

## Regulatory Reminders for Various Rules

Christopher D. Roy
Supervising Sanitary Engineer
Information Systems Unit
Drinking Water Section
Connecticut Department of Public Health



### **Ground Water Rule**

- Applies to all PWS that use groundwater sources
- Implementation agreement with EPA
- Triggered monitoring
  - GW Source sampling for E. coli within 24 hours of a Total Coliform Rule (TCR) positive sample
  - ♦ One GW sample per TCR positive per source "in use"
  - ♦ Consecutive system notification requirements
- Confirmation monitoring
  - ◆ 5 GW Source samples after an E. coli positive trigger
- Assessment monitoring
  - ♦ Coming soon!



### **Ground Water Rule**

- ◆ Tier 1 public notification within 24 hours
- Do <u>NOT</u> disinfect until Triggered and Confirmation samples (if required) are collected!
- Significant Deficiencies
  - ♦ Coming soon!
- PWS response to a GW source EC+ (TG or CO) or a Significant Deficiency
  - ◆ Consultation with DPH within 30 days
  - ◆ Corrective Action (CA) or CA Plan within 120 days
- ◆ Failure to perform corrective action = Tier 2 Treatment Technique Violation



### **Ground Water Rule**

STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH DRINKING WATER SECTION

#### WHAT TO DO IF COLIFORM BACTERIA ARE DETECTED IN A PWS

#### Purpose:

To provide public water systems (PWS) with a procedure to follow when Total Coliform Rule (TCR) or Ground Water Rule (GWR) sample results indicate the presence of total coliform bacteria, E. coll or other fecal indicators.

#### References:

Section 19-13-B102 of the Regulations of Connecticut State Agencies (RCSA) Code of Federal Regulations (CFR) Section 141.402

#### TCR Maximum Contaminant Level (MCL) Compliance:

The results of all routine and repeat samples not invalidated by the Drinking Water Section (DWS) shall be included in determining compliance with the MCL for total coliforms. The three criteria for invalidation of a total coliform positive sample by the Department are outlined in Section 19-13-B102(e)(7)(F) of the RCSA. Requests for invalidation of positive samples must be in writing.

#### Non-acute TCR MCL violation:

- For a PWS which collects fewer than 40 samples per month, if more than one sample collected during a month is total coliform positive, the PWS is in violation of the MCL for total coliforms.
- For a PWS which collects at least 40 samples per month, if more than 5 percent of the samples collected during a month are total coliform positive, the PWS is in violation of the MCL for total coliforms.

#### TCR MCL Violation Examples:

- For a PWS which normally collects one routine TCR sample per month or quarter, if that
  routine sample is total coliform positive AND any repeat sample is also total coliform
  positive, the PWS is in violation of the MCL for total coliforms.
- For a PWS which collects more than one routine TCR sample per month or quarter but fewer than 40 samples per month, if more than one routine sample or any repeat sample is total coliform positive, the PWS is in violation of the MCL for total coliforms.
- If a PWS collects 50 samples per month and any combination of 3 or more routine or repeat samples are total coliform positive, the PWS is in violation of the MCL for total coliforms.

### Acute (fecal coliforms or E. coli) TCR MCL violation:

 A PWS has an acute MCL violation for total coliforms if ANY repeat sample is fecal coliform or E. coli positive OR if a routine original fecal coliform or E. coli positive sample is followed by a total coliform positive repeat sample.

- What To Do If Coliform Bacteria Are Detected In A PWS

  - Available on DWS website

Rev. 8/04/2011 1 of 9



# Stage 2 Disinfectants & Disinfection By-Products Rule

- Applies to all CWS and NTNC that deliver water treated with a primary disinfectant (not UV)
- Implementation agreement with EPA
- Early Implementation tasks complete (IDSE)
- 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)
- Compliance Monitoring Plans are required



Schedule 1

# Stage 2 Disinfectants & Disinfection By-Products Rule

### **Compliance Monitoring for the Stage 2 DBP Rule**

Compliance Monitoring

Begins:

**Drinking Water Section** 

Public water systems serving at least

100,000 people or part of a combined

	people	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 or a combined distribution system serving less than 10,000 people	Compliance Monitoring Begins: October 1, 2013



# Stage 2 Disinfectants & Disinfection By-Products Rule

- Operational Evaluation Level (OEL)
  - Predictive calculation that indicates a location may be on a path to non-compliance
  - Operational Evaluation Levels must be calculated by the PWS each quarter for each sampling location
  - Operational Evaluation and a written report must be submitted to the Department within 90 days
  - ◆ The Operational Evaluation Level Guidance Manual is available on EPA's website at:

http://www.epa.gov/safewater/disinfection/stage2/pdfs/draft\_guide\_stage2\_operationalevaluation.pdf



# Stage 2 Disinfectants & Disinfection By-Products Rule

 OEL for both TTHM and HAA5 at each compliance monitoring location is calculated as:

$$[A + B + (2 \times C)] / 4 = D$$

### Where:

A = TTHM or HAA5 result for the quarter before the previous quarter (mg/L)

B = TTHM or HAA5 result for the previous quarter (mg/L)

C = TTHM or HAA5 result for the current quarter (mg/L)

D = Operational Evaluation Level (mg/L)

If D for TTHM is > 0.080 mg/L, you have an OEL Exceedance If D for HAA5 is > 0.060 mg/L, you have an OEL Exceedance



### **Lead and Copper Rule**

- Short-Term Revisions
  - Clarified "end of the monitoring period" trigger date
  - Changes to minimum number of samples required
  - Return to standard monitoring after an ALE
  - Additions to Lead Public Education content and delivery requirements
  - Consumer Notification within 30 days of sample collection
  - Certification of Consumer Notification due to DPH within three months
- ♦ Long-Term revisions in the works



# Unregulated Contaminant Monitoring Rule 3

- EPA Implementation
- Monitoring for 30 contaminates (28 chemicals and 2 viruses)
- Basis for future regulatory action
- ◆ All PWS serving > 10,000 (37)
- ♦ Selected PWS serving <= 10,000 (4)</p>
- ◆ 12 months of monitoring between 2013 and 2015
- ♦ October 1, 2012 Deadline to report contact info and/or revise sampling locations and schedules
- **♦** SDWARS



### SDWIS NextGen

What?

Safe Drinking Water Information System

Who?

EPA, EPA Contractors and State Program personnel

How?

Complete redesign using Agile System Development methodology

Where?

In the EPA Cloud

When?

September 2014



## **Reporting Changes**

- New version of SDWIS installed August 2012
- Informational packet to be sent to all data submitters soon
  - ♦ New sample type (TG) added
  - Additional reporting fields to link triggered, repeat and confirmation samples to original sample
  - Sample analysis methodology required
- XML format preferred
- Anticipated implementation by January 1, 2013
- ◆ DPH web installation of Lab-To-State???