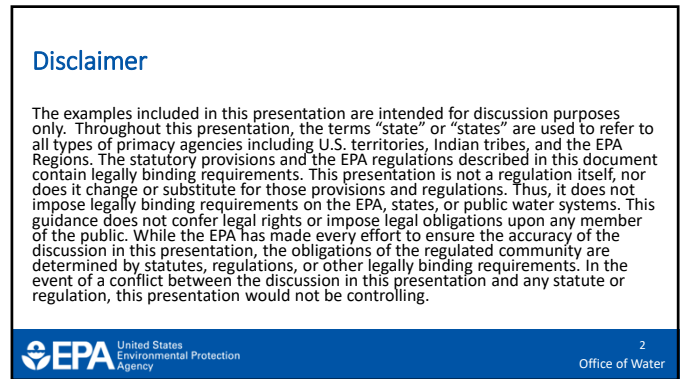
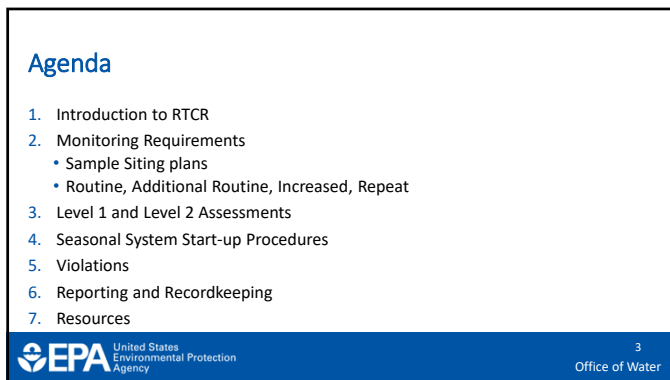




