



Connecticut Department of Public Health *Drinking Water Section*

RTCR, Regulatory Requirements & New Initiatives

ATCAVE 2015

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Drinking Water Section



CT DPH Drinking Water Section Responsibilities

- Responsible for Adequacy and Purity of Public Drinking Water Statewide
- Regulate over 2,500 Public Water Systems with 4,400 sources
- 2.8 million CT residents served – 3.5 million total population
- 96 systems serve over 1,000 people
- 460 systems serve under 1,000 people - small community systems; 332 not owned by larger water companies
- 2,000 non-community systems

Drinking Water Section

- Primacy of Safe Drinking Water Act - EPA
 - system engineering surveys
 - treatment/source review & approval
 - Drinking Water State Revolving Loan Fund
 - drinking water quality – oversight of monitoring and reporting
 - ground water rule
 - revised total coliform rule
- State Statutory
 - purity and adequacy of public drinking water
 - water company land regulation
 - recreation permitting, sale of excess water, certified operators, enforcement, source water protection
 - water supply planning and regional planning (WUCC)

Regulatory Process

- Commissioner Approval
- OPM Approval
- Governor Approval
- Publish NOI in CT Law Journal
- Allow for 30 days public comments
- Redraft & send to AG for formal review
- After AG approval, send to LRRC
- If approved, send to Sec. of State
- Publish approved Regs in CT Law Journal



RTCR

- Draft Regulation at Gov. Office
- Held informational session in June 2014
- Increase Public Health Protection
- Establish a “find & fix” approach
- Effective Date: April 01, 2016

RTCR – KEY CHANGES

- Physical Parameters are non-enforceable goals
- Retain the same monitoring frequency at the time (i.e. Monthly or Quarterly)
- Sampling plan must include repeat sites if not within 5 service connections
- Special monitoring evaluation by State
- Start-up procedures for Seasonal Systems
- Level 1 and 2 Assessments
- Treatment Technique Violations

RTCR – Level 1 Assessment

- Level 1 Assessment is triggered if:
 - <40 samples with 2 or more TC+ routine/repeat
 - 40 or more samples with more than 5% TC+ R/R
 - Failed to take every required repeat sample
- Performed by System owner or operator
- Submitted within 30 days of trigger
- Defects corrected within 30 days or per State approved correction plan



RTCR- Level 2 Assessment

- Level 2 Assessment is triggered if:
 - E.coli MCL Violation
 - Has a 2nd level 1 assessment within 12 month
- Performed by a trained certified operator or a PE not currently employed by the system, or by the DPH
- Submitted within 30 days of trigger
- Defects corrected within 30 days or per State approved correction plan

RTCR- VIOLATIONS

- E. coli MCL Violation when:
 - Routine EC+ & Repeat TC+
 - Routine EC+ & any missing repeat
 - Routine EC+ & Repeat EC+
 - Routine TC+ & Repeat EC+
 - Routine TC+ & Repeat TC+ (*but no E.coli analysis*)
- Treatment Technique Violation when:
 - Failure to conduct level 1 or level 2 assessment within 30 days
 - Failure to correct defects within 30 days or per State approved plan
 - Failure of seasonal system to complete start up procedures



Public Act 14-178 – Bulk Water Hauler License

- Hauler delivering water to PWS must be licensed by DPH
- Application is available on DPH/DWS webpage
http://www.ct.gov/dph/lib/dph/drinking_water/pdf/DWS_Circular_2015-03.pdf
- Circular letter sent on 01/29/2015
- Guidelines & notification form on webpage



Generator and emergency contingency and response plan

- Proposed new Section 19-13-B102(w)
- At AG for formal review
- Applicable to CWSs only
- Gen. to be provided or made available at critical facilities
- Comply in 3 yrs for CWSs <10,000 from effective date
- Use of propane or natural gas w/allowances for Liq. Fuel
- Alternative source of backup power is allowed w/DPH approval
- File info on existing Gen. within 8 months of effective date
- CWSs <1000 to prepare & make available emergency contingency & response plan within 8 months of effective date



Emergency Notification Per RCSA 19-13-B46

- Whenever the security of the public water system is threatened,
- Whenever suspicious activities are observed on or near water company land,
- Whenever the treatment of the public water supply is interrupted or
- Whenever the source of water supply is damaged so as to impair the quality or the sufficiency of the supply, including in this case the main transmission line.



Emergency Notification

it's strongly recommended that the Department be notified when:

- i) Water service interruption impacts known critical health care facilities (primarily hospitals & convalescent homes) or
- ii) Public water system can't maintain a detectable free chlorine residual in the water feeding the area impacted by the water service interruption.

