

# Revised Total Coliform Rule (RTCR) Placards

The U.S. Environmental Protection Agency (EPA) developed a collection of six e-fillable placards on the requirements of the Revised Total Coliform Rule (RTCR). Primacy agencies should use these placards to conduct training and outreach to small public water systems (PWSs) serving 1,000 or fewer persons.

For non-seasonal PWSs, there are three placards:

- 1. Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each Month
- 2. Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each Quarter
- 3. Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) One-time a Year

For seasonal PWSs, there are two placards:

- 4. Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each Month
- 5. Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each **Quarter**

For all PWS, there is one placard:

6. Serving 1,000 or Fewer People Requiring a Level 1 or Level 2 Assessment

#### The placards are published as a fillable form in Adobe PDF

The placards are e-fillable in Adobe Acrobat or Adobe Reader\*. Each form is designed with a different publication number to allow for unbundling the collection while maintaining the metadata.

\*Note: some of the following steps may not function in Adobe Reader (e.g., deleting pages).

- E-fillable Fields -- Information entered in any of the following fields, is replicated to the same fields in the other placards within the collection:
  - o Lab Contact
  - o State Contact
  - o State Website
- E-fillable Fields Information entered in any of the following fields, does <u>not</u> replicate:
  - Site location (ex. address, location description, etc.)
  - Site location (alternative address, location description, etc.) if a second sample location is needed
  - o Expected sample day (in the month, quarter, or year)
  - o Number of TC samples to be collected
  - o Routine and repeat sample locations (non-seasonal placards)

#### Steps to complete the placards

- Step 1 To maintain the fields that replicate, complete these fields first (noted above).
- Step 2 [Save] the PDF.
- Step 3 If you do not want the collection, [Delete] the pages that are not relevant.
- View [Page Thumbnails], click on page(s) not relevant to the water system, right click, and click [Delete].
- Step 4 Complete the remaining e-fillable fields.
- Step 5 [Save] the PDF.
- Step 6 [Print] the PDF by page or collection.
  - [File] / [Print].
  - Select [Shrink oversized pages].
  - Uncheck [Print on both sides of paper].
  - Under [Printer properties] select [11X17 paper (Ledger size)]. If 11X17 is not available select [8 ½X14 (Legal size)].

Note: As the default, these placards are set to font size 13 for printing to 11X17 paper size so they can hang on the wall and remain readable. If they are printed on smaller paper (e.g., 8 ½X11, 8 ½X14) the format dimensions will shift (i.e., more white space on the top and bottom), but they will be readable.

# Inited States **Environmental Protection**

Agency Revised Total Coliform Rule (RTCR)

40 CFR 141.851 - 141.861

# **Routine Sample Monitoring Actions**

Enter your sampling information in the spaces below.

**Collect** samples at the location(s) and timeframes included in your Sample Siting Plan that are representative of water throughout the distribution system.

Site Location (ex. Address, Location Description, etc.)

Site Location (Alternative Address, Location Description, etc.)

Expected Sample Day (ex. 1st Tuesday of the month)

# of TC Samples to be Collected

Lab Contact (name & phone)

State Contact (name & phone)

#### **IMPORTANT REMINDERS**

- ✓ COLLECT SAMPLES (ROUTINE & REPEAT) BASED ON YOUR SAMPLE SITING PLAN.
- ✓ ENSURE ALL **TC+** SAMPLES ARE ANALYZED FOR **EC**.
- ✓ REPORT (OR ENSURE YOUR LAB REPORTS) YOUR ROUTINE AND REPEAT SAMPLE RESULTS TO THE STATE NO LATER THAN THE 10TH DAY OF THE FOLLOWING MONTH.
- ✓ CALL YOUR STATE ON THE SAME BUSINESS DAY YOU LEARN OF THE **EC+** RESULT. ASK YOUR STATE, OTHER REPORTING OPTIONS MAY BE AVAILABLE.
- ✓ KEEP ALL MICROBIOLOGICAL ANALYSES RECORDS FOR A MINIMUM OF 5 YEARS.

