

# Introduction to Drinking Water Standards Beyond the Basics

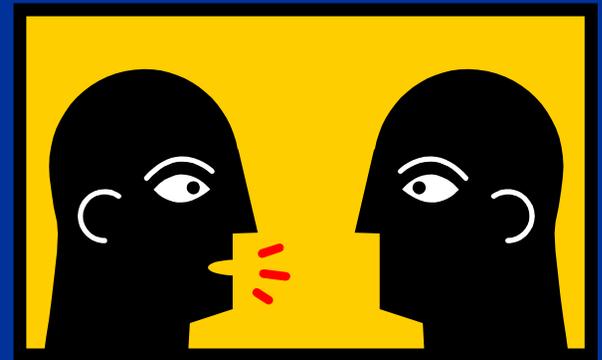
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Drinking Water Section

# Discussion Topics

- 🔥 Phase II/V Rules
- 🔥 Public Notification Rule
- 🔥 Consumer Confidence Reports
- 🔥 Stage 1 Disinfectant and Disinfection Byproducts Rule
- 🔥 Stage 2 Disinfectant and Disinfection Byproducts Rule



# Phase II/V Rules



- 🔥 **Purpose**: Protect Public Health by reducing exposure to various contaminants in drinking water.
- 🔥 **Compliance**: Compliance with maximum contaminant levels is based on a Running Annual Average (RAA) or a Monitoring Period Average (MPA).
- 🔥 **Applicability**: All Community and NTNC PWS. (Nitrate and Nitrite – All PWS)
- 🔥 **Benefits**: Varies by contaminant.

# Phase II/V Rules



Contaminant	Base Sampling Requirement		Reduced Sampling Requirement	
	Ground Water	Surface Water	Ground Water	Surface Water
Asbestos	Every 9 years	Every 9 years	N/A	N/A
Nitrate, Nitrite	Annually	Quarterly	N/A	Annually
Inorganic Chemicals	Every 3 years	Annually	N/A	N/A
Organic Chemicals	Quarterly	Quarterly	Annually*	Annually
Pesticides, Herbicides and PCBS	Quarterly	Quarterly	PWS serving > 3300, two quarters per year every 3 years PWS serving <= 3300, every 3 years	

- Monitoring is required at each active entry point to the distribution system

# Phase II/IV Rules



## Reduced Monitoring:

- 💧 Must be granted in writing by the DWS
- 💧 Is not automatic. When eligible, the PWS should contact the DWS by phone or in writing
- 💧 Many scenarios for eligibility. In general, a PWS may be eligible for reduced monitoring after 4 consecutive quarters of results less than the MCL
  - 💧 Refer to Section 19-13-B102(e)(7)(C) of the Regulations of Connecticut State Agencies for specifics
- 💧 Waivers must be requested in writing

# Phase II/V Rules



## Increased Monitoring:

- 💧 Quarterly monitoring is automatic beginning in the following quarter
  - 💧 A reminder letter is sent out by the DWS
- 💧 Nitrate and Nitrite:  $\geq 50\%$  of the MCL
- 💧 Inorganic Chemicals:  $> MCL$
- 💧 Organic Chemicals: Any detection  $> MRL$
- 💧 Pesticides, Herbicides and PCBs: Any detection

# Phase II/V Rules



## Confirmation Samples:

- ☛ Required within 24 hours for any Nitrate and Nitrite result that exceeds the MCL; OR
  - ☛ Immediately provide a public notification to the customers and collect a confirmation sample within 2 weeks
  - ☛ Notify the DWS immediately upon receiving any nitrate or nitrite results above the MCL to determine the appropriate course of action
- ☛ The DWS may require a confirmation sample within 2 weeks for any result that exceeds an MCL