*Use guidance document found at:

http://www.ct.gov/dph/LIB/dph/drinking_water/pdf/MainRepairRecProc.pdf

*Use notification form found at:

http://www.ct.gov/dph/cwp/view.asp?a=3139&q=387316&dphNav=|&dphNav_GID=1824#Public_Water_System_Notification_Form



Emergency Notification

- Call 860-509-7333 during normal business hours
- Call 860-509-8000 after hours
- Be direct & concise in the information relayed
- Make direct phone contact with a DPH Representative (emails, voicemails & faxes are not acceptable substitute)
- Complete notification form & submit by the next business day
- See circular letter at http://www.ct.gov/dph/lib/dph/drinking_water/pdf/2013_02.pdf



Regulatory Requirements (*to be aware of*)

- 19-13-B102(f)(5)(C) - All atmospheric finished water storage tanks, basins and clearwells shall be inspected at a minimum of once every ten years for sanitary conditions and structural integrity.
- 19-13-B102(f)(6) – Annual distribution flushing program for each PWS shall be conducted, and made available to DPH upon request
- 19-13-B102(l)(1)(E) – Accurate & up-to-date maps filed with DPH & updated every 5 years.
- 19-13-B102(o) – Prepare a plan relating safe yield & available water to existing & projected demands, and update on a regular basis.



Regulatory Requirements

- 19-13-B102(q) – Essential valves shall be maintained in operating condition.
- 19-13-B102(r) – CWSs to notify consumers annually of an emergency contact & phone number. Make a crew available to deal with emergencies. Have available sufficient spare parts & disinfectant equipment. Report annually by 1/1 to DPH.
- 19-13-B102(s) – A program to reduce the amount of water that cannot be accounted for, shall be established & filed with DPH.



Critical Facilities List

- Thank you for your assistance & attendance at our June 2014 meeting
- Request to large community systems serving over 1,000 people
- Thank you for your response
- List forwarded through DPH Commissioner's Office to DEMHS
- Some information remains incomplete, DWS to reach out to those systems for further information
- Important to keep up to date



Program Announcement:

CT DPH to Issue

Training Contact Hours (TCHs)

Intent: to Strengthen Operators as Stakeholders for the Systems they Operate by Promoting the Operators Involvement in Assessment Projects or Optimization Activities

Conditions to Issue TCHs:

- Will run on a pilot basis,
- Applies to Certified Class 3 and 4 Water Treatment Plant (WTP) Operators of Surface WTPs,
- Operator must have direct involvement in the Assessment Project or Optimization Activities,
- TCH Certificate Granted through an application process,
- As many as 10 TCHs granted for Assessment Projects,
- As many as 15 TCHs granted for Optimization Activities,



CT DPH to award Training Contact Hours (TCHs) cont.

The intention of the Assessment Project or Optimization Activity must be towards:

- improving the performance of the operator's treatment plant,
and
- improving the operator's knowledge / understanding with the treatment plant operations

Not conducting routine or existing operational procedures

CT DPH to award Training Contact Hours (TCHs) cont.

ASSESSMENT PROJECTS – e.g.

- **pilot plant studies** – direct involvement in design, installation, data collection, process control, analysis, etc.,
- **evaluation of treatment plant processes control changes** - assessment of any of the water treatment plant's unit processes (filtration, disinfection, sludge handling, sedimentation, etc.) towards improving efficiency, performance and/or control, which may include associated equipment, instrumentation and monitoring equipment,
- **research/analysis** –journal or literature search, disinfection contact time analysis, etc.,
- **other:** evaluated on a case by case basis,

Not conducting routine or existing operational procedures



CT DPH to award Training Contact Hours (TCHs) cont.

OPTIMIZATION ACTIVITIES e.g.

- **water treatment plant optimization activities** - e.g. activities that reduce filter effluent turbidity levels:
 - Commitment to 1 year of data entry into **Optimization Assessment Spreadsheet** ("OAS" - e.g. recording of filter turbidity effluent levels),
 - OAS can be provided to systems upon request,
 - Presentation and software to be posted on DWS web page,

Not conducting routine or existing operational procedures



CT DPH to award Training Contact Hours (TCHs) cont.

- *The DWS will grant TCH certificates based on the merits / completeness of an initial application and associated final report.*

STEP 1. **Chief Certified WTP Operator & Superintendent** to file an initial application requesting TCHs be awarded to specific listed certified WTP operator(s) who will be directly involved with the Assessment Project or Optimization Activity,

STEP 2. DWS to evaluate/review of initial Application for TCHs for completeness and merit,

STEP 3. DWS to either grant conditional approval of TCHs, reject the application or request modification of initial application for TCHs (Final DWS award of TCHs is conditioned upon the certified WTP operator filing of final SWTPAP report),



CT DPH to award Training Contact Hours (TCHs) cont.

STEP 4. Certified WTP Operator(s) to carry out the Assessment Project or Optimization Activity based on initial application and conditional approval,

STEP 5. Certified WTP Operator to file a Final Report (lessons learned, outcomes, conclusions/findings, project log, collected data, photos, diagrams, reference list, chief operator attestation),

STEP 6. DWS to evaluate Final Report for completeness and merit and to compare the report against the initial application (item 1. above) and conditions of approval (item 3. above), this evaluation may include a site visit of the plant to meet and review the assessment project or optimization activities,

