

OTCO Compliance Workshop
Ohio EPA Update
October 26, 2015

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Division of Drinking and Ground Waters



Overview

- Rules Update
- Compliance Initiatives
- Capability/Asset Management
- Needs Survey
- Loans/Grants

Revised Total Coliform Rule (RTCR)

- Rule has large impacts to Non-Community Water systems
 - Seasonal systems especially
- Triggers require assessments
- Submission period shortened for repeat samples
- Effective April 1, 2016
 - Interested Party Review in March 2015
 - One comment received
 - Addressing questions Region V of U.S. EPA has with Ohio EPAs draft revisions and revised rules accordingly
 - Preparing to hold second round of interested party review

RTCR BACKGROUND

- *Why Change It?*
- U.S. EPA issued RTCR in Feb. 2013
 - April 1, 2016 – Effective Date
 - Goal: Improve public health protection by reducing fecal pathogens to minimal levels by controlling TC bacteria, especially E. coli

RTCR Major Features

- Applies to ALL public water systems
- Reduces emphasis on TC+ as health risk
- Uses a “Find and Fix Approach”
- Integrating with the GW Rule

RTCR Major Features

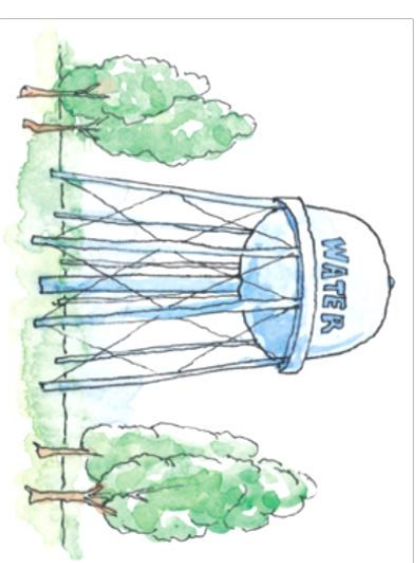
- Small Changes for Big Systems
- Big Changes for Small and Seasonal Systems
- MCL for Monthly Total Coliform Eliminated
- New MCL for *E. coli*
- Treatment Technique - Level 1 or Level 2 Assessments

RTCR Components

1. Sample Siting Plan – greater emphasis
2. Analytical Methods – E. coli is only fecal indicator
3. Monitoring
 - Routine changes mostly affect small systems
 - Repeat changes affect all
4. Treatment Techniques
 - Assessments
 - Corrective actions
5. Violations

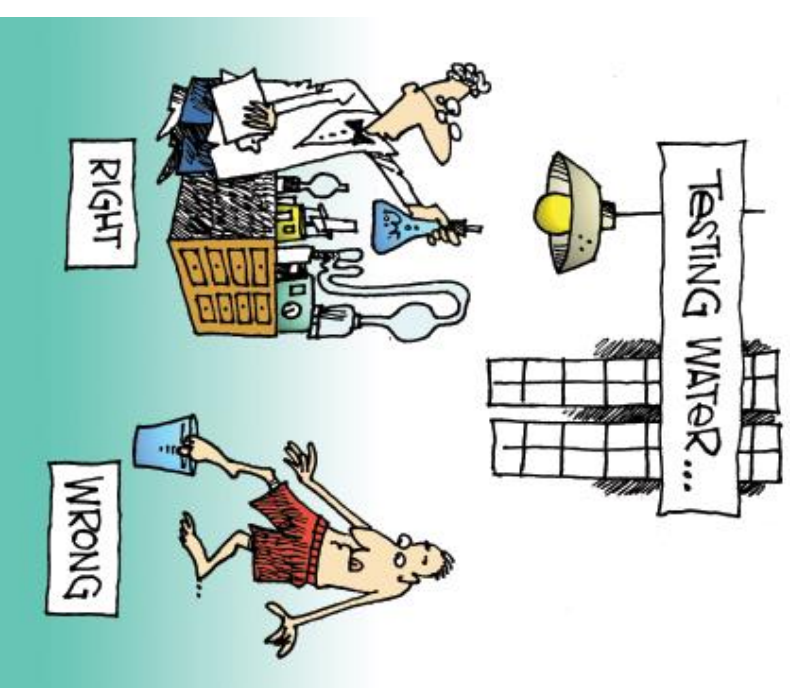
Sample Siting Plans

- SSP must be updated to meet RTCR by **3/31/16**
- Must specify locations and numbers for routine and repeat locations
- May identify dedicated repeat sampling stations or locations according to SOP
- Ohio EPA must review and approve plans for small systems