# Phase II/V Rules



## Nitrate and Nitrite Compliance:

- 💧 Where nitrate and nitrite results exceed the MCL, the system shall take a confirmation sample within 24 hours
- 💧 Systems unable to comply with the 24-hour sampling requirement shall immediately provide a public notification to the customers and shall collect a confirmation sample within 2 weeks
- 💧 The results of the initial and confirmation samples will be averaged to determine compliance with the MCL
- 💧 Notify the DWS immediately upon receiving any nitrate or nitrite results above the MCL to determine the appropriate course of action



# Phase II/V Rules



## Phase II/V Rules Compliance:

- 💧 The results of all available results will be averaged to determine compliance with an MCL
- 💧 Compliance is based on a Running Annual Average (RAA) calculated quarterly, except Nitrate and Nitrite
- 💧 Nitrate and Nitrite compliance is based on a Monitoring Period Average (MPA)
- 💧 All MCL Violations must be reported to the DWS within forty-eight (48) hours the failure to comply with any established MCL

# Calculating Compliance

**Example:** A system begins monitoring and receives the following Benzene results (Benzene MCL = 0.005 mg/L) :

3Q2006: 0.015 mg/L

2Q2007: 0.006 mg/L

4Q2006: No detect

3Q2007: 0.005 mg/L

1Q2007: 0.006 mg/L

4Q2007: 0.007 mg/L

RAA for each quarter is calculated as follows:

3Q2006:  $0.015 / 4 = 0.00375$  mg/L

4Q2006:  $(0.015 + 0) / 4 = 0.00375$  mg/L

1Q2007:  $(0.015 + 0 + 0.006) / 4 = 0.00525$  mg/L (No MCL)

2Q2007:  $(0.015 + 0 + 0.006 + 0.005) / 4 = 0.0065$  mg/L

3Q2007:  $(0 + 0.006 + 0.005 + 0.007) / 4 = 0.0045$  mg/L

# Phase II/V Rules



## Public Notification (PN) Requirements:

- 🔴 Tier 1 Violation (PN within 24 hours)
  - 🔴 Nitrate and Nitrite MCL Violations (**Acute Risk**)
- 🟡 Tier 2 (PN within 30 days)
  - 🟡 All MCL Violations, except Nitrate and Nitrite
  - 🟡 Nitrate and Nitrite monitoring and reporting violations
- 🟡 Tier 3 (PN within 365 days)
  - 🟡 All monitoring and reporting violations, except Nitrate and Nitrite

# Public Notification Rule



- ◆ **Purpose**: To notify the public any time a water system violates drinking water regulations or has other situations posing a risk to public health.
- ◆ **Compliance**: Notices must be sent within 24 hours, 30 days, or one year depending on the tier to which the violation is assigned.
- ◆ **Applicability**: All Public Water Systems violating drinking water regulations, operating under a variance or exemption, or having other situations posing a risk to public health.

# Public Notification Rule



## PN Rule Compliance:

- 💧 Violations are classified into three tiers as defined in RCSA 19-13-B102(a) - Definitions
- 💧 Notices must be sent to all persons served within the period specified by each tier:
  - 💧 Tier 1: 24 hours
  - 💧 Tier 2: 30 days
  - 💧 Tier 3: 365 days
- 💧 Clock for notification starts when the system learns of the violation
- 💧 When reporting a violation, a PN template can be provided
- 💧 Minimum general content of the notice must contain ten (10) required elements

# Public Notification Rule



## PN Rule Compliance:

- 💧 All violation letters include a PN template
- 💧 When properly completed, the template will address the ten (10) requirements elements
- 💧 Any deviations from the template should be submitted to the DWS for approval
- 💧 Systems shall submit a certification that is has fully complied with the requirements within ten (10) days after completing the public notification requirements
- 💧 A copy of the actual notice provided must be submitted with the completed and signed Certification
- 💧 Systems may use the Consumer Confidence Report (CCR) as a method of delivery provided the timing, content, and delivery requirements are met
  - 💧 A PN Certification is still required when using the CCR

