique triggers.**
         (i) For systems taking 40 or more samples per month, the system exceeds 5.0% total coliform-positive samples for the month.
         (ii) For systems taking fewer than 40 samples per month, the system has two or more total coliform-positive samples in the same month.
         (iii) The system fails to take every required repeat sample after any single total coliform-positive sample.
      (2) **Level 2 treatment technique triggers.**
         (i) An *E. coli* MCL violation, as specified in §141.860(a).
         (ii) A second Level 1 trigger as defined in paragraph (a)(1) of this section, within a rolling 12-month period, unless the State has determined a likely reason that the samples that caused the first Level 1 treatment technique trigger were total coliform-positive and has established that the system has corrected the problem.

2. CFR § 141.858 Repeat monitoring and *E. coli* requirements (Partial)
   (a) **Repeat monitoring**
      (1) If a sample taken under §§ 141.854 through 141.857 is total coliform-positive, the system must collect a set of repeat samples within 24 hours of being notified of the positive result. The system must collect no fewer than three repeat samples for each total coliform-positive sample found.
      . . .
      (5) Results of all routine and repeat samples taken under §§141.854 through 141.858 not invalidated by the State must be used to determine whether a coliform treatment technique trigger specified in §141.859 has been exceeded.

   (b) **Escherichia coli (E. coli) testing.**
      (1) If any routine or repeat sample is total coliform-positive, the system must analyze that total coliform-positive culture medium to determine if *E. coli* are present. If *E. coli* are present, the system must notify the State by the end of the day when the system is notified of the test result.