RTCR Analytical Methods

- Minor changes & updates
- Keep samples at 10° C – Recommended
- *E. coli* is the only fecal indicator



RTCR Routine Monitoring

- Large Community PWS
 - Routine monitoring is unchanged
- Small Community PWS (pop <1001)
 - One sample per month - also unchanged



RTCR Routine Monitoring

Small Noncommunity PWS Using Ground Water (pop <1001)

- Baseline will remain 1 sample per quarter
- Temporary increase in month following TC+: **3 instead of 5**
- Triggered monthly monitoring

RTCR Routine Monitoring

Small Noncommunity PWS (continued)

- **Returning to Quarterly monitoring**
 - ✓ 12 months of clean compliance history
 - ✓ Inspection w/in past 12 months
 - ✓ no significant deficiencies
 - ✓ protected water source
 - ✓ valid LTO
 - ✓ no other acute health risk violations

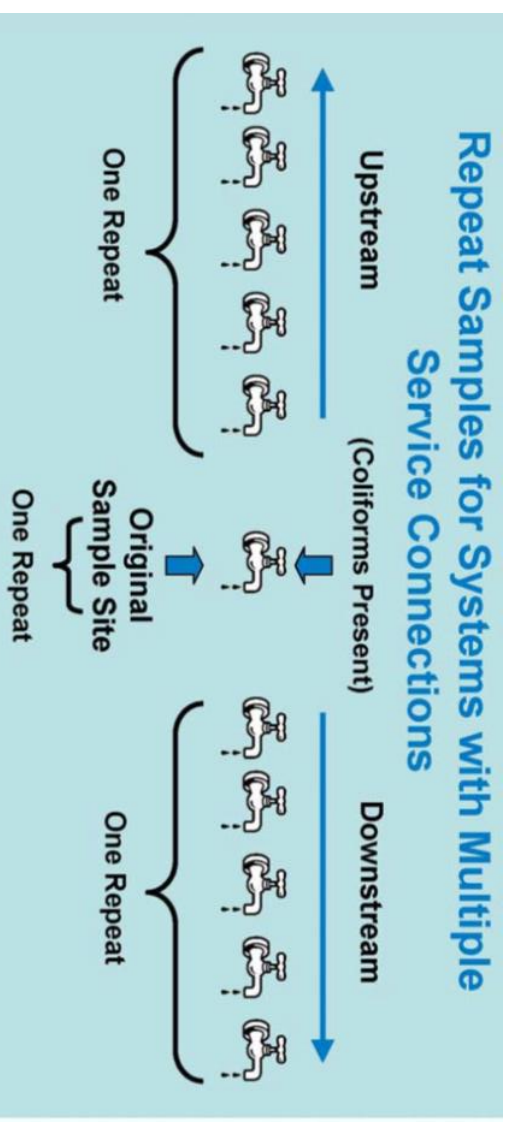
RTCR - Seasonal Systems

Systems that have distinct seasonal fluctuations in operations and all or most of it shuts down for part of the year.

- **TC sample - 1 per month during season**
- **1 per quarter in off season when part of system is still in use**
- **Start-up procedure and report including TC sampling**

RTCR Repeat Monitoring

- **3 instead of 4**
- Additional sets of repeats
- *E. coli* is sole fecal indicator
- Failure to take all is **NOT** a monitoring viol. **BUT** does trigger action
- Consecutive GW Systems must notify supplier



RTCR Level 1 Assessments

- Treatment Technique Triggers
 - > 5.0% TC+ for PWS taking 40 or more samples/mo
 - 2 or more TC+ for PWS taking <40 samples/mo
 - Failure to take all repeat samples
- It is **NOT** a violation - no Public Notice
- Goal – ID problems w/ sampling and cause of TC+