# **Sampling Protocols**

### You **MUST**:

- ✓ **Collect** 100 ml per sample.
- ✓ **Collect** samples in bottles specific to **TC** for drinking water analysis.
- ✓ **Conduct** residual chlorine testing at the same time, if required by your state.
- ✓ **Send** samples to a state certified lab that performs **TC** drinking water analyses.
- Samples must be sent with sufficient time for the laboratory to begin sample analysis within 30 hours of sample collection.
- Samples should be maintained at a temperature below 10°C/50°F during transit.

### **TC** = Total coliform

EC = E. coli

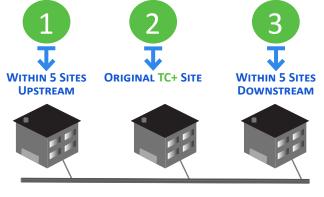
- **TC+** = Total coliform-positive or present.
- **TC-** = Total coliform-negative or absent.
- **EC+** = *E. coli*-positive or present.
- *EC* = *E. coli* negative or absent.
- EC? E. coli not analyzed

### **Ground Water Rule (GWR) Actions**

If "triggered source water monitoring" from the GWR applies to your water system, when you have a **TC+** under the RTCR, you must:

- ✓ **Collect** 1 sample from each well (source water) in use at the time the routine **TC+** was collected.
- ✓ Analyze the source water sample for *EC*, if "dual purpose" samples are approved by your state. If "dual purpose" samples are not approved by your state, analyze source water sample for a **fecal indicator**.

For more GWR details see EPA's website at: https://www.epa.gov/ dwreginfo/ground-water-rule-compliance-help-water-system-ownersandoperators.



- the set is **TC+**.

- collected.
- TC+ repe

✓ Contact your st

# For: Public Water Systems Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each Month

## **Repeat Sample Monitoring Actions**

✓ Within 24 hours of notification of a TC+ sample result or sooner, as **specified by your state,** collect 3 repeat samples (a set).

• **Collect** 3 repeat samples for each routine **TC+** sample.

Enter Site Location Enter Site Location

Enter Site Location

Continue to collect 3 repeat samples when one or more sample in

• Stop collecting repeats when all samples are TC- in one set, or results trigger a Level 1 or Level 2 Assessment.

• **Continue** routine monitoring, if all the repeat samples are **TC-.** 

# **Assessment Actions**

✓ **Conduct** the applicable *Level 1* or *Level 2\* Assessment* within 30 days:

• If any of the repeat samples are TC+, or

• If any or all of the repeats are not collected.

\*A *Level 2 Assessment* must be completed by the state or state approved assessor, if any of the following occur:

- TC+ routine sample and EC+ repeat sample.

- EC+ routine sample and TC+ repeat sample.

- **EC+** routine sample and any or all repeat samples are not

| eat and <i>EC</i> ? repeat sample. | Office of Water (4606M) |  |
|------------------------------------|-------------------------|--|
|                                    | EPA 815-B-18-001A       |  |
| state!                             | September 2018          |  |

# United States Environmental Protection Agency

Revised Total Coliform Rule (RTCR) 40 CFR 141.851 - 141.861

# **Routine Sample Monitoring Actions**

Enter your sampling information in the spaces below.

**Collect** samples at the location(s) and timeframes included in your Sample Siting Plan that are representative of water throughout the distribution system.

Site Location (ex. Address, Location Description, etc.)

Site Location (Alternative Address, Location Description, etc.)