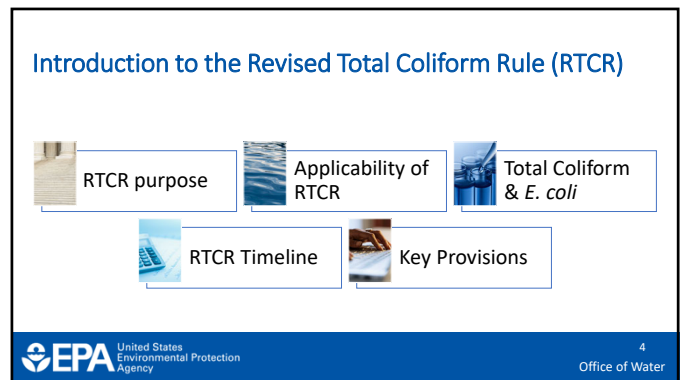
1



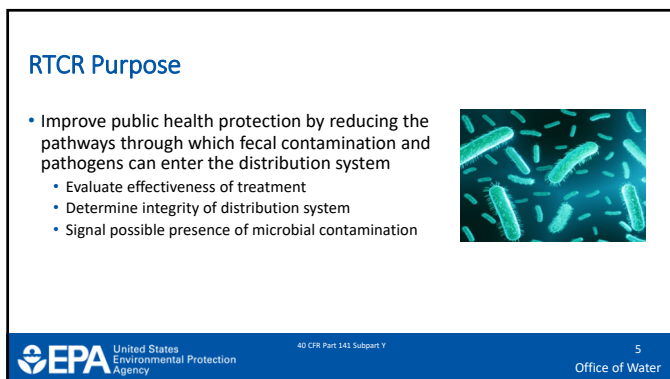
2



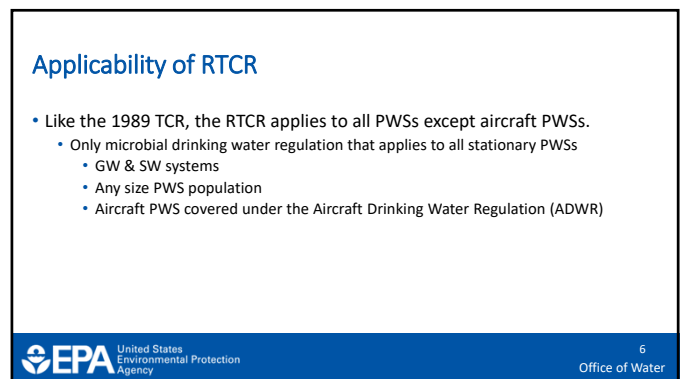
3



4



5



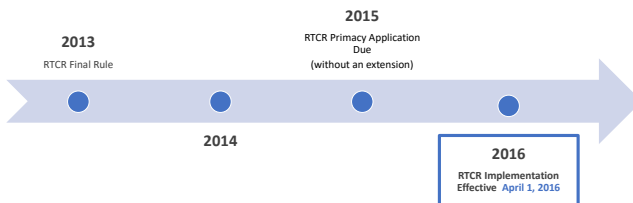
6

Total Coliform and *E. coli*

- Total coliform & *E. coli* as indicators of potential risk
 - Total coliform are a group of closely related bacteria that, with a few exceptions, are not harmful to humans
 - *E. coli* bacteria are a more accurate indicator of fecal contamination, though not a measure of waterborne pathogen occurrence
- The presence of total coliform is a good indicator of a potential pathway of microbial contamination into the distribution system
- These contaminants could include:
 - Bacteria
 - Viruses
 - Parasitic protozoa

7

RTCR Timeline



8

Key Provisions: Assessment and Corrective Action

- Requires investigation and correction of sanitary defects
- Requires assessments when monitoring results show the system may be vulnerable to contamination
 - Level 1 - self-assessment unless the state determines otherwise
 - Level 2 - more detailed assessment by the state or by a party approved by the state
- Systems required to correct sanitary defects found through either Level 1 or 2 assessments conducted
- Failure to assess and correct is a Treatment Technique (TT) violation

9

Key Provisions: MCL and TT

- Establishes MCLG and MCL for *E. coli*
 - MCLG = the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, allowing an adequate margin of safety.
 - MCL = highest allowable concentration of a contaminant
 - Compliance based on sampling results
- Establishes a total coliform TT requirement
 - TT = process intended to reduce the level of a contaminant in drinking water
 - Compliance based on performing activities

10

Key Provisions: Public Notification

- Requires Tier 1 PN within 24 hours if system confirms fecal contamination (*E. coli* MCL violation)
- Requires Tier 2 PN within 30 days if system does not investigate and fix identified problem(s) (TT violation)
 - Replaces the PN for total coliform MCL violations
- Requires Tier 3 PN within a year for monitoring, reporting, and recordkeeping violations
- Community water systems (CWSs) must use specific language in their CCRs when required to conduct an assessment or they incur an *E. coli* MCL violation.

11



12

Sample Siting Plans

- Systems must:
 - Develop sample siting plans
 - Collect samples in accordance with the plan
 - Submit plan to the state if proposing to use alternative sampling locations for repeat samples
 - Get written state approval of the plan before using dual purpose sampling sites
- All plans are subject to state review and revision
 - Must have been developed by April 1, 2016

13

Sample Siting Plans

- Systems must include sampling locations
 - Must be representative of the water in the distribution system
 - On the premises, OR
 - Dedicated sampling station, OR
 - Other designated compliance sampling location
 - Routine and repeat monitoring locations
 - All applicable GWR monitoring sites (in states where dual purpose sampling is allowed)

14

Sample Siting Plan: State role?

- Sample siting plans are subject to state review and revision
- Sample Siting Plans must be approved by the state:
 - 1) Repeat alternative sampling locations [40 CFR 141.853(a)(5)(i)]
 - ✓ Alternative fixed locations or criteria written in an SOP based on a situational basis
 - ✓ PWS must submit to the state prior to use
 - ✓ PWS can use these locations prior to state approval
 - 2) Seasonal systems not monitoring monthly [40 CFR 141.854(i)(2)(i)]
 - ✓ PWS must submit and gain state approval prior to use
 - ✓ Plan must designate monitoring time period
 - 3) Dual purpose sampling (eligible ground water systems) if state adopted [40 CFR 141.853(a)(5)(iii)]
 - ✓ PWS must submit and gain state approval prior to use

15

Monitoring: Types of RTRC Compliance Samples

- Routine samples:
 - Collect each monitoring period
- "Additional" routine samples
 - For PWSs sampling less than monthly (e.g., quarterly, annual)
- Repeat samples:
 - Collect when a routine or repeat sample is TC+
 - Dual Purpose GWR sampling: If the state adopted

16

Collecting more samples than the minimum requirements:

- If a PWS wishes to take more compliance samples than required, those samples must be included in the sample siting plan
 - The extra compliance sample(s) must be used to calculate coliform TT-trigger exceedances
- Considerations for when a small PWS may wish to take more than the minimum required compliance samples:
 - More than one pressure zone with separate sources in each pressure zone
 - Long distance (more than 2 miles) between connections within the distribution system, or other situations leading to stagnant water. This is especially important in areas with small populations or large pipe diameters
 - Isolated sub-populations in separate pressure zones associated with large storage tanks

17

Frequencies: Routine Monitoring

- For NCWS GW < 1,000 people
 - Monthly
 - Quarterly
 - Annual
 - Seasonal systems (monthly unless state reduces, must meet specific criteria)
- CWS GW < 1,000 people
 - Monthly (state may reduce, if meet criteria)
- All SW Systems
 - Monthly
- All PWS serving >1,000 people
 - Monthly

18

Frequencies: Increased/Reduced GW PWSs Serving ≤ 1,000 People

System Type	Increased	Baseline	Reduced	NOTE
CWS	NA	1 / month	1 / quarter	Same frequency under the TCR
Non-Seasonal NCWS	1 / month	1 / quarter	1 / year	Same frequency under the TCR For annual – site visit or voluntary Level 2 assessment in 1 st and subsequent years
Seasonal NCWS	NA	1 / month	1 / quarter or 1 / year	For quarterly – identify vulnerable period for monitoring For annual – identify vulnerable period for monitoring and site visit or voluntary Level 2 assessment in 1 st and subsequent years

19

Monitoring: Additional Routine

Applicable to PWSs NOT monitoring monthly

For PWSs monitoring quarterly or annually:

- PWSs must collect at least 3 “additional routine” samples the month following 1 or more TC+ samples
- Samples must be:
 - Collected at regular time intervals throughout the month or on a single day if taken from different sites
 - Collected consistent with the sampling siting plan
 - Used to calculate whether the TT trigger has been exceeded or an *E. coli* MCL violation has occurred

20

Monitoring: Repeat Samples

- For each routine TC+, collect 3 repeat samples (a set) within 24hrs of being notified of the positive result (state may extend the 24-hour limit on a case-by-case basis)
- Location = original site, 5 connections upstream, 5 connections downstream, or alternative sample locations (identified in Sample Siting Plan)
- Collect at least one round (3 repeats) for each routine TC+, even if PWS triggered an assessment earlier in the month

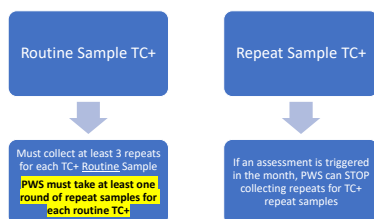
21

Repeat Monitoring Requirements [40 CFR 141.858]

(a)(3)The system must continue to collect additional sets of repeat samples until either total coliforms are not detected in one complete set of repeat samples or the system determines that a coliform treatment technique trigger specified in § 141.859(a) has been exceeded as a result of a repeat sample being total coliform-positive and notifies the State. If a trigger identified in § 141.859 is exceeded as a result of a routine sample being total coliform-positive, systems are required to conduct only one round of repeat monitoring for each total coliform-positive routine sample.

22

QUESTION: When does a PWS stop taking repeats?



23

Monitoring: Speciation

E. coli testing

- Any sample (i.e., routine or repeat) that is TC+ must be further tested for *E. coli*

******Results of all routine and repeat samples must be included in the determination of whether an assessment has been triggered.