RTCR Level 1 Assessments

Requirements

- Done by the PWS – Ohio EPA will assist by phone
- 30 day turnaround
- Failure to complete is TT violation

RTCR Level 1 Assessments

- Scope
 - Primarily a desk top review
- Required elements
 - Inadequacies in sampling sites, protocol or processing
 - Review of unusual events that may have affected water distributed
 - For seasonal PWS were there any issues during start-up?
 - Changes in distribution system O&M
 - Source and treatment issues

RTCR Level 2 Assessments

- Triggers
 - An E. coli MCL, or
 - A second L1 Assess within 12 months
- Goal – ID significant deficiencies and cause of EC+
- Requirements
 - By a state approved person – Ohio EPA expects to do them
 - Required elements – same as L1 but more detailed
 - 30 day turnaround
 - Failure to complete is TT violation

RTCR Corrective Action

- L1 and L2 Assessment reports, if possible, are to identify cause of TC+ or EC+ samples
- Eliminate causes of TC+ or EC+ samples
- Must be completed within 30 days or an agreed-upon schedule
- Not completing assessment or corrective action is a TT violation
 - requires Tier 2 public notification

RTCR Violations

- *E. coli* MCL violation

ROUTINE	REPEAT
EC+	TC+
EC+	Any missing sample
TC+	EC+
TC+	TC+ - <u>but no E. coli analysis</u>

- Treatment technique violations

- Not submitting L1 or L2 Assessment on time
- Not completing corrective actions on time
- Seasonal system not doing start-up procedure



RTCR Violations

- **Monitoring violations - only 2**
 - Failure to take routine total coliform sample
 - Failure to analyze for E. coli following a TC+ routine sample
- **Reporting violations - new ones**
 - Failing to submit an Assessment form on time
 - Failure by a seasonal PWS to submit documentation that required start-up procedure was completed

RTCR Wrap-Up

- New approach moves away from “sampling until it goes away” to finding the cause of TC+ and E. coli+ samples.
- Prepare to respond promptly to TC+
 - make sure sample bottles are available and collection can be done quickly after notification
- Follow through on any TT requirements
- Communicate!