Expected Sample Day (ex. 1st Tuesday of each quarter)

# of TC Samples to be Collected

Lab Contact (name & phone)

State Contact (name & phone)

#### **IMPORTANT REMINDERS**

- ✓ COLLECT SAMPLES (ROUTINE & REPEAT) BASED ON YOUR SAMPLE SITING PLAN.
- ✓ ENSURE ALL TC+ SAMPLES ARE ANALYZED FOR EC.
- ✓ REPORT (OR ENSURE YOUR LAB REPORTS) YOUR ROUTINE AND REPEAT SAMPLE RESULTS TO THE STATE NO LATER THAN THE 10TH DAY AFTER THE END OF THE MONITORING PERIOD.
- ✓ CALL YOUR STATE ON THE SAME BUSINESS DAY YOU LEARN OF THE *EC*+ RESULT. ASK YOUR STATE, OTHER REPORTING OPTIONS MAY BE AVAILABLE.
- ✓ KEEP ALL MICROBIOLOGICAL ANALYSES RECORDS FOR A MINIMUM OF 5 YEARS.

# **Sampling Protocols**

You MUST:

- ✓ **Collect** 100 ml per sample.
- ✓ Collect samples in bottles specific to TC for drinking water analysis.
- Conduct residual chlorine testing at the same time, if required by your state.
- ✓ Send samples to a state certified lab that performs TC drinking water analyses.
  - Samples must be sent with sufficient time for the laboratory to begin sample analysis within 30 hours of sample collection.
  - Samples should be maintained at a temperature below 10°C/50°F during transit.

# **Ground Water Rule (GWR) Actions**

If "triggered source water monitoring" from the GWR applies to your water system, when you have a **TC+** under the RTCR, you must:

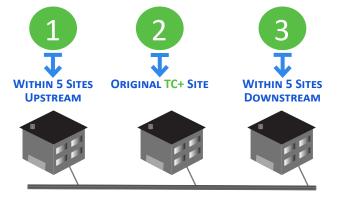
- ✓ Collect 1 sample from each well (source water) in use at the time the routine TC+ was collected.
- Analyze the source water sample for *EC*, if "dual purpose" samples are approved by your state. If "dual purpose" samples are not approved by your state, analyze source water sample for a *fecal indicator*.

For more GWR details see EPA's website at: <u>https://</u> <u>www.epa.gov/dwreginfo/ground-water-rule-</u> <u>compliance-help-water-system-ownersand-operators</u>.

> Office of Water (4606M) EPA 815-B-18-001B September 2018

# **Repeat Sample Monitoring Actions**

- Within 24 hours of notification of a TC+ sample result or sooner, as specified by your state, collect 3 repeat samples (a set).
- **Collect** 3 repeat samples for <u>each routine</u> **TC+** sample.



Enter Site Location Enter Site Location Enter Site Location

- Continue to collect 3 repeat samples when one or more sample in the set is TC+.
- Stop collecting repeats when all samples are TC- in one set, or results trigger a *Level 1* or *Level 2 Assessment*.
- **Continue** routine monitoring, if all the repeat samples are **TC-** (*See Additional Routine Sample Monitoring*).

**TC** = Total coliform

**EC** = E. coli

- **TC+** = Total coliform-positive or present.
- **TC-** = Total coliform-negative or absent.
- **EC+** = *E. coli*-positive or present.
- **EC-** = *E. coli* negative or absent.
- EC? E. coli not analyzed

For: Public Water Systems Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each <u>Quarter</u>

### **Assessment Actions**

- ✓ Conduct the applicable Level 1 or Level 2\* Assessment within 30 days:
- If any of the repeat samples are **TC+**, or
- If any or all of the repeats are not collected.

\*A *Level 2 Assessment* must be completed by the state or state approved assessor, if any of the following occur:

- TC+ routine sample and EC+ repeat sample.
- *EC*+ routine sample and TC+ repeat sample.
- EC+ routine sample and any or all repeat samples are not collected.
- TC+ repeat and EC? repeat sample.
- ✓ Contact your state!

# Additional Routine Sample Monitoring Actions

- The month following a TC+ sample, you MUST collect 3 additional routine samples at your routine sample location(s) as identified in your sample siting plan.
  - Collect at regular time intervals throughout the month or on a single day if taken from different sites.
- You MUST use the results of additional routine samples in determining if you trigger a *Level 1* or *Level 2 Assessment* for the month in which these samples are collected.