NOTE: Failure to analyze repeat TC+ for EC = *E. coli* MCL violation

24

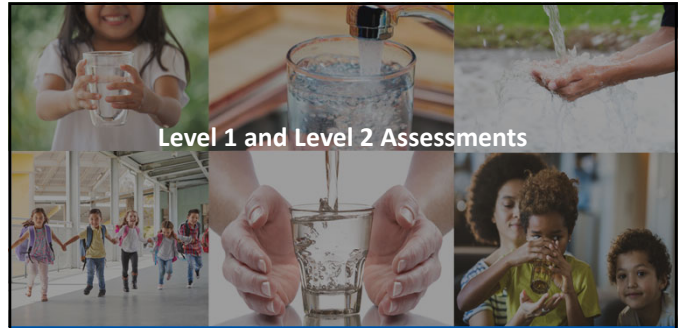
Triggers to increased Monitoring

Quarterly → Monthly	Annual → Monthly	Annual → Quarterly
PWS triggered from quarterly to monthly monitoring if any of the following conditions occur:	PWS triggered from annual to monthly monitoring if any of the following conditions occur:	PWS triggered from annual to quarterly if the following condition occurs:
<ul style="list-style-type: none"> A Level 2 assessment or two Level 1 assessments are triggered under the provisions of §141.859 in a rolling 12-month period An <i>E. coli</i> MCL violation A coliform treatment technique violation Two monitoring violations in a rolling 12-month period* One monitoring violation and one Level 1 assessment in a rolling 12-month period* 	<ul style="list-style-type: none"> A Level 2 assessment or two Level 1 assessments are triggered in a rolling 12-month period An <i>E. coli</i> MCL violation A coliform treatment technique violation 	<ul style="list-style-type: none"> One monitoring violation

*State has the discretion not to consider monitoring violations in determining a transient NCWS's eligibility to remain on or qualify for quarterly monitoring if the system meets the provision of 141.854(a)(4).

25

Level 1 and Level 2 Assessments



26

Purpose of Assessments

- All systems required to conduct an assessment when monitoring results show that the system may be vulnerable to contamination
- An assessment is an evaluation to identify sanitary defects
- More proactive approach to public health protection compared to TCR
 - Conditions that defined a non-acute MCL violation under TCR are now used to trigger assessment

27

Sanitary Defects

- A defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place. For example:
 - Holes in storage tanks
 - Breaks in pipes
 - Cracks in well seals or casings
- Not linked directly to significant deficiencies under the GWR, but may overlap (depends on state program)
- The system should consult with the state regarding how to coordinate actions under the GWR and RTRC, as necessary

28

Elements of Assessments

- Atypical events that may affect distributed water quality or indicate that distributed water quality was impaired
- Changes in distribution system maintenance and operation that may affect distributed water quality, including water storage
- Source and treatment considerations that bear on distributed water quality
- Existing water quality monitoring data
- Inadequacies in sample sites, sampling protocol, and sample processing

29

Conducting Assessments

- Assessments must be:
 - Consistent with state directives
 - Conducted as soon as practical after the system learns it has triggered an assessment
- Assessment form must be submitted to state within 30 days after system learned it triggered assessment
- Failure to conduct an assessment or correct sanitary defects is a TT violation and requires Tier 2 PN

30

Level of Effort: Level 1 vs. Level 2

Level 1 Assessments	Level 2 Assessments
<ul style="list-style-type: none"> Primarily completed using existing data May include limited inspections or interviews Conducted by the PWS 	<ul style="list-style-type: none"> More comprehensive review of existing data May include field investigations, additional sampling, and inspections May involve consultation with additional parties Conducted by the state or party approved by the state

31

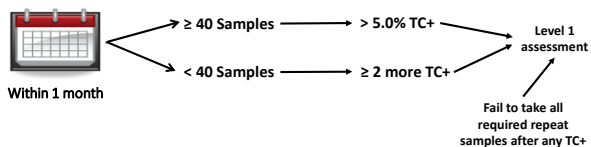
Level 1 Assessments

- General examination of the system's:
 - Source water
 - Treatment
 - Distribution
 - Relevant operational practices
- Intended to be a self-assessment

32

Level 1 Assessment Triggers

- Must consider all samples (the total number of routine and repeat) to determine Level 1 assessment trigger



33

Who Conducts Level 1 Assessments?

- Intended to be self-assessments
 - State, or party approved by the state may conduct assessment
 - State or system may request consultation with the other party to determine the appropriate actions to be taken
- Must be consistent with state requirements

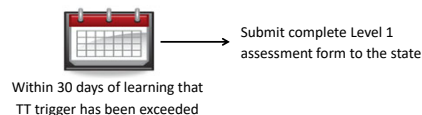
34

Completed Level 1 Assessment Form Components

- Sanitary defect(s) identified
 - Assessment form may note that no sanitary defects were identified, if applicable
- Corrective actions taken
- Proposed timetable for corrective actions if not completed within 30 days after system learns it triggered assessment

