

REVISED TOTAL COLIFORM RULE (RTCR)



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REVISED TOTAL COLIFORM RULE (RTCR)

- Published in Federal Register on 2/13/13
- Primacy application in progress
- Effective date is April 1, 2016
- Applies to CWS & NCWS
- No impact on residential wells



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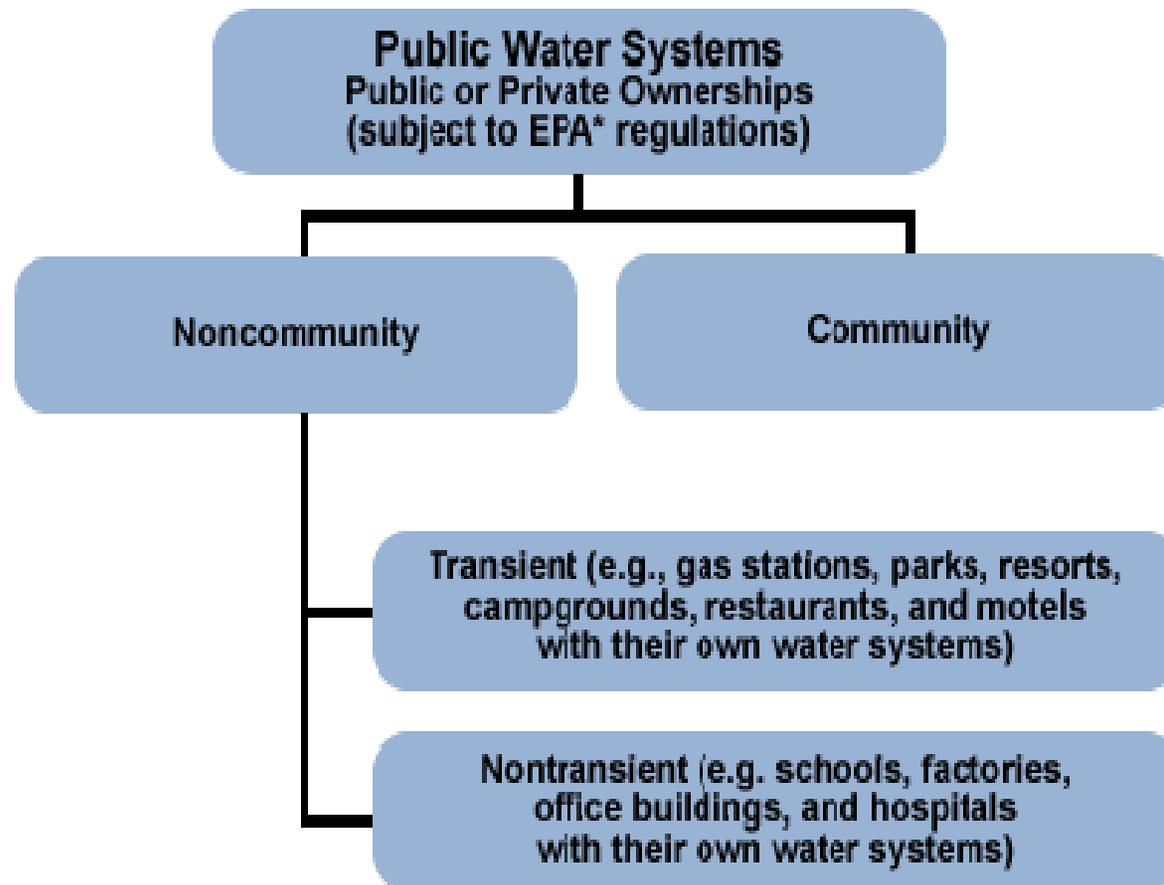
Part II

Environmental Protection Agency

40 CFR Parts 141 and 142
National Primary Drinking Water Regulations: Revisions to the Total Coliform Rule; Final Rule



TYPICAL NCWS



WHAT IS THE TOTAL COLIFORM RULE?

- Established in 1989
- Contains all of the coliform monitoring requirements for:
 - Routine samples
 - Repeat samples
 - Maximum contaminant level (MCL)

RTCR ELEMENTS SIMILAR TO EXISTING RULE

- Routine Monitoring
- Repeat Sampling
- Approved Sample Siting Plans
- Public Notice Requirements
- Monthly Monitoring for Supplies Serving Over 1000 Population

NEW ELEMENTS

- Level 1 Assessment
- Level 2 Assessment
- Coliform Treatment Technique Violation
- Seasonal System Start Up Requirements

MCL & TT VIOLATIONS

Maximum Contaminant Level (MCL) Violation = exceeds allowable concentration of a contaminant

- Compliance based on sampling results

Treatment Technique (TT) Violation = failure to perform a required action to reduce the level of a contaminant in drinking water

- Compliance based on activities completed

E. coli MCL VIOLATION

An *E. coli* MCL Violation occurs with any of these sampling set combinations

Routine Sample	Repeat Sample
<i>E. Coli</i> Positive	Total coliform positive
<i>E. Coli</i> Positive	Any missed repeat sample
Total coliform positive	<i>E. Coli</i> Positive
Total coliform positive	Total coliform positive (no <i>E. coli</i> analyzed)

All total coliform positive samples must be tested for *E. coli*.