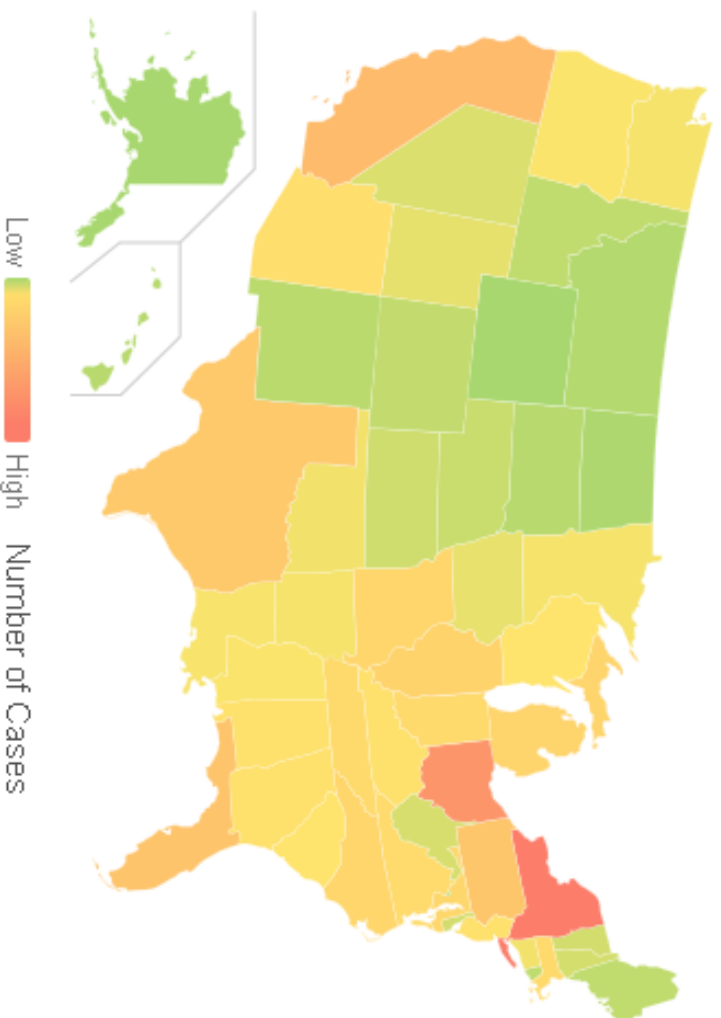
Legionella Control

- One of the biggest public health concerns
- Many outbreaks and deaths
- VA Directive 1061
 - Requires a water management plan
- USEPA Draft – Technologies for Legionella Control: Scientific Literature Review
- Treatment = regulated consecutive system

Legionnaires' Cases

Legionnaires' Disease Cases in 2015

5



Raw count of Legionnaires' Disease as of August 31, 2015, as reported to the CDC. Legionnaires' Disease is a nationally notifiable disease, meaning that any cases must be reported to the local public health department, which in turn will report it to the CDC.

LCR Long Term Revisions

- Proactive TOTAL lead line replacement
- Stronger Public Education
- Improve Corrosion Control Treatment
- Establish a Household Action Level
- Separate Requirements for Copper

Revisions to Plan Approval, Backflow Prevention & Consumer Confidence Report (CCR) Rules

- Will be effective October 26, 2015
- Backflow prevention and cross-connection rules (Chapter 3745-95)
 - Revised backflow manual
 - More clearly define requirements for conducting surveys and investigations to assess potential risks for cross-connections
- Plan Approval rule 3745-91-12
 - Added provisions for self-certification
- CCR rules 3745-96-01 and 3745-96-04
 - Defined PWS satellite system, and added condominium complexes to list of facilities for delivery of CCRs

Well Standards & Plan Approval

Well Standard Amendments (Chapter 3745-9) & Plan Approval Rules (Chapter 3745-91)

- Well Standards
 - Worked with industry stakeholders and Ohio Department of Health during rule drafting process
 - Working on policy for conditions under which a variance may be granted
- Plan Approval – general plan approval; Greenbook and 10 States
- Interested party review in September 2014
 - Received several comments and discussed with stakeholders
 - Made several revisions to rules which reflect comments
- Second round of interested party review, Oct. 14 – Oct. 28, 2015
- Next step is to file rules with JCARR

Operational Requirements & Operator Certification

- Operational Requirements (3745-83-01)
 - Non-community PWSs opting to chlorinate as a disinfectant but are not required to must meet the minimum chlorine residual requirements
 - Record maintenance of monthly operational reports (MORs) for ten years, except for lead and copper which is twelve years
 - Add requirement for MORs to be signed by the operator of record
 - Require facilities and equipment operate as intended
 - Updated AWWA standard C651 to 2014 version

Operational Requirements & Operator Certification

- Operator Certification (3745-7-01 and 3745-7-03)
 - Clarified a few definitions
 - Clarified classification of PWSs serving less than 250 people treating for nitrate or 4-log virus inactivation and removal
 - Added provision to include fluoride monitoring as one of the parameters for a reduction in minimum staffing requirements
- Interested party review in May 2015
 - Received a couple of comments on operator certification rules and revised rules to address these.
- Preparing to file rules with JCARR – November

Harmful Algal Bloom (HAB) Rules

- Establish Microcystins Action Level (based on USEPA Health Advisories)
- Monitoring Requirements for Surface Water Systems
 - Weekly Cyanobacteria Screening & Microcystins Monitoring
 - Increased Monitoring Based on Elevated Source Concentrations (>5 ug/L) or Finished Water Detections

Treatment Technique Requirements – Treatment Optimization Protocols

- Required if microcystins are detected in raw or finished drinking water in samples
 - Detected between 7/16/15 and effective date of rule, submit within 30 thirty days of the effective date of the rule
 - Detected after effective date of rule, submit within 30 days of detection (unless previously required)
- Describe treatment adjustments that will be made under various raw and finished water conditions
- Review and optimize existing treatment for microcystins
 - avoid lysing cyanobacterial cells
 - optimize removal of intact cells
 - optimize barriers for extracellular cyanotoxin removal or destruction
 - optimize sludge removal
 - discontinue or minimize backwash recycling