35

Submission and Review



- State will review assessment to determine if:
 - System identified likely cause of Level 1 trigger
 - System corrected the problem or has an acceptable schedule for correction
- State may require revisions to the assessment after consultation with the system

36

Level 2 Assessments

- More detailed examination of the system, its monitoring program and results, and its operational practices
- Triggered by events that:
 - Pose a potential immediate acute public health threat (i.e., trigger associated with the presence of *E. coli*); or,
 - Do not necessarily pose an immediate acute public health threat (i.e., a second Level 1 trigger) but may still pose a potential serious health impact because of the persistence of the contamination

37

Level 2 Assessment Triggers

- Considering all compliance samples (routine and repeat) a Level 2 assessment is triggered when a system incurs:
 - A second Level 1 trigger within a rolling 12-month period
 - Unless the state has determined a likely reason that the samples that caused the first Level 1 TT trigger were TC+ and has established that the system has corrected the problem
 - An *E. coli* MCL violation
- For systems with approved annual monitoring, a Level 2 assessment is triggered when a system incurs a Level 1 trigger in two consecutive years

38

Who Conducts Level 2 Assessments?

- Must be conducted by state-approved party
 - The state
 - A third party approved by the state (*which can be the PWS in cases where the system has staff or management with the required certification or qualifications specified by the state*)
- Must follow state directives related to:
 - Size and type of the water system
 - Size, type, and characteristics of distribution system

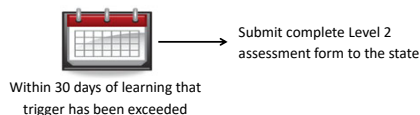
39

Completed Level 2 Assessment Form Components

- Level 2 assessment elements contain the same elements as the Level 1, but each element is investigated in greater detail
- Must include:
 - Sanitary defect(s) identified
 - Corrective actions
 - Timetable for corrective actions, if not completed within 30 days after system learns it triggered assessment

40

Submission and Review



- State will review assessment to determine if:
 - System identified likely cause of Level 2 trigger
 - System corrected the problem or has an acceptable schedule for correction
- State may require revisions to the assessment after consultation with the system

41

Corrective Actions Associated with Assessments

- The system must correct all sanitary defects found during a Level 1 or Level 2 assessment
- The following slides will discuss:
 - Required timing of corrective action;
 - Common corrective actions; and
 - Common causes of contamination and associated corrective actions

42

Timing of Corrective Action

- System must complete corrective action:
 - By the time assessment form is submitted to the state, which is within 30 days of the trigger; or
 - Within state-approved timeframe
- System must notify the state when each scheduled corrective action is completed
- Either system or state can at any time request a consultation with the other party to discuss the corrective action

43

Common Corrective Actions

- Well maintenance/repair
- Disinfection
- Flushing
- Replacement/repair of distribution system or storage components
- Storage facility maintenance
- Development/implementation of operations plan
- Maintenance of adequate pressure
- Training on proper sampling technique

44

Common Causes of Contamination and Corrective Actions

Common Cause	Common Corrective Action(s)
Failure to disinfect (or improper disinfection) after maintenance work in the distribution system	• Disinfection
Main breaks	• Disinfection • Replacement/repair of distribution system components
Holes in storage tank, inadequate screening, etc.	• Maintenance of storage facility • Addition of security measures • Development and implementation of an operations plan
Cracks in well seal, casing, etc.	• Replacement/repair of well components

45

Common Causes of Contamination and Corrective Actions (cont.)

Common Cause	Common Corrective Action(s)
Loss of system pressure	• Maintenance of adequate pressure • Valve maintenance • Addition or upgrade of on-line monitoring and control
Biofilm accumulation in the distribution system	• Flushing • Maintenance of adequate pressure
Cross connections	• Maintenance of adequate pressure • Installation of backflow prevention assembly/device • Implementation/upgrade of cross connection control program

46

Common Causes of Contamination and Corrective Actions (cont.)