Note: Call your state, if the sample results are positive. Your results may have triggered you into increased sampling (i.e., monthly monitoring).

# **Jnited States Environmental Protection** Agency

Revised Total Coliform Rule (RTCR) 40 CFR 141.851 - 141.861

# **Routine Sample Monitoring Actions**

**Enter** your sampling information in the spaces below.

**Collect** samples at the location(s) and timeframes included in your Sample Siting Plan that are representative of water throughout the distribution system.

Site Location (ex. Address, Location Description, etc.)

Site Location (Alternative Address, Location Description, etc.)

Expected Sample Day (ex. 1st Tuesday in August)

# of TC Samples to be Collected

Lab Contact (name & phone)

State Contact (name & phone)

#### **IMPORTANT REMINDERS**

- ✓ COLLECT SAMPLES (ROUTINE & REPEAT) BASED ON YOUR SAMPLE SITING PLAN.
- $\checkmark$  Ensure all **TC+** samples are analyzed for **EC**.
- ✓ REPORT (OR ENSURE YOUR LAB REPORTS) YOUR ROUTINE AND REPEAT SAMPLE RESULTS TO THE STATE NO LATER THAN THE 10TH DAY AFTER THE END OF THE MONITORING PERIOD.
- ✓ CALL YOUR STATE ON THE SAME BUSINESS DAY YOU LEARN OF THE **EC+** RESULT. ASK YOUR STATE, OTHER REPORTING OPTIONS MAY BE AVAILABLE.
- ✓ KEEP ALL MICROBIOLOGICAL ANALYSES RECORDS FOR A MINIMUM OF 5 YEARS.

## **Sampling Protocols**

You **MUST**:

- ✓ **Collect** 100 ml per sample.
- ✓ **Collect** samples in bottles specific to **TC** for drinking water analysis.
- ✓ **Conduct** residual chlorine testing at the same time, if required by your state.
- ✓ Send samples to a state certified lab that performs TC drinking water analyses.
  - Samples must be sent with sufficient time for the laboratory to begin sample analysis within **30 hours** of sample collection.
  - Samples should be maintained at a temperature below 10°C/50°F during transit.

# **Ground Water Rule (GWR) Actions**

If "triggered source water monitoring" from the GWR applies to your water system, when you have a TC+ under the RTCR, you must:

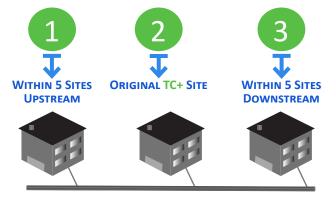
- ✓ **Collect** 1 sample from each well (source water) in use at the time the routine **TC+** was collected.
- Analyze the source water sample for *EC*, if "dual purpose" samples are approved by your state. If "dual purpose" samples are not approved by your state, analyze source water sample for a **fecal** indicator.

For more GWR details see EPA's website at: https:// www.epa.gov/dwreginfo/ground-water-rulecompliance-help-water-system-ownersand-operators.

> Office of Water (4606M) EPA 815-B-18-001C September 2018

# **Repeat Sample Monitoring Actions**

- ✓ Within 24 hours of notification of a TC+ sample result or sooner, as specified by your state, collect 3 repeat samples (a set).
- Collect 3 repeat samples for each routine TC+ sample.



Enter Site Location Enter Site Location Enter Site Location

- Continue to collect 3 repeat samples when one or more sample in the set is **TC+**.
- Stop collecting repeats when all samples are TC- in one set, or results trigger a *Level 1* or Level 2 Assessment.
- **Continue** routine monitoring, if all the repeat samples are **TC-** (*See Additional Routine* Sample Monitoring).

