



## **RTCR Monitoring Scheme**

### **Standard and Reduced Monitoring Provisions**

#### **General**

- All public water systems must have a bacteriological sampling plan reflecting RTCR sampling requirements on March 31, 2016. All system bacteriological sample siting plans are subject to review and revision by the state and will at a minimum frequency be reviewed by State of TN staff during each sanitary survey.
- Any bacteriological sample siting plan with alternative repeat monitoring locations, (other than +/- 5 service connections up and down) requires prior state bacteriological plan review and approval.
- All seasonal systems must complete a state of TN specified start up procedure, obtain a negative bacteriological result and submit certification of completion of the requirements prior to start up.
- Seasonal systems may be allowed a reduction to quarterly monitoring which must be reflected in the bacteriological sampling plan and requires prior state review and approval. Otherwise they begin monthly sampling upon start up effective April 1, 2016.
- All systems are required to collect three repeat samples within 24 hours of notification of a positive routine sample result.
- Any system that is on a quarterly sampling schedule is required to collect three routine samples in the month following a total coliform positive sample.

## System Type Specific Requirements

### Non-Community NCWS using true ground water serving <1000 Persons

Standard monitoring: One sample per quarter

Reduced monitoring: Not allowed

Increased monitoring: One sample per month

- During standard monitoring and In the event of a positive sample, three routine samples are required the following month.
- Increased monitoring to monthly is required if:
  - A level 2 assessment or two level 1 assessments are triggered in a rolling 12 month period
  - An E.coli MCL violation
  - A coliform treatment technique violation
  - Two RTCR monitoring violations in a rolling 12- month period
  - One RTCR monitoring violation and one level 1 assessment in a rolling 12 month period.

State may approve return to quarterly sampling if:

- Within the last 12 months, a sanitary survey or site visit by the state or a voluntary level 2 assessment is conducted by a party approved by the state.
  1. The system is free of sanitary defects and has a protected source.
  2. System has a clean compliance history for a minimum of 12 months.

### Seasonal Non-Community Water Systems NCWS using true ground water serving <1000 Persons\*

Standard monitoring: One sample each month the system is in operation

Reduced monitoring: One sample per quarter

Increased monitoring: One sample per month

- Systems standard monitoring is one sample per month beginning April 1, 2016.
- Reduced monitoring- The State may grant a reduction of systems monitoring frequency to quarterly if:
  1. The state approves a sample siting plan that designates the time period for monitoring based on site-specific considerations such as monitoring during periods of highest demand or highest vulnerability to contamination. The compliance samples must be collected during this time.
  2. Within the last 12 months, a sanitary survey or site visit by the state or a voluntary level 2 assessment is conducted by a party approved by the state.
  3. The system is free of sanitary defects and has a protected source
  4. System has a clean compliance history for a minimum of 12 months.
- If on reduced quarterly sampling and in the event of a TC positive sample, three routine samples are required the following month.
- Increased monitoring to monthly is required if:
  - A level 2 assessment or two level 1 assessments are triggered in a rolling 12 month period.
  - An E.coli MCL violation.
  - A coliform treatment technique violation.
  - Two RTCR monitoring violations in a rolling 12- month period.
  - One RTCR monitoring violation and one level 1 assessment in a rolling 12 month period.

State may approve a return to quarterly sampling if:

1. Within the last 12 months, a sanitary survey or site visit by the state or a voluntary level 2 assessment is conducted by a party approved by the state.
2. The system is free of sanitary defects and has a protected source
3. System has a clean compliance history for a minimum of 12 months.

\*All seasonal systems must complete a state of Tennessee specified start up procedure, obtain a negative bacteriological result and submit certification of completion of the requirements prior to start up.

**Community Water Systems using true ground water and Serving <1000 Persons**

<u>Standard monitoring:</u>	One sample per month
<u>Reduced monitoring:</u>	Not allowed
<u>Increased monitoring:</u>	NA

**Community and Non-Community Subpart H (surface or GUDI) Serving <1000 Persons\***

<u>Standard monitoring:</u>	One sample per month
<u>Reduced monitoring:</u>	Not allowed
<u>Increased monitoring:</u>	NA

\*Seasonal systems must complete start up procedure and certification and obtain a negative bacteriological result prior to start up.

**Community and Non-Community systems serving >1000 Persons\***

<u>Standard monitoring:</u>	Monthly based on population served Range is 2-480 samples/month
<u>Reduced monitoring:</u>	Not allowed
<u>Increased monitoring:</u>	NA

\*Seasonal systems must complete start up procedure and certification and obtain a negative bacteriological result prior to start up.

Total Coliform Monitoring Frequency for Public Water Systems Serving More than 1000 people

Population Served	Minimum number of samples per month
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390
2,270,001 to 3,020,000	420
3,020,001 to 3,960,000	450
3,960,000 or more	480