Common Cause	Common Corrective Action(s)
Inadequate disinfectant residual	• Disinfection • Flushing • Maintaining appropriate hydraulic residence time • Addition or upgrade of on-line monitoring and control
Contaminated sampling taps	• Replacement/repair of distribution system components • Sampler training
Sampling protocol errors	• Sampler training • Development and implementation of an operations plan

47



Seasonal Systems: Routine Monitoring and Startup Procedures

 United States Environmental Protection Agency

Office of Water

48

Seasonal Systems

- A seasonal system is a NCWS, not operated as a PWS on a year-round basis, that starts up/shuts down at the beginning and end of each operating season
- Seasonal systems must demonstrate completion of a State-approved start-up procedure, which may include a requirement for startup sampling prior to serving water to the public.
- State may exempt systems from start-up requirements only if the distribution system remains pressurized during the entire period that the system is not operating (*except that systems that monitor less frequently than monthly must still monitor during the vulnerable period designated by the State*)

49

Start-up Procedures

- All seasonal systems must demonstrate completion of a state-approved startup procedure before serving water to the public
- States have the flexibility to determine what start-up procedures are appropriate for a particular system based on site-specific considerations
- States may require one or more TC samples as part of the required start-up procedures

50

Seasonal Systems: Monitoring Requirements

- Must follow a state-approved start-up plan
- Must monitor monthly for all months they are in operation, unless it meets reduced monitoring criteria
 - If monitoring less than monthly, the system must have a state-approved sample siting plan that designates sampling during high vulnerability periods

51

Seasonal Systems - Reduced Monitoring

- Routine monthly monitoring
- Exception:
 - GW seasonal systems that serve <1000 persons may be reduced to quarterly or annual monitoring if the PWS:
 - Meets the quarterly requirements at 40 CFR 141.854(g) and for annual monitoring the additional requirements found at 141.854(h)
 - Has an approved sample siting plan that designates the time period of monitoring based on site-specific consideration

52



53

E. Coli MCL Violations

Routine sample	AND	Repeat sample
(1) TC+		EC+
(2) EC+		TC+
(3) EC+		Fails to take <u>all</u> required repeat samples
(4) TC+		TC+ (but not analyzed for <i>E. coli</i>)

54

Treatment Technique (TT) Violations

1. Failure to conduct a Level 1 or Level 2 assessment within 30 days of learning of the trigger.
2. Failure to correct all sanitary defects from a Level 1 or Level 2 assessment within 30 days of learning of the trigger or approved timeframe by the state.
3. Failure of a seasonal system to complete state-approved start-up procedure prior to serving water to public.

55

Monitoring (M) and Reporting (R) Violations

Monitoring violations and reporting violations tracked separately (2 different violation types):

1. M - Failure to take every required routine or additional routine sample in a compliance period.
2. M - Failure to analyze for *E. coli* following a TC+ routine sample.
3. R - Failure to submit a monitoring report or completed assessment form after monitoring or conducting assessment correctly/timely.
4. R - Failure to notify the state following an *E. coli*+ sample.
5. R - Failure to submit certification of completion of state-approved start-up procedure by a seasonal system.

56

Public Notification Requirements

Violation	Tier of Public Notification
MCL	Tier 1 (issue within 24 hours)
Treatment Technique	Tier 2 (issue within 30 days)
Monitoring	Tier 3 (issue within one year)
Reporting	Tier 3 (issue within one year)

57

Consumer Confidence Reports (CCR)

- CCR reporting: 40 CFR 141.155(j) – due July annually
- Beginning in 2027 systems serving 10,000 or more persons will be required to deliver CCRs biannually: 40 CFR 141.155(j)(2)
- Community Water Systems must report:
 - *E. coli*: total number of positive results
 - TT-triggers:
 - Number of Level 1 and Level 2 assessments triggered with special language
 - Corrective actions taken
 - All violations: TT, MCL, M, R

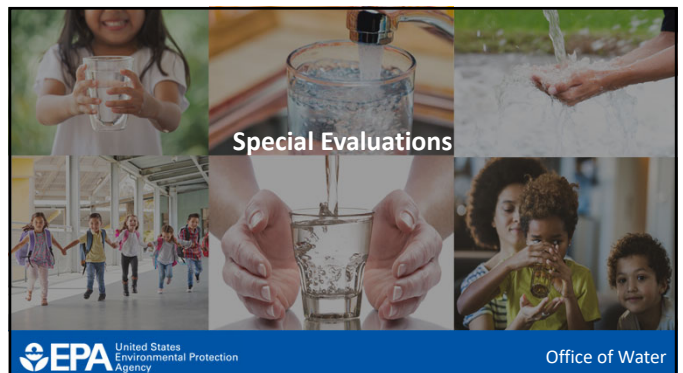
58

Consumer Confidence Reports (CCR) RTCR: Reporting Detected Contaminants

RTCR
(Annual reporting for all systems serving fewer than 10,000 persons. Beginning in 2027 systems serving more than 10,000 persons will be required to deliver CCRs biannually)