# Public Notification Rule



## PN Rule Compliance:

### Tier 1 Violations:

- 💧 All Acute Risk Violations
  - 💧 Total Coliform MCL
    - 💧 E. coli
    - 💧 Fecal Coliforms
  - 💧 Nitrate MCL
  - 💧 Nitrite MCL
  - 💧 Chlorine Dioxide MRDL
  - 💧 Disease Outbreaks

# Public Notification Rule



## PN Rule Compliance:

### Tier 2 Violations:

- 💧 All other MCL Violations
- 💧 MRDL Violations
- 💧 Treatment Technique Violations
- 💧 Monitoring Violations for total coliform, nitrate, nitrite, total nitrate and nitrite, or chlorine dioxide
- 💧 Consent Order Violations

# Public Notification Rule



## PN Rule Compliance:

### Tier 3 Violations:

- 💧 All other Monitoring requirements
- 💧 Operated under an administrative order, variance, or an exemption;
- 💧 Exceeded the fluoride secondary maximum contaminant level (SMCL)

# Public Notification Rule



## PN Rule Compliance:

### Ten Required Elements of a Public Notice:

- i) Description of the violation or situation
- ii) Potential Health Effects
- iii) Population at risk
- iv) What the PWS is doing to correct the violation or situation
- v) Whether alternative water supplies should be used
- vi) What action(s) the consumer should take
- vii) PWS Contact Information
- viii) When the violation or situation occurred
- ix) When the water system expects to return to compliance or resolve the situation; and
- x) Additional distribution instructions

# Public Notification Rule



## PN Rule Compliance:

### Special Public Notice Requirements:

- 💧 Exceedance of the Copper Action Level (Tier 2)
- 💧 Notification when sodium level exceeds 28 mg/L (Tier 3)
- 💧 Notification of monitoring results for unregulated contaminants (Tier 3)

# Consumer Confidence Reports

- 💧 All community water systems, all sizes
- 💧 Annual report to provide educational materials to consumers regarding potential health risks associated with the quality, treatment and management of the public water supply
- 💧 Data collected during the previous calendar year
- 💧 Distribution due to consumers and the DWS by **July 1**
- 💧 All Reports must be available upon request
- 💧 Certification of distribution due to the DWS by **August 9**
- 💧 DWS recommends submitting the Certification with the CCR
- 💧 Forms and additional information available on the DWS Website
- 💧 Repeat offenders (i.e. CCR violations in consecutive years) will be targeted for Administrative Orders and Civil Penalties

