

TCR vs. RTCR

Recap of Key Differences

RTCR

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Sampling Plan

TCR	RTCR
Systems must collect samples that are representative of water throughout the distribution system & the monitoring period according to a written sample siting plan.	Systems must develop a written sample siting plan that identifies sampling sites & a sample collection schedule that are representative of water throughout the distribution system, <u>no later than March 31, 2016</u> . Sites may include a <u>customer's premise, dedicated sampling station or other designated compliance sampling station</u> . <u>Routine, repeat & GWR</u> (if the system is subject to the rule) sampling sites must be reflected in the plan.
Plans are subject to state review & revision.	

40 CFR 141.853(a)(1)

Seasonal Systems

TCR	RTCR
Seasonal PWS has the same requirements as other systems of the same size & type.	All seasonal PWSs must demonstrate (certify) <u>completion of a state-approved start-up procedure</u> . <u>Routine (baseline) monitoring is monthly</u> . For reduced monitoring: <ul style="list-style-type: none"> Seasonal PWSs must meet the same criteria as other systems of its size and type. Sample site plan must <u>designate the time period for monitoring based on high demand or vulnerability</u>. State <u>may exempt</u> seasonal system from requirements (i.e., start-up procedures) <u>if the entire distribution system remains pressurized</u> . Systems monitoring <u>less than monthly</u> must still <u>monitor during the designated vulnerable period</u> .

40 CFR 141.856(a)(4); 141.857(a)(4)

Routine Monitoring Frequency (Baseline)

TCR	RTCR
NCWS (GW) ≤1,000: 1 sample per quarter.	Same as current TCR.
CWS ≤1,000: 1 sample per month.	
PWS >1,000: monthly based on population.	<ul style="list-style-type: none"> Seasonal systems ≤1,000: 1 sample <u>per month</u>. Seasonal systems >1,000: <u>monthly</u> based on population.
Seasonal systems monitor based on the size & type of system as identified above.	

40 CFR 141.856(a)(4) & (b); 141.857(a)(4) & (b)

Additional Routine Monitoring

TCR	RTCR
PWS taking < 5 routine samples per month (PWS serving ≤4,100): <ul style="list-style-type: none"> Must take at least 5 routine samples in the month after a TC+ sample. 	<u>No longer a requirement</u> for systems that monitor at least monthly. PWSs taking samples less frequently than once per month (i.e., quarterly or annually): <ul style="list-style-type: none"> Must <u>take at least 3 routine samples in a month after a TC+ sample</u>.

40 CFR 141.21(b)(5); 141.854(f); 141.855(f) & 141.857(b)

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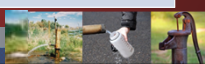


Repeat Monitoring – # of Samples

TCR	RTCR
PWS serving ≤1,000: 4 repeat samples for every TC+ routine sample. PWS serving >1,000: 3 repeat samples for every TC+ routine sample. <ul style="list-style-type: none"> Must <u>take additional repeats</u> for TC+ repeat samples <u>until trigger an MCL violation</u> and the system notifies the state. 	<ul style="list-style-type: none"> All PWSs <u>must take 3 repeat samples</u> for every TC+ routine sample regardless of whether PWS has already triggered an assessment. Must <u>take additional repeats</u> for TC+ repeat samples <u>until trigger an assessment</u> and system notifies the state.

40 CFR 141.21(b) & 141.858(a)

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Repeat Monitoring – Locations

TCR	RTCR
Repeat samples must be collected from the original TC+ site, at least one at a tap within 5 service connections upstream, & at least one at a tap within 5 service connections downstream.	<p>PWS can collect repeat samples using the <u>same procedure as in the TCR</u>; or,</p> <p>PWS can specify in their sample siting plan either <u>fixed alternative locations</u> or <u>criteria for selecting sites</u> on a situational basis via a standard operating procedure.</p>

40 CFR 141.853(a)(5)

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Treatment Technique (TT) Triggers and Level 1 & Level 2 Assessments

TCR	RTCR
Does not exist	<ul style="list-style-type: none"> All systems required to <u>conduct Level 1/Level 2 Assessment</u> when monitoring results show that the system may be vulnerable to contamination <ul style="list-style-type: none"> Initiated by Treatment Technique (TT) triggers, it is an evaluation to identify sanitary defects Conditions that defined a non-acute MCL violation under TCR are now used to trigger an assessment More proactive approach to public health protection compared to TCR

40 CFR 141.859(a)-(b)

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MCL Violations

TCR (acute MCL violation)	RTCR (E.coli MCL violation)	
	Routine sample	Repeat sample
	← AND →	
Fecal coliform-positive repeat sample.	(1) TC+	EC+
EC+ repeat sample.	(2) EC+	TC+
TC+ repeat sample following a fecal coliform-positive or EC+ routine sample.	(3) EC+ routine	Fails to take <u>all</u> required repeat samples
	(4) TC+	TC+ (but no <i>E. coli</i> analyzed)

40 CFR 141.63 & 141.860(a)

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Treatment Technique (TT) Violations

TCR	RTCR
Does not exist	<p>TT violations:</p> <ul style="list-style-type: none"> • <u>Failure to conduct a Level 1 or Level 2 assessment</u> within 30 days of learning of the trigger. • <u>Failure to correct all sanitary defects</u> from a Level 1 or Level 2 assessment within 30 days of learning of the trigger or approved timeframe by the state. • <u>Failure of a seasonal system to complete state-approved start-up procedure</u> prior to serving water to public.

40 CFR 141.860(b)

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Monitoring (M) & Reporting (R) Violations

TCR	RTCR
M&R violation (tracked together as 1 violation type)	<ul style="list-style-type: none"> • Monitoring violations and reporting violations will be tracked separately as <u>2 different violation types</u> • Newly specified M, R violations: <ul style="list-style-type: none"> - M - Failure to <u>take every required routine</u> or additional routine sample in a compliance period. - M - Failure to <u>analyze for E. coli</u> following a TC+ routine sample. - R - Failure to <u>submit a monitoring report or completed assessment form</u> after monitoring or conducting assessment correctly/timely. - R - Failure to <u>notify the state following an E. coli+</u> sample. - R - Failure to <u>submit certification of completion of state-approved start-up procedure</u> by a seasonal system.

40 CFR 141.204- 141.860(c)-(d)

PN for MCL & TT Violations

TCR	RTCR	
TC MCL violation/acute MCL: FC+ or E.coli +	E. coli MCL violations	Tier 1
Monthly TC MCL violation	Treatment technique (TT) violations	Tier 2
M&R (tracked as 1 violation type)	Monitoring	Tier 3
M&R (tracked as 1 violation type)	Reporting	Tier 3

12 40 CFR 141.63(b) & (d), 141.202, 141.203 & 141.860(a)-(b)

PN & CCR Rules – Health Effects Language

TCR	RTCR
Mandatory health effects language for total coliforms & fecal coliforms/ <i>E. coli</i> .	Total coliforms health effects language changed to <u>reflect nature of total coliforms as an indicator</u> . The health effects language for fecal coliforms/ <i>E. coli</i> has been <u>replaced with health effects language for <i>E. coli</i> only</u> .

40 CFR 141, Appendix B to Subpart O

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CCR Language

TCR	RTCR
Information related to highest monthly total coliforms results (number or percentage) & the total number of fecal coliforms/ <i>E. coli</i> -positive samples.	Information on the <u>total number of <i>E. coli</i>-positive samples</u> . Information about the number of <u>assessments required & corrective actions</u> taken, and, if appropriate, the number of assessments & corrective actions not completed.

40 CFR 141.153(d)(4) & 141.153(h)(7)

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