**TC** = Total coliform

**EC** = E. coli

- **TC+** = Total coliform-positive or present.
- **TC-** = Total coliform-negative or absent.
- **EC+** = *E. coli*-positive or present.
- *EC* = *E. coli* negative or absent.
- EC? E. coli not analyzed

For: Public Water Systems Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) One-time a Year

#### **Assessment Actions**

- ✓ **Conduct** the applicable *Level* **1** or *Level* **2**\* Assessment within 30 days:
- If any of the repeat samples are **TC+**, or
- If any or all of the repeats are not collected.

\*A *Level 2 Assessment* must be completed by the state or state approved assessor, if any of the following occur:

- TC+ routine sample and EC+ repeat sample.
- EC+ routine sample and TC+ repeat sample.
- **EC+** routine sample and any or all repeat samples are not collected.
- TC+ repeat and EC? repeat sample.
- ✓ **Contact** your state!

# **Additional Routine Sample Monitoring** Actions

- ✓ The month following a **TC+** sample, you **MUST** collect 3 additional routine samples at your routine sample location(s) as identified in your sample siting plan.
- Collect at regular time intervals throughout the month or on a single day if taken from different sites.
- ✓ You **MUST** use the results of additional routine samples in determining if you trigger a *Level 1* or *Level 2 Assessment* for the month in which these samples are collected.

**Note: Call your state,** if the sample results are positive. Your results may have triggered you into increased sampling (i.e., monthly or quarterly monitoring).

# **Jnited States Environmental Protection** Agency

Revised Total Coliform Rule (RTCR) 40 CFR 141.851 - 141.861

### **Seasonal Start-up Procedures Actions**

Seasonal start-up procedures help reduce the presence of harmful bacteria in your system's water. You **MUST**:

- ✓ **Conduct** and **complete** your start-up procedures every operating season **BEFORE** delivering drinking water to your customers.
  - Use the state-specific start-up procedures and checklist.
- ✓ **Send** the state-specific certification form to the state **BEFORE** serving water to customers.

If you have any questions regarding the seasonal startup procedure, please contact the state.

**Questions?** State Contact Information

State Website

### **IMPORTANT REMINDERS**

- ✓ CONDUCT SEASONAL START-UP PROCEDURES **BEFORE SERVING WATER TO CUSTOMERS.**
- ✓ COLLECT SAMPLES (ROUTINE & REPEAT) BASED ON YOUR SAMPLE SITING PLAN.
- ✓ ENSURE ALL **TC+** SAMPLES ARE ANALYZED FOR **EC**.
- ✓ REPORT (OR ENSURE YOUR LAB REPORTS) YOUR ROUTINE AND REPEAT SAMPLE RESULTS TO THE STATE NO LATER THAN THE 10TH DAY OF THE FOLLOWING MONTH.
- ✓ CALL YOUR STATE ON THE SAME BUSINESS DAY YOU LEARN OF THE **EC+** RESULT. ASK YOUR STATE, OTHER REPORTING OPTIONS MAY BE AVAILABLE.
- ✓ KEEP ALL MICROBIOLOGICAL ANALYSES RECORDS FOR A MINIMUM OF 5 YEARS.

### **Routine Sample Monitoring Actions**

**Enter** your sampling information in the spaces below.

**Collect** samples at the location(s) and timeframes included in your Sample Siting Plan that are representative of water throughout the distribution system.

Site Location (ex. Address, Location Description, etc.)

Site Location (Alternative Address, Location Description, etc.)

Expected Sample Day (ex. 1st Tuesday of the month)

# of TC Samples to be Collected

Lab Contact (name & phone)

State Contact (name & phone)

### **Repeat Sample Monitoring Actions**

- ✓ Within 24 hours of notification of a TC+ sample result or sooner as specified by your state collect 3 repeat samples (a set).
  - **Collect** 3 repeat samples for each routine **TC+** sample.
  - Continue to collect 3 repeat samples when one or more sample in the set is **TC+**.
  - **Stop collecting** repeats when all samples are TC- in one set, or results trigger a *Level 1* or Level 2 Assessment.
  - **Return** to routine monitoring, if all the repeat samples are TC-.