Treatment Technique Requirement – Cyanotoxin General Plan

- Required if microcystins exceed 1.6 µg/L in raw water, or are detected in finished drinking water
- Within 120 days, submit general plan and implementation schedule for approval
 - \$150 fee for general plan
- Implement in accordance with approved schedule
- Include one or a combination of source water protection activities, reservoir management and in-plant treatment technologies
 - May document existing treatment is sufficient for cyanotoxin destruction or removal
 - Gives the PWS time to assess all its treatment objectives

Harmful Algal Bloom (HAB) Rules

- Public Notification Requirements
 - monitoring/reporting violations
 - treatment technique violations
 - action level exceedances
- Requirements for Laboratory Certification, Analytical Techniques, and Reporting Deadlines
- Recordkeeping Requirements
- Rulemaking timeline
 - Comments on draft rules due by Friday, October 23
 - Goal: finalize by June 2016

Contingency Plans

- Contingency Plans required updated at Surface Water Systems determined susceptible to HABs
 - Under existing authorities
 - Reaching out to Satellites of Susceptible Systems
- Rule Revisions (Rule 3745-85-01)
 - Revisions to contingency plan rules to be more protective of public health
 - May consider requiring limited-scope contingency plan for noncommunity PWSs
 - Early stakeholder outreach (ESO) in May 2015
 - Draft out for interested party review soon

Environmental Rules

Get Involved Early, Have a Say

- Early stakeholder outreach is the first step in Ohio EPA's rule-making process.
 - Provide feedback as early as possible when Ohio EPA needs to amend, rescind or create rules
- **Why comment so early in the process?**
 - Early stakeholder outreach phase is the only opportunity to shape the direction of rules before staff begin drafting language
 - Ohio EPA can consider different concepts and ensure our rule development takes into account the effects the rules will have when you share comments early in process

Sign up for rule notification emails

ohioepa.custhelp.com/ci/documents/detail/2/subscriptionpage

Capability and Asset Management

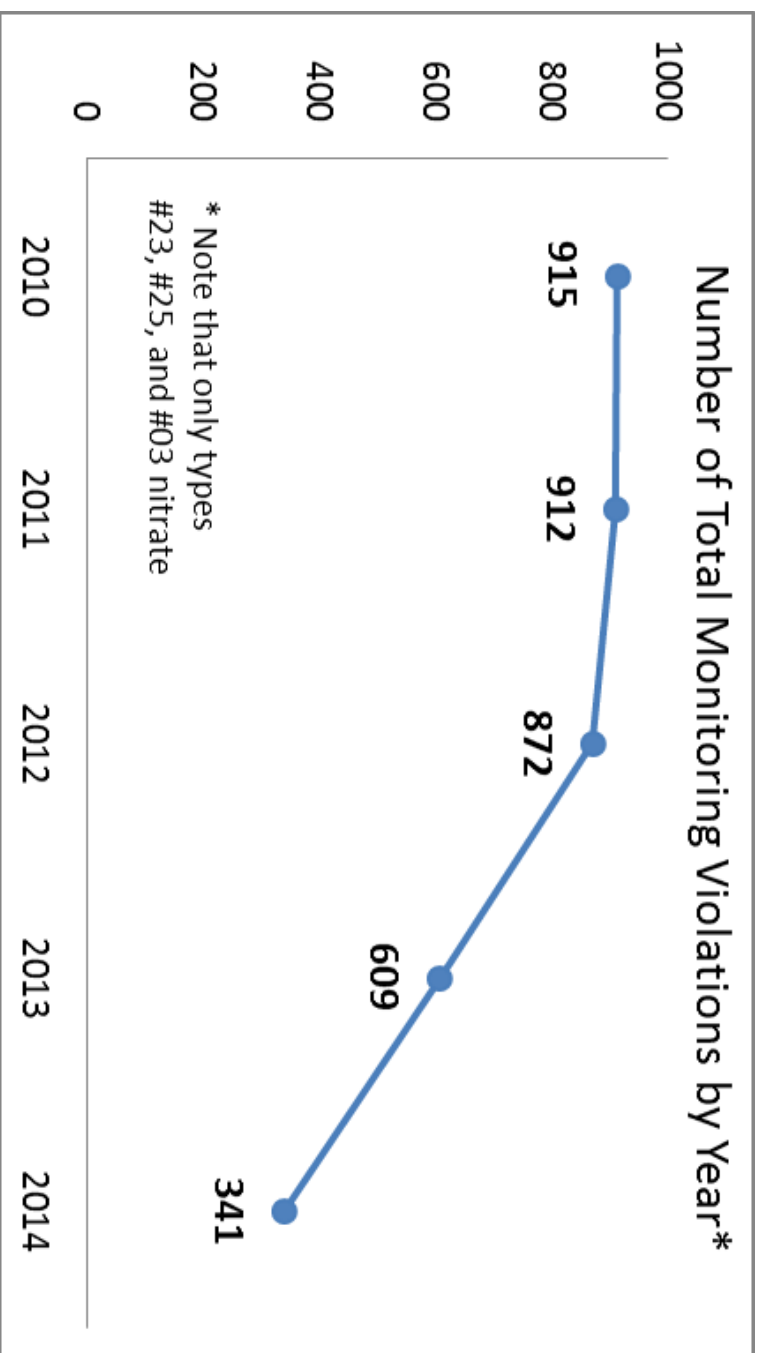
- More than just compliance
- Managerial and Financial capability
- Asset Management
 - Inventory and evaluation of assets
 - Operation and maintenance programs
 - Contingency Planning
 - Criteria and timelines for infrastructure re-hab/rplcmt
 - Approved Capacity projections and CIP
 - Long term funding for asset management
- Screening tool