- E. coli*:**
- Report total number of positive samples
- Total coliform:**
- Do not have to report specific number or %
 - Report applicable language if PWS incurs TT-trigger (i.e., L1/L2 assessments) or TT-violation
- Level 1 or Level 2 assessment language:**
- For TT-triggered: Report number of assessments required, and corrective actions taken
 - For TT-violation: Report the number of assessments and corrective actions not completed.

59



60

Special Monitoring Evaluations

- Must be conducted for all GWSs serving ≤ 1,000 with each sanitary survey
- Determines whether the following are appropriate:
 - Monitoring frequency
 - # of samples per monitoring period
- Ensures that the distribution system is evaluated in sufficient detail

61

Special Monitoring Evaluation [141.854(c)(2) and 141.855(c)(2)]

Question: Does Special Monitoring Evaluations apply to all GW CWSs and NCWSs serving 1,000 or fewer people, even those on monthly monitoring?

Response: Yes, the state must perform a special monitoring evaluation during each sanitary survey regardless of monitoring schedule frequency for all GW CWSs and NCWSs (including seasonal systems) serving 1,000 or fewer people.

62

Special Monitoring Evaluation 40 CFR 141.854(c)(2) [GW, NCWSs <1000] and 141.855(c)(2) [GW, CWS <1000]

141.854(c)(2) -- Beginning April 1, 2016, the State must perform a special monitoring evaluation during each sanitary survey to review the status of the system, including the distribution system, to determine whether the system is on an appropriate monitoring schedule. After the State has performed the special monitoring evaluation during each sanitary survey, the State may modify the system's monitoring schedule, as necessary, or it may allow the system to stay on its existing monitoring schedule, consistent with the provisions of this section. The State may not allow systems to begin less frequent monitoring under the special monitoring evaluation unless the system has already met the applicable criteria for less frequent monitoring in this section. For seasonal systems on quarterly or annual monitoring, this evaluation must include review of the approved sample siting plan, which must designate the time period(s) for monitoring based on site-specific considerations (e.g., during periods of highest demand or highest vulnerability to contamination). The seasonal system must collect compliance samples during these time periods.

63



64

System Reporting Requirements

Requirement	Timing
<i>E. coli</i> MCL violation, or EC+ routine sample	By end of current business day (or next business day if state office is closed)
TT violation	By end of next business day
Level 1 or 2 assessment report	Within 30 days of learning that the system has exceeded a TT trigger
Coliform monitoring violation	Within 10 days of learning of violation
Completion of corrective action, if occurring after submittal of an assessment report	When each corrective action is completed

65

Seasonal System Reporting Requirements

- Seasonal systems must report to the state:

Requirement	Timing
Seasonal system certification of compliance with state-approved start-up procedures	Prior to serving water to the public

66

System Recordkeeping

- Systems must maintain:

Requirement	Timing
Records of action taken by the system to correct violations of primary drinking water regulations	3 years
Public notices issued and certifications made	3 years
Records of microbiological analysis	5 years
Copies of monitoring plans	As long as analyses are required

67

System Recordkeeping (cont.)

- Systems must maintain:

Requirement	Timing
Level 1 or 2 assessment forms	5 years
Documentation of corrective actions	5 years
Other available summary documentation of sanitary defects and corrective actions	5 years
Records of any repeat samples taken that meet the state's criteria for an extension of the 24-hour period for collecting repeat samples.	5 years

68

State Reporting Requirements to EPA

- Quarterly reports of violations and enforcement actions to SDWIS/Fed
 - MCL violations
 - TT violations
 - Monitoring violations
 - Reporting violations
 - PN violations
 - Other violations
 - Formal enforcement actions
 - RTC status
- Annual reports of inventory and status of variances and exemptions

69

System Recordkeeping (all systems)

Requirement	Timing
Microbiological analyses	1 year
Decisions to waive the 24-hour time limit for collecting repeat samples after a TC+ routine sample or sample invalidation	5 years
Decisions to waive the requirement for 3 routine samples the month following a TC+ sample	5 years
Decisions to invalidate a TC+ sample	5 years
Completed and approved Level 1 or 2 assessments	5 years
Reports from systems of completed corrective actions	5 years

70

System Recordkeeping (cont.)