# **Sampling Protocols**

You **MUST**:

- ✓ **Collect** 100 ml per sample.
- ✓ **Collect** samples in bottles specific to **TC** for drinking water analysis.
- ✓ **Conduct** residual chlorine testing at the same time, if required by your state.
- ✓ **Send** samples to a state certified lab that performs TC drinking water analyses.
  - Samples must be sent with sufficient time for the laboratory to begin sample analysis within **30 hours** of sample collection.
  - Samples should be maintained at a temperature below 10°C/50°F during transit.

# **Ground Water Rule (GWR) Actions**

If "triggered source water monitoring" from the GWR applies to your water system, when you have a TC+ under the RTCR, you must:

- ✓ **Collect** 1 sample from each well (source water) in use at the time the routine **TC+** was collected.
- ✓ Analyze the source water sample for *EC*, if "dual purpose" samples are approved by your state. If "dual purpose" samples are not approved by your state, analyze source water sample for a **fecal** indicator.

For more GWR details see EPA's website at: https:// www.epa.gov/dwreginfo/ground-water-rulecompliance-help-water-system-ownersand-operators.

For: Seasonal Water Systems Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each Month

#### **Assessment Actions**

✓ **Conduct** the applicable *Level* 1 or *Level* 2\* Assessment within 30 days:

- If any of the repeat samples are **TC+**, or
- If any or all of the repeats are not collected.

\*A *Level 2 Assessment* must be completed by the state or state approved assessor, if any of the following occur:

- TC+ routine sample and EC+ repeat sample.
- EC+ routine sample and TC+ repeat sample.
- **EC**+ routine sample and any or all repeat samples are not collected.
- TC+ repeat and EC? repeat sample.

✓ **Contact** your state!

**TC** = Total coliform **EC** = E. coli **TC+** = Total coliform-positive or present. **TC-** = Total coliform-negative or absent. *EC*+ = *E. coli*-positive or present. **EC-** = *E. coli* negative or absent. EC? - E. coli not analyzed

> Office of Water (4606M) EPA 815-B-18-001D September 2018

# United States Environmental Protection Agency

Revised Total Coliform Rule (RTCR) 40 CFR 141.851-141.861

### **Seasonal Start-up Procedures Actions**

Seasonal start-up procedures help reduce the presence of harmful bacteria in your system's water. You **MUST**:

- Conduct and complete your start-up procedures every operating season BEFORE delivering drinking water to your customers.
  - Use the state-specific start-up procedures and checklist.
- ✓ Send the state-specific certification form to the state BEFORE serving water to customers.

If you have any questions regarding the seasonal startup procedure, please contact the state.

Questions? State Contact Information

State Website

### IMPORTANT REMINDERS

- ✓ CONDUCT SEASONAL START-UP PROCEDURES BEFORE SERVING WATER TO CUSTOMERS.
- ✓ COLLECT SAMPLES (ROUTINE & REPEAT) BASED ON YOUR SAMPLE SITING PLAN.
- ✓ ENSURE ALL TC+ SAMPLES ARE ANALYZED FOR EC.
- ✓ REPORT (OR ENSURE YOUR LAB REPORTS) YOUR ROUTINE AND REPEAT SAMPLE RESULTS TO THE STATE NO LATER THAN THE 10TH DAY AFTER THE END OF THE MONITORING PERIOD.
- ✓ CALL YOUR STATE ON THE SAME BUSINESS DAY YOU LEARN OF THE *EC*+ RESULT. ASK YOUR STATE, OTHER REPORTING OPTIONS MAY BE AVAILABLE.
- ✓ KEEP ALL MICROBIOLOGICAL ANALYSES RECORDS FOR A MINIMUM OF 5 YEARS.

# **Routine Sample Monitoring Actions**

**Enter** your sampling information in the spaces below.

**Collect** samples at the location(s) and timeframes included in your Sample Siting Plan that are representative of water throughout the distribution system.