Save a Dime, Sample on Time!

- Increasing Monitoring and Reporting Compliance for Total Coliform and Nitrate
- Compliance Assistance Efforts
- New approach to deter violations
- Makes it financially beneficial to collect all required samples
 - Samples cost ~\$20-\$25 each
 - Penalty will be at least \$150 for *each* TC or nitrate monitoring violation

Save a Dime, Sample on Time!

- # Violations



New Initiatives

- Annual Compliance Review
 - Comprehensive five-year review of all PWSs
 - Determines unaddressed and/or repeated violations, and PWSs in and out of compliance
 - Includes state and federal violations
 - Look at all operators of record associated with each PWS
 - Work with districts to identify compliance path, including our normal enforcement process.

Lab Oversight Update

- Assessing reporting compliance for laboratories
- Began issuing routine Notices of Violation to laboratories for reporting violations in 3rd quarter 2013
 - Significant decrease in the number of late sample reports
- May result in further enforcement

Needs Survey

- Please help Ohio get the \$\$ it deserves!
- Needs Survey is used to determine what share (%) of the State Revolving Loan award the state gets
- Using the same systems from last Needs Survey with a few substitutions
- First 1/3 submitted by 8/31/15
- Second 1/3 by 11/30/15
- All by 2/29/16 with no modification time

HAB Loan Program

- Additional \$50 million in 0% interest for 20 years, to address HAB issues at surface water treatment plants
- PY15 \$50 million accepted projects are being grandfathered into PY16, must proceed to award by March 1, 2016

Eligible Projects

- Treatment processes to address toxins produced from HABs
- Projects that implement avoidance strategies such as interconnections with other water supplies
- New elevated storage facilities
- Installation of alternative sources of raw water
- Ohio EPA will be accepting nominations for projects until the fund has been fully allocated

Examples of Projects Received

- Improved raw water sources
- Development of groundwater sources
- Enhancement of surface water treatment (Ozone, PAC, Potassium Permanganate)
- Emergency interconnections
- Additional finished water storage

Cyanotoxin Testing Equipment Grant

- Ohio public water systems that utilize a surface water source are eligible to apply.
- Equipment obtained under the grant must be for the sampling and analysis of cyanotoxins.
- Satellite distribution systems are not eligible for these grants.
- Maximum of \$30,000 per public water system
- No match required

Questions?

Thank you

Contact

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