VIOLATION DETERMINATION BASED ON MONITORING

Action	Monitoring Violation	<i>E. coli</i> MCL Violation	Assessment Trigger
Fails to collect <u>routine</u> samples	Yes	No	No
Fails to analyze for <i>E. coli</i> following a <u>routine</u> total coliform positive result	Yes	No	No
Fails to collect <u>repeat</u> samples following a routine total coliform positive	No	No	Level 1 Assessment Level 2 Assessment if a level 1 assessment in the previous 12 months.
Fails to collect all <u>repeat</u> samples following a routine <i>E. coli</i> positive	No	Yes	Level 2 Assessment
Fails to analyze for <i>E. coli</i> following a <u>repeat</u> total coliform positive	No	Yes	Level 2 Assessment

TREATMENT TECHNIQUE VIOLATIONS

- Fails to conduct a level 1 or level 2 Assessment within 30 days
- Fails to correct all sanitary defects from a level 1 or level 2 assessment within 30 days or within the approved corrective action plan timeframe
- Fails to complete the approved seasonal system start-up procedure

MONITORING REQUIREMENTS FOLLOWING A ROUTINE TOTAL COLIFORM POSITIVE

Annual or Quarterly Routine Monitoring

- 4 repeat samples (3 repeat samples and 1 at raw water tap for Groundwater Rule)
- 3 routine samples the next month

Monthly Monitoring

- 4 repeat samples (3 repeat samples and 1 at raw water tap for Groundwater Rule)
- No additional routine monitoring required

LEVEL 1 ASSESSMENTS

Level 1 Trigger

- Repeat(s) total coliform positive
- Failure to collect required repeat sample(s) after a total coliform positive routine sample

Level 1 Assessment

- Basic examination of the source water, treatment, distribution system and relevant operational practices.
- Can be done by owner/operator or local health department.

LEVEL 2 ASSESSMENTS

Level 2 Trigger

- An *E. coli* MCL violation
- A second level 1 within a rolling 12-month period
- A second level 1 within 2 consecutive years for systems on annual coliform monitoring

Level 2 Assessment

- An in-depth examination of the system and its monitoring and operational practices.
- Conducted by the local health department.

ASSESSMENT COMPONENTS

- State approved assessment forms
- Identify sanitary defects or statement that none were found
- Corrective actions taken
- Timetable for correction(s)

REVIEW OF LEVEL 1 OR LEVEL 2 ASSESSMENT

- Assessment form submitted within 30 days of trigger
- Assessment form complete
- Cause of the trigger identified
- Correction(s) completed
- Acceptable timetable for correction(s)

CORRECTIVE ACTION EXAMPLES

- Repair or replace well components
- Repair or replace distribution system components
- Flush well and/or distribution system
- Disinfect well and/or distribution system
- Training on proper sampling technique
- Eliminate cross connections

Water supply must inform the local health department when a correction has been completed.

GROUNDWATER SYSTEMS

BACTERIOLOGICAL MONITORING FREQUENCIES

System Type	Baseline	RTCR Increased	RTCR Reduced	Notes
Year-Round Serving ≤ 1000 people/day	1/quarter	1/month	1/year	Annual Level 2 Assessment in 1 st and subsequent years to qualify for annual sampling.
Seasonal Serving ≤ 1000 people/day	1/month while open	NA	1/quarter	Implement State approved Certified Start-Up Procedures.

Year-round operations may transition in on current monitoring schedule.

WHEN INCREASED MONITORING IS REQUIRED

Annual to Quarterly

- Failure to monitor

Annual to Monthly

- Triggered level 2 Assessment
- Triggered level 1 Assessment in 2 consecutive years
- *E. coli* MCL violation
- Coliform treatment technique violation

WHEN INCREASED MONITORING IS REQUIRED

Quarterly to Monthly

- Triggered level 2 Assessment
- Second level 1 Assessment in a rolling 12 month period
- *E. coli* MCL violation
- Coliform treatment technique violation
- Two coliform monitoring violations
- One coliform monitoring violation and one level 1 Assessment in a rolling 12 month period
- Seasonal systems that fail to complete approved start up procedures

REDUCED MONITORING

Monthly to Quarterly

1. Annual level 2 assessment
2. Free of sanitary defects
3. Protected source
4. Clean compliance history for minimum 12 months

Quarterly to Annual (additional requirements)

5. One additional enhancement
 - a) Cross-connection control program
 - b) Certified operator
 - c) Other equivalent enhancements

Reduction from monthly not applicable for systems >1000 population served.

SEASONAL SYSTEM REQUIREMENTS

- Approved start-up procedures
- Submit start-up certification form
 - State approved form
- Transition in on quarterly monitoring (annual not allowed)
- Sample collection during high vulnerability periods

Systems serving >1000 people/day must sample monthly.

ADDITIONAL INFORMATION

- DEQ Noncommunity Website
 - Guidance documents
 - Upcoming webinars/recordings
- Bay City Noncommunity Program Workshop

For additional information, contact your DEQ representative.

Thank You