



2014 Revisions to §19-13-B102 of the Regulations of Connecticut State Agencies

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New Regulations

RCSA Sec 19-13-B102 - Standards For Quality Of Public Drinking Water

- Updated to include:
 - Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
 - Stage 2 Disinfectants & Disinfectant By-Products Rule (Stage2)
 - Ground Water Rule (GWR)
 - Lead and Copper Rule Short Term Revisions (LCR)
 - Miscellaneous corrections and changes
- Received LRRC approval on 1/7/2014
- Published and effective on 1/14/2014



Notable Miscellaneous Changes

- RCOSA 19-13-B102(a)(115)
 - Tier 2 notice redefined – eliminates public notice for “physical parameters”: color, odor, turbidity and pH
- RCOSA 19-13-B102(c)(2)
 - Additional testing for all ground water sources with “reasonable grounds” for contamination
- RCOSA 19-13-B102(e)(7)(M)
 - Eliminated the requirement to maintain a free chlorine residual of 0.2 mg/L where water is chlorinated. Daily monitoring is still required.



Notable Miscellaneous Changes

- RCSA 19-13-B102(n)
 - Meters are required at all sources of water supply at all system types
- RCSA 19-13-B102(t) (New!)
 - Department approvals
- RCSA 19-13-B102(u) (New!)
 - System responsibilities – person or entity that owns or controls the system is responsible for B102 compliance
- RCSA 19-13-B102(v) (New!)
 - Sampling Taps are required for all sources of supply at all systems



Ground Water Rule Review

Source Water Monitoring

- Triggered Monitoring
- Assessment Monitoring
- Confirmation Monitoring
- Source Water Fecal Indicator Monitoring Plan

Treatment Technique Compliance Monitoring

- Minimum Residual Disinfectant Concentration
- As directed by the Department



Ground Water Rule Review

Triggered Monitoring

(RCSA 19-13-B102(e)(12)(C)(ii))

- Routine TC+ TCR samples “trigger” source water monitoring
- Triggered samples must be collected within 24 hours
- Triggered samples must be collected at each well in operation at the time of the TCR TC+ sample
- Representative monitoring plan advised
- **Do NOT disinfect until you are sure that no additional monitoring will be required!**



Ground Water Rule Review

Confirmation Monitoring

(RCSA 19-13-B102(e)(12)(C)(iii))

- Following E. Coli+ triggered or assessment sample
 - Collect 5 Confirmation (CO) samples within 24 hours of notification (*unless immediate corrective action by DWS*)
 - Tier 1 PN within 24 hours of notification
- **If** any of the 5 CO samples are E. Coli+,
 - Additional PN to be posted within 24 hours; and,
 - A 120 day compliance period for Corrective Action goes into effect.
 - Consultation with the DWS is necessary within 30 days.
- Failure to collect confirmation samples results in immediate 120 day Corrective Action requirement



Ground Water Rule (New)

Assessment Monitoring

(RCSA 19-13-B102(e)(12)(D))

- Source does not meet the separating distances from sources of pollution
- Source is currently disinfected but not 4-log approved
- Two or more TCR MCL violations in a 12-month period
- Source is determined to be susceptible to contamination by microbial pathogens based on an HSA
- All 5 confirmation samples are Fecal Indicator Negative
- Discontinuance/removal of 4-log approved treatment
- Source schedule will be at the same frequency of the routine TCR monitoring schedule



Ground Water Rule (New)

Source Water Fecal Indicator Monitoring Plan (RCSA 19-13-B102(e)(12)(I))

- Alternative to assessment monitoring for sources currently disinfected but not 4-log approved
- Plan Includes:
 - location, sampling technique and protocols, and frequency of sampling, the methodology used for the analysis of the samples collected, and the format and timing of the ground water system's submission of sampling results
- Reporting form will be available
- Systems will be notified to submit a plan
- Failure to submit a plan results in Assessment Monitoring



Ground Water Rule (New)

Significant Deficiencies (RCSA 19-13-B102(a)(104)

- Definition has been changed
- Any situation, practice, or condition in a public water system with respect to design, operation, maintenance, or administration that the department determines to be causing, or has the potential for causing, risks to health or safety of the public served by the system
- Typically, but not always, identified during a sanitary survey
- Guidance Document will be available



Ground Water Rule (New)

Corrective Action

Upon notification of an E. Coli+ source samples or a **significant deficiency**, PWS must either:

- Complete corrective action within 120 days (30 day consultation period); **OR**
- Be in compliance with a DWS approved corrective action plan.
- Failure to comply results in a Treatment Technique Violation and Public Notification Requirement
- Public notice must be completed annually if not corrective action is not completed



Ground Water Rule

What is a Corrective Action?

- Correct all significant violations
- Eliminate the source of contamination,
- Provide an alternate source of water, or
- Provide treatment which reliably achieves 99.99 percent (4-log) inactivation or removal of viruses.