Site Location (ex. Address, Location Description, etc.)

Site Location (Alternative Address, Location Description, etc.)

Expected Sample Day (ex. 1st Tuesday of the quarter)

# of TC Samples to be Collected

Lab Contact (name & phone)

State Contact (name & phone)

# **Repeat Sample Monitoring Actions**

- Within 24 hours of notification of a TC+ sample result or sooner as specified by your state collect 3 repeat samples (a set).
- **Collect** 3 repeat samples for <u>each routine</u> **TC+** sample.
- Continue to collect 3 repeat samples when one or more sample in the set is TC+.
- Stop collecting repeats when all samples are TC- in one set, or results trigger a *Level 1* or *Level 2 Assessment*.
- Continue routine monitoring, if all the repeat samples are TC-. Office of Water (4606M)

EPA 815-B-18-001E September 2018

# For: Seasonal Water Systems Serving 1,000 or Fewer People that Collect Routine Total Coliform Sample(s) each <u>Quarter</u>

# **Sampling Protocols**

### You MUST:

- ✓ **Collect** 100 ml per sample.
- Collect samples in bottles specific to TC for drinking water analysis.
- Conduct residual chlorine testing at the same time, if required by your state.
- ✓ Send samples to a state certified lab that performs TC drinking water analyses.
  - Samples must be sent with sufficient time for the laboratory to begin sample analysis within 30 hours of sample collection.
  - Samples should be maintained at a temperature below 10°C/50°F during transit.

| <b>TC</b> = Total coliform                        |
|---|
| <b>EC</b> = E. coli                               |
| <b>TC+</b> = Total coliform-positive or present.  |
| <b>TC-</b> = Total coliform-negative or absent.   |
| <b>EC+</b> = <i>E. coli</i> -positive or present. |
| C   |

- *EC-* = *E. coli* negative or absent.
- EC? E. coli not analyzed

# **Ground Water Rule (GWR) Actions**

If "triggered source water monitoring" from the GWR applies to your water system, when you have a **TC+** under the RTCR, you must:

- ✓ Collect 1 sample from each well (source water) in use at the time the routine TC+ was collected.
- Analyze the source water sample for *EC*, if "dual purpose" samples are approved by your state. If "dual purpose" samples are not approved by your state, analyze source water sample for a *fecal* indicator.

# Additional Routine Sample Monitoring Actions

- The month following a TC+ sample, you MUST collect 3 additional routine samples at your routine sample location(s).
  - Collect at regular time intervals throughout the month or on a single day if taken from different sites.
- You MUST use the results of additional routine samples in determining if you trigger a *Level 1* or *Level 2 Assessment* during the month in which these samples are collected.

Note: Call your state, if the sample results are positive. Your results may have triggered you into increased sampling (i.e., monthly monitoring).

## **Assessment Actions**

- ✓ Conduct the applicable Level 1 or Level 2\* Assessment within 30 days:
  - If any of the repeat samples are TC+, or
  - If any or all of the repeats are not collected.

\*A *Level 2 Assessment* must be completed by the state or state approved assessor, if any of the following occur:

- TC+ routine sample and EC+ repeat sample.
- *EC*+ routine sample and TC+ repeat sample.
- **EC+** routine sample and any or all repeat samples are not collected.
- TC+ repeat and EC? repeat sample.

✓ Contact your state!

For more GWR details see EPA's website at: <u>https://</u> <u>www.epa.gov/dwreginfo/ground-water-rule-</u> <u>compliance-help-water-system-ownersand-operators</u>.

#### Inited States **Environmental Protection** Agency Revised Total Coliform Rule (RTCR)

# 40 CFR 141.851 - 141.861

#### Level 1 Assessment

**MUST** be conducted by:

Authorized personnel

*Level 1 Assessment* treatment technique (TT) triggers occur when a water system:

- ✓ Has two or more **TC+** samples (use both routine and repeat results in your calculation) in one month; or
- ✓ Fails to collect and analyze at least 3 repeat samples for each routine **TC+**.