Requirement	Timing
Decisions to allow a system to forgo <i>E. coli</i> testing of a TC+ sample if that system assumes that the sample is EC+	In such a manner that each system's current status may be determined

71

System Recordkeeping (GW NCWS)

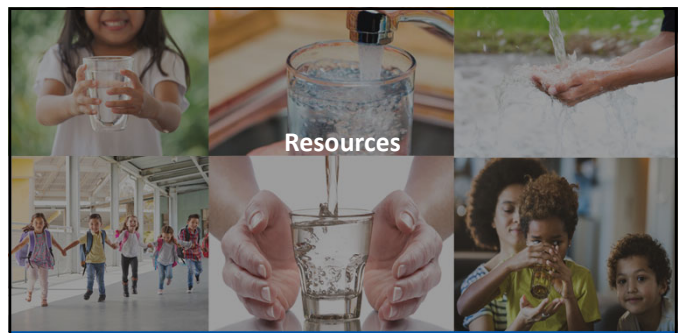
Requirement	Timing
Decisions to reduce the total coliform monitoring frequency for a NCWS using only GW and serving 1,000 or fewer people to less than once per quarter	In such a manner that each system's current status may be determined
Decisions to reduce the total coliform monitoring frequency for a NCWS using only GW and serving more than 1,000 people during any month the system serves 1,000 or fewer people	

72


System Recordkeeping (GW CWS)

Requirement	Timing
Decisions to reduce the total coliform monitoring frequency for a CWS serving 1,000 or fewer people to less than once per month	In such a manner that each system's current status may be determined

73



Resources

 United States Environmental Protection Agency

Office of Water

74

Resources for Public Water Systems

- Six RTCR Placards
 - Collection of six (6) e-fillable placards
 - For non-seasonal PWSs: 3 placards for collecting routine samples per Month, Quarter, or One-time a Year
 - For seasonal PWSs: 2 placards for collecting routine samples per Month or Quarter
 - For all PWSs: 1 placard on Level 1 or Level 2 Assessment requirements
- RTCR Sample Siting Plan with Template Manual
 - Ten page manual for selecting representative sample locations. Includes protocols, recommended instructions, and an e-fillable sample siting plan template



75

Resources for Public Water Systems (cont.)

- Five (5) RTCR Template factsheets for small systems serving <1,000
 - Requirements for Small Systems on Monthly Monitoring;
 - Requirements for Small Systems on Quarterly/Annual Monitoring;
 - Requirements for Seasonal Systems;
 - Repeat Monitoring Requirements for Small Systems;
 - Level 1 and Level 2 Assessments and Corrective Actions



76

Resources for Public Water Systems (cont.)

- Public Notification Templates
 - Designed to assist water systems with public notification requirements
 - RTCR Guide for Small Public Water Systems
 - Designed to assist small water systems serving < 1,000 persons in complying with the requirements of the RTCR
 - A Small System Guide to the RTCR
 - Provides information for CWSs that serve fewer than 3,300 people.
- Additional resources can be found here:
<https://www.epa.gov/dwreginfo/total-coliform-rule-compliance-help-public-water-systems>



77

Resources for Primacy Agencies

- RTCR Quick Reference Guide (QRG)
- RTCR State Implementation Guidance
- RTCR Assessments and Corrective Actions Guidance Manual
- RTCR Training: 5 webinar training series (for States)
 - Recordings & slides on ASDWA website www.asdwa.org/rtcr
 - Target audience: Regions, States, and Technical Assistance Providers
- RTCR workshops and presentations. Slides on ASDWA website (for States) www.asdwa.org/rtcr
 - AWWA ACE in Boston, MA.
 - NRWA annual in-service training event in Mobile, AL
 - RCAP 2014 National Training Conference in Madison, WI

78

Any Questions?



79

Contact Information

- Brandon Welbourn
Welbourn.brandon@epa.gov | 202-565-2408
US EPA, Office of Groundwater & Drinking Water/CCAD/SAB
Washington, D.C.

80