Lead and Copper Rule

💧 Short-Term Revisions

- 💧 Allowance to reduce number of sampling sites (RCSA 19-13-B102(e)(8)(C)(ii))
- 💧 Clarified “end of the monitoring period” trigger date: September 30 for annual or less frequent
- 💧 Return to standard monitoring after an ALE
- 💧 Additions to Lead Public Education content and delivery requirements (RCSA 19-13-B102(i)(6))
- 💧 **Consumer Notification within 30 days of sample collection (RCSA 19-13-B102(i)(6)(C))**
- 💧 **Certification of Consumer Notification due to DPH within three months (RCSA 19-13-B102(h)(5)(F)(ii))**



Stage 2 Disinfectant and Disinfection Byproducts Rule

- 💧 RCSA 19-13-B102(e)(11) - Revised
- 💧 Effective January 4, 2006
- 💧 Applies to all CWS and NTNC that deliver water treated with a primary disinfectant (not UV)
- 💧 Maximum Contaminant Levels have not changed
 - 💧 TTHM MCL = 0.080 mg/L
 - 💧 HAA5 MCL = 0.060 mg/L
- 💧 **Compliance is based on a Locational Running Annual Average (LRAA)**
- 💧 Schedules, Fact Sheets, Forms and links to additional information and guidance documents are available on the DWS website



Stage 2 Disinfectant and Disinfection Byproducts Rule

Compliance Monitoring for the Stage 2 DBP Rule

Schedule 1	Public water systems serving at least 100,000 people or part of a combined distribution system serving at least 100,000 people	Compliance Monitoring Begins: April 1, 2012
Schedule 2	Public water systems serving 50,000 to 99,999 people or part of a combined distribution system serving 50,000 to 99,999 people	Compliance Monitoring Begins: October 1, 2012
Schedule 3	Public water systems serving 10,000 to 49,000 people or part of a combined distribution system serving 10,000 to 49,999 people	Compliance Monitoring Begins: October 1, 2013
Schedule 4	Public water systems serving less than 10,000 people or part of a combined distribution system serving less than 10,000 people	Compliance Monitoring Begins: October 1, 2013



Stage 2 Disinfectant and Disinfection Byproducts Rule

Compliance Monitoring Plans

RCSA19-13-B102(e)(11)(A)(VI)

- 💧 Required for all systems
- 💧 Plan will be reviewed and approved by the DWS
- 💧 Plans must be followed exactly as approved
 - 💧 Sampling locations
 - 💧 Sampling Frequencies
 - 💧 Sampling Date Range
- 💧 Any changes to the plan must receive approval from the DWS
- 💧 Compliance Monitoring Plan Forms and Instructions are available on the DWS Website



Stage 2 Disinfectant and Disinfection Byproducts Rule

Operational Evaluation Levels

RCSA19-13-B102(e)(11)(C)(vii)

- 💧 Pre-compliance calculation at each sampling location conducted quarterly after 3 quarters of monitoring
- 💧 Sum of the 2 previous quarterly results plus twice the current quarter's result, divided by 4
- 💧 Compare OEL to MCL
- 💧 Exceedance requires an OEL report to be submitted to the DWS within 90 days of being notified of the result
- 💧 OEL Exceedance Reporting form has been developed and will be on the DWS website soon



Long Term 2 Surface Water Treatment Rule

Enhanced treatment for Cryptosporidium (RCSA 19-13-B102(e)(7)(T))

- Applies to all Subpart H Systems (RCSA 19-13-B102(a)(110))
- Second round of source water sampling starts next year
- Grandfathering of data is not allowed
- PWS must submit a sampling schedule and receive approval prior to monitoring (RCSA 19-13-B102(e)(7)(T)(iii))
 - Sampling calendar dates
 - Sampling locations
 - Forms are available



Consumer Confidence Report

- 💧 Reminder for 2014 - Electronic Delivery is Allowed!
 - 💧 January 3, 2013 EPA memo clarified delivery requirements to allow for electronic means to “mail or otherwise directly deliver”
 - 💧 DPH supported the clarification (Circular letter #2013-01)
 - 💧 Paper copies required when requested or if customer cannot receive CCR electronically
 - 💧 3 electronic delivery options to customers:
 - 💧 Include a URL in an email that directly links to the CCR
 - 💧 Include the CCR as an attachment to the email
 - 💧 Include the CCR text and tables in the body of the email
 - 💧 CCR can be sent electronically to the DWS by July 1 each year
CCRCoordinator.DPH@ct.gov



Revised Total Coliform Rule

- 💧 Final RTCR published in Federal Register on February 13, 2013
 - 💧 New requirements beginning April 1, 2016
 - 💧 Eliminated the MCL for total coliforms
 - 💧 Establishes an MCL for *E. coli*
 - 💧 Defines a “Sanitary Defect”
 - 💧 Establishes Treatment Technique requirements
 - 💧 Level 1 and Level 2 Assessments
 - 💧 Allowances for increased and reduced monitoring
 - 💧 Monitoring schedules will remain the same
 - 💧 New Sample Siting Plans required before 3/31/2016
 - 💧 Start-up procedures required for seasonal systems

Water Quality Monitoring Schedules

- 💧 Provided by the DWS as a courtesy to assist owners and operators of Public Water Systems in maintaining compliance
- 💧 Updated and posted on the website twice monthly
- 💧 Schedules divided into the following sections
 - Water Quality Monitoring Requirements
 - Water System Facility Level Monitoring Requirements and Reporting History
 - Monthly Compliance Reminders
 - Water System Facility Information
 - Sampling Point Inventory
 - Operator Certification
 - Public Notification Requirements
 - Contact Information
 - 💧 **Other Compliance Schedules**



Helpful Information

- 💧 DPH website: www.ct.gov/dph
- 💧 DWS website: www.ct.gov/dph/publicdrinkingwater
- 💧 DWS Phone: (860) 509-7333 (during business hours: M-F 8:30 am – 4:30 pm)
- 💧 DPH Main/Emergency phone: (860) 509-8000 (outside of business hours)
- 💧 US EPA website: <http://water.epa.gov/drink/index.cfm>
- 💧 EPA Small system info (including STEP, Quick Reference, Best Practices guides, & CUPSS): <http://water.epa.gov/type/drink/pws/smallsystems/index.cfm>



Thanks for Listening! Questions??

Connecticut Department of Public Health Website:
<http://www.ct.gov/dph/publicdrinkingwater>

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