### Level 2 Assessment

**MUST** be conducted by the state or a party approved by the state.

Authorized personnel

*Level 2 Assessment* TT-triggers occur when a water system:

- ✓ Incurs an *EC* maximum contamination level (MCL) violation; or
- ✓ Triggers two *Level 1 Assessments* in a rolling 12-month period; or
- ✓ For systems on annual monitoring, triggers a *Level 1 Assessment* in two consecutive years.



Within 30 days of learning that the TT-trigger has been exceeded.



EC = E. coli

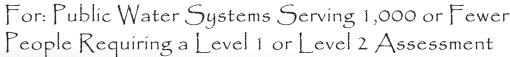
*EC*+ = *E. coli*-positive or present.

**EC-** = *E. coli* negative or absent.

**Ensure** completed Level 1 or Level 2 Assessment form is submitted to the state



- **TC+** = Total coliform-positive or present.
- **TC-** = Total coliform-negative or absent.
- EC? E. coli not analyzed



# Level 1 and Level 2 Assessment Steps

- the assessment form.
- Step 2: Complete the assessment within 30 days of the TT-trigger.
- of the TT-trigger, you **MUST** obtain a state-approved schedule for correcting the sanitary defect.
- Step 4: Submit the completed assessment form to the state within 30 days of the TT-trigger.
- not fixed within 30 days of the TT-trigger.

| If Routine<br>Sample Is: |   | Any Repeat<br>Sample Is:                      |  |
|--------------------------|---|---|--|
| TC+ / <i>EC</i> -        | & | TC-   | <ol> <li>Systems monito</li> <li>Systems monito<br/>monitoring the</li> </ol>  |
| TC+ / <i>EC</i> +        | & | TC-   | <ol> <li>Notify the state<br/>sooner as specif</li> <li>Systems monito</li> <li>Systems monito<br/>monitoring the</li> </ol>   |
| TC+ / <i>EC</i> -        | & | TC+ / <i>EC</i> -                             | <ol> <li>Conduct a <i>Level</i><br/>Assessment trig</li> <li>Contact the<br/>required.</li> </ol>                              |
| TC+ / <i>EC</i> -        | & | Any or all repeat<br>samples not<br>collected |  |
| TC+ / <i>EC</i> -        | & | TC+ / <i>EC</i> ?                             | <ol> <li>Notify the state<br/>specified by you</li> <li>Contact the stat</li> <li>Issue a Tier 1 Puresults or soone</li> </ol> |
| TC+ / <i>EC</i> -        | & | TC+ / <i>EC</i> +                             |  |
| TC+ / <i>EC</i> +        | & | TC+   |  |
| TC+ / <i>EC</i> +        | & | Any or all repeat<br>samples not<br>collected |  |

• Step 1: Call the state to verify or select the appropriate person to conduct the assessment, and to receive

• Step 3: Correct any sanitary defects found. For any sanitary defect that cannot be corrected within 30 days

• Step 5: Notify the state after completing the corrective action for each sanitary defect identified that was

#### You MUST Take the Following Actions:

oring monthly, continue with routine monitoring.

oring quarterly or annually conduct additional routine following month after the TC+.

within 24 hours of receiving *EC+* sample results or ified by your state.

oring monthly, continue with routine monitoring.

oring quarterly or annually conduct additional routine following month after the **TC+**.

el 1 Assessment or (Level 2 Assessment if second Level 1 ggered in rolling 12 month period)

e state for help determining which type of assessment is

within 24 hours of receiving sample results or sooner as ur state, you have a *EC* MCL violation.

te to conduct a Level 2 Assessment.

ublic Notice (PN) within 24 hours of receiving the sample er as specified by your state.

> Office of Water (4606M) EPA 815-B-18-001F September 2018