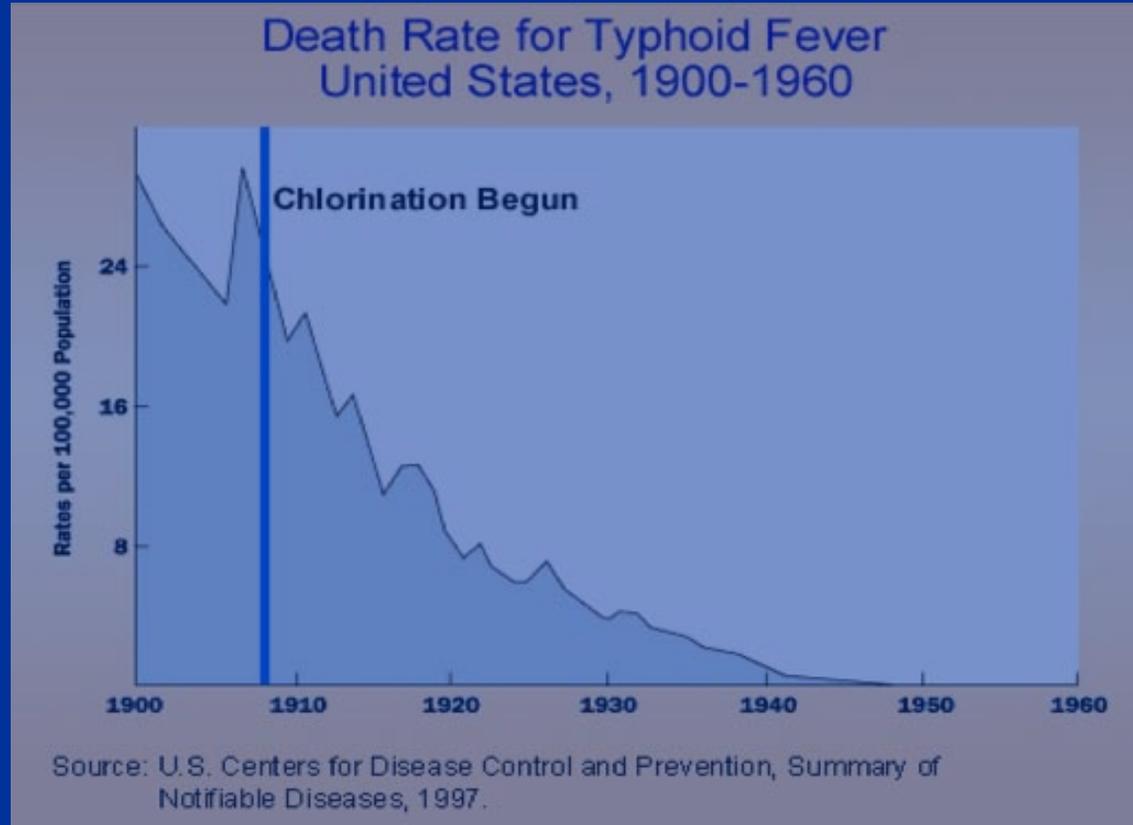
# Stage 1 DBPR

- 🔥 **Purpose**: Improve public health protection by reducing exposure to disinfection byproducts.
- 🔥 **Compliance**: Based on compliance with Maximum Contaminant Levels (MCL) and Maximum Residual Disinfectant Levels (MRDL) and Treatment Technique Requirements
- 🔥 **Applicability**: All CWS and NTNCWS that add a disinfectant to the drinking water during any part of the treatment process
- 🔥 **Benefits**: Some disinfectants and disinfection byproducts (DBPs) have been shown to cause cancer and reproductive effects in lab animals and suggested bladder cancer and reproductive effects in humans.

# Public Health & Disinfection

## 💧 Disinfectants:

- + Kill or inactivate disease-causing microorganisms
- React with substances naturally in water to form harmful DBPs
- Produce negative health effects when present in excessive levels



# A Delicate Balance

- ✓ Risk: microbial contamination vs. DBP formation
- ✓ EPA's solution: control health risks from microbials, disinfectants, and DBPs
- ✓ Result: M-DBP Suite of rules



# How Are DBPs Formed?

## Precursor in Water

**Natural Organic  
Material**

**Bromide**

+

## Added Disinfectant

**Chlorine**

**Chloramines**

**Chlorine Dioxide**

**Ozone**

=

## DBP

**TTHM**

**HAA5**

**Chlorite**

**Bromate**

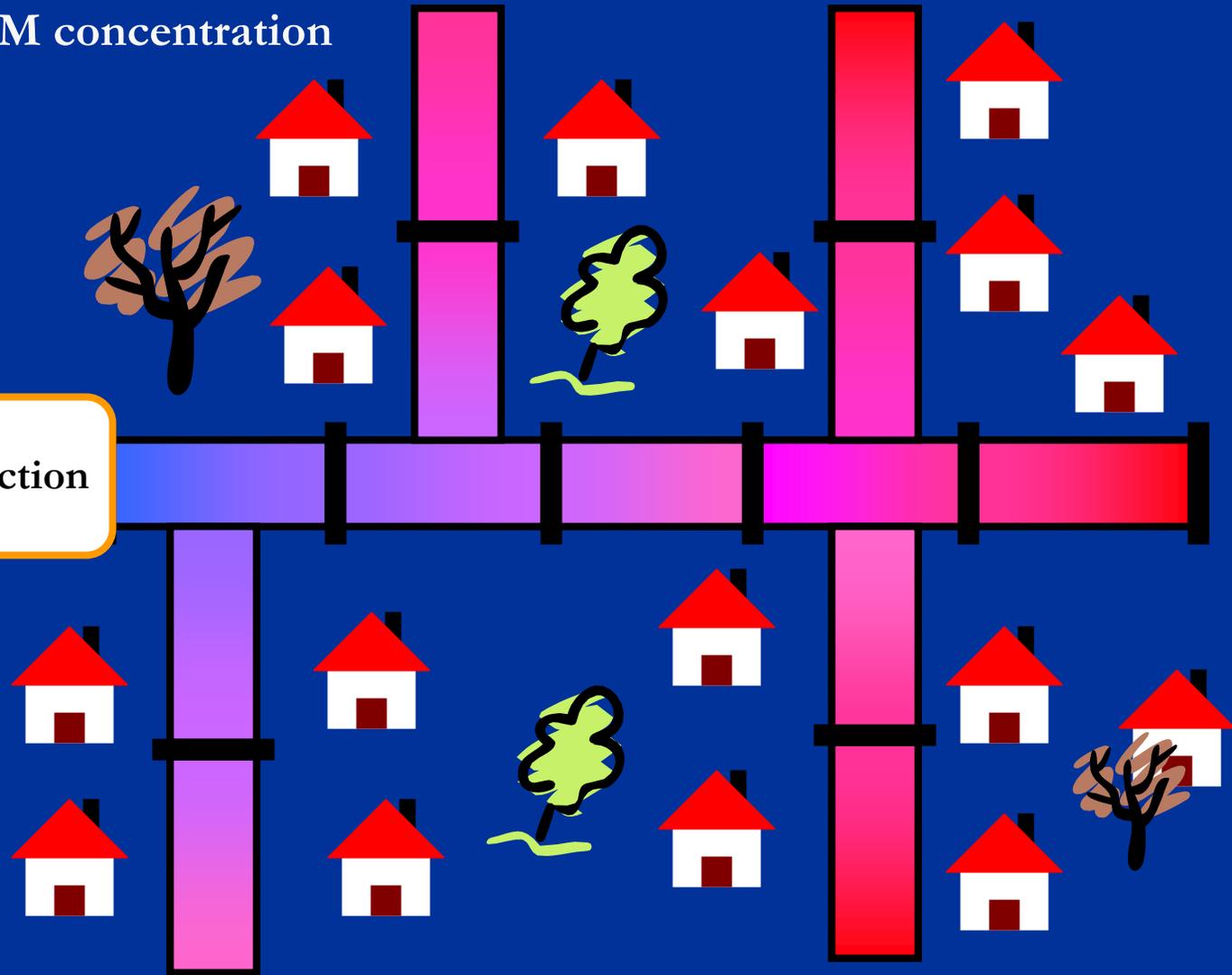
# TTHM Formation



High TTHM concentration

Organics

Disinfection



Drinking Water Section

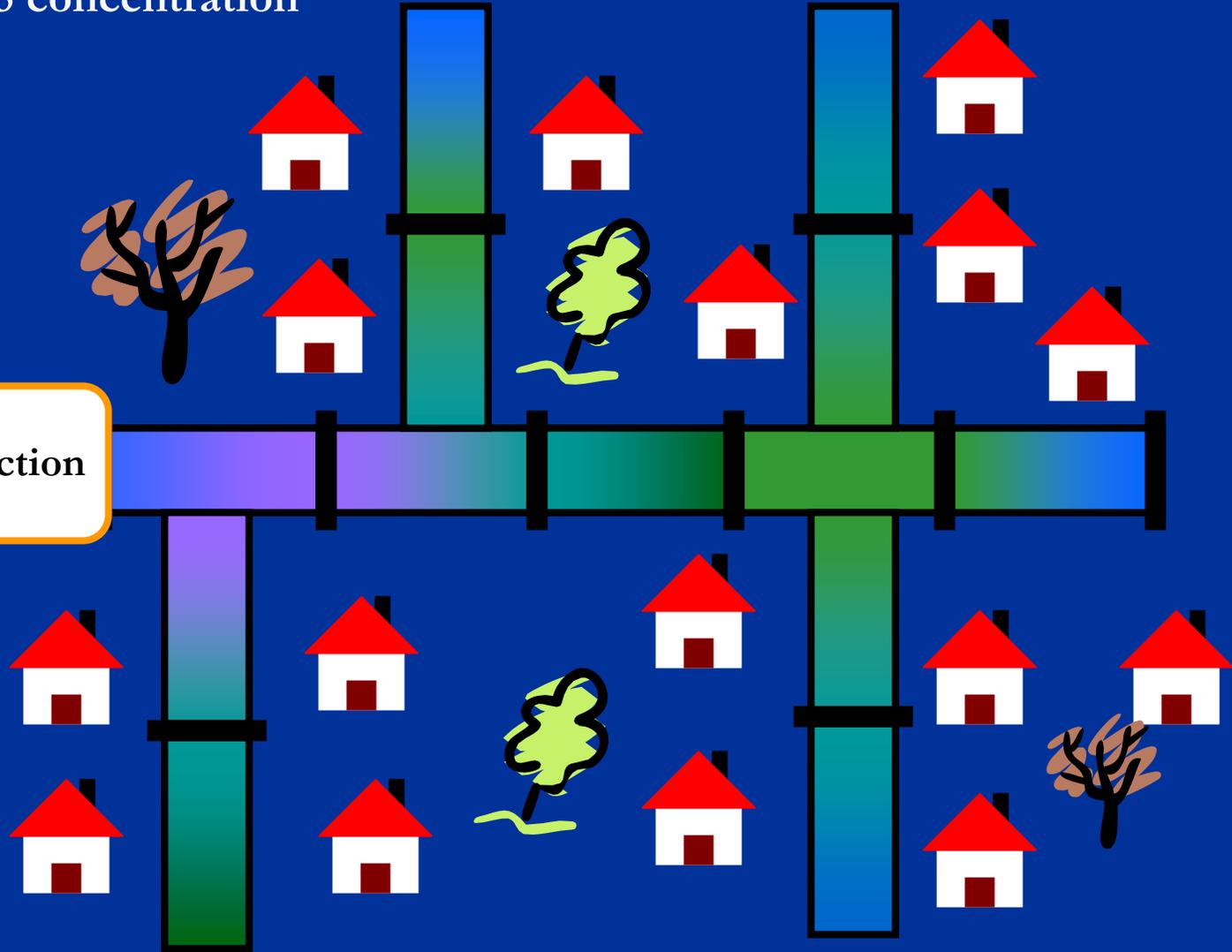
# HAA5 Formation



High HAA5 concentration

Organics

Disinfection

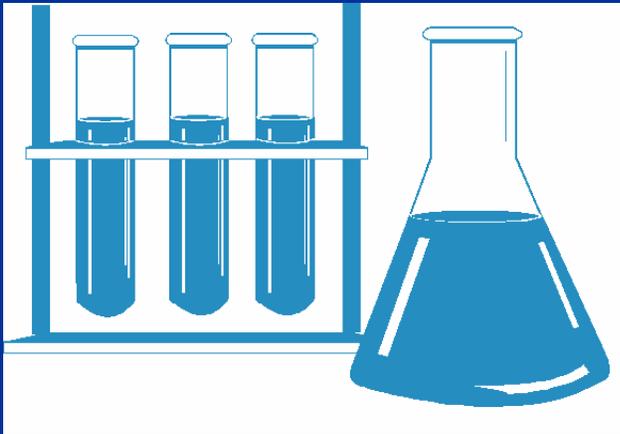


Drinking Water Section

# MCLs

**TTHM MCL = 0.080 mg/L**

**HAA5 MCL = 0.060 mg/L**



- Apply to CWSs and NTNCWSs that add a disinfectant to their water
- Reduce health risks associated with elevated levels of byproducts

# MRDL

**Chlorine MRDL = 4.0 mg/L**



- 💧 Applies to all CWSs and NTNCWSs that add chlorine or chloramines
- 💧 MRDLs are like an MCL but for disinfectants
- 💧 Ensures adequate disinfection
- 💧 Flexible - keeps disinfectant levels low enough to minimize DBP formation and limit health effects

# Routine Monitoring

TYPE OF SYSTEM	MINIMUM MONITORING FREQUENCY	SAMPLE LOCATION IN DISTRIBUTION SYSTEM
Surface water or GWUDI in whole or in part and serving 10,000 or more	Four (4) samples per quarter <u>per</u> treatment plant	25% at Maximum Residence Time, remaining at Average Residence Time
Surface water or GWUDI in whole or in part and serving fewer than 10,000 persons	One (1) sample per quarter <u>per</u> treatment plant	Location representing maximum residence time
Groundwater only and serving 10,000 or more persons	One (1) sample per quarter <u>per</u> treatment plant	Location representing maximum residence time
Groundwater and serving fewer than 10,000 persons	One (1) sample per year <u>per</u> treatment plant <b>during the third calendar quarter</b>	Location representing maximum residence time <sup>(3)</sup>

# Chlorine Monitoring

## Chlorine monitoring is based on TCR monitoring:

- Frequency based on population served
- Occurs at representative sites in distribution system
- Includes repeat total coliform-positive monitoring
- Must be taken at same location as TCR samples

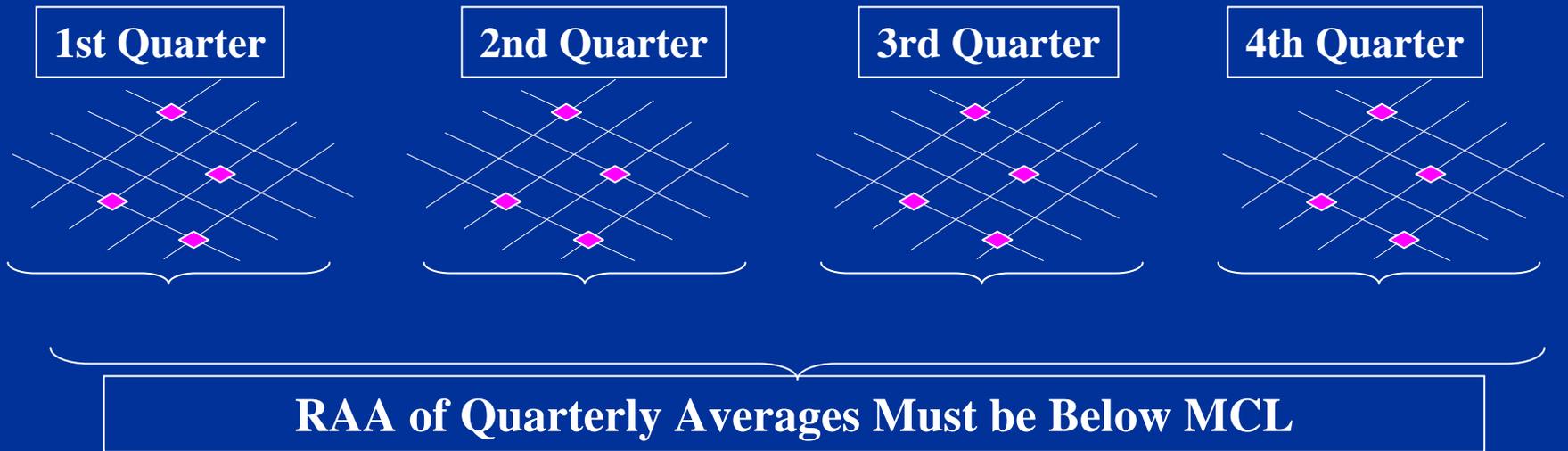
Population Served*	Number of Samples
25 - 1,000	1
1,001 – 2,500	2
2,501 – 3,300	3

\* See rule for additional population categories

1 TCR sample  
=  
1 chlorine sample

# Calculating Compliance

Compliance is based on a Running Annual Average  
Calculated Quarterly



# Stage 1 DBPR

## Public Notification (PN) Requirements:

- 🔴 Tier 1 Violation (PN within 24 hours)
  - 🔴 MRDL for Chlorine Dioxide
- 🟡 Tier 2 (PN within 30 days)
  - 🟡 All MCL and Chlorine MRDL Violations
  - 🟡 Treatment Technique Violations
  - 🟡 Chlorine Dioxide Monitoring Violations
- 🟡 Tier 3 (PN within 365 days)
  - 🟡 All other monitoring and reporting violations

# Purpose of Stage 2 Rule

Builds upon Stage 1 by providing greater public health protection and equity through:

- 🔹 Initial distribution system evaluations (IDSE) to identify compliance monitoring locations with high disinfection byproducts (DBPs)
- 🔹 Basing compliance on Locational Running Annual Averages (LRAAs)
- 🔹 Specifying requirements for consecutive systems

# MCLs for DBPs

Disinfectant Byproduct	MCL (mg/L)
<b>TTHM</b>	<b>0.080</b>
<b>HAA5</b>	<b>0.060</b>

- 💧 TTHM and HAA5 MCLs remain the same
- 💧 Monitoring is population based rather than treatment plant based
- 💧 Calculating compliance changes:
  - 💧 Stage 1 RAA vs. Stage 2 LRAA

# Population Based Monitoring

- 🔹 Required for both IDSE & Compliance Monitoring
- 🔹 Monitoring based on system population and source water type rather than treatment plant location
- 🔹 Targets DBP problem areas based on better understanding of DBP occurrence and formation
- 🔹 Easier to implement for systems and states

# Locational Running Annual Average (LRAA)

- 💧 Intent of rule is to focus on DBP peaks
- 💧 More peaks in DBP levels in distribution system when compliance based on RAA.
- 💧 The highest DBP level in a quarter can be much higher than the distribution system average.
- 💧 Under an LRAA, populations in different parts of the distribution system will receive equitable health protection.

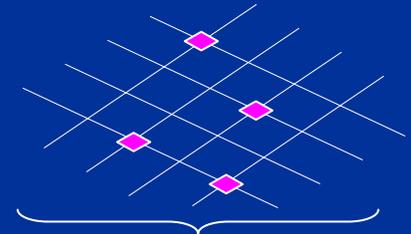
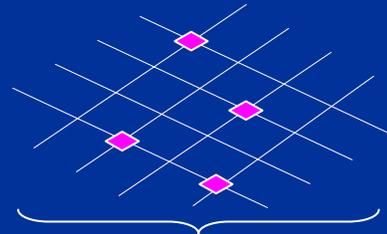
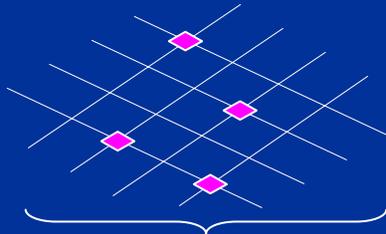
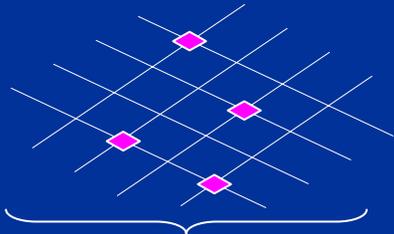
# RAA vs. LRAA

1st Quarter

2nd Quarter

3rd Quarter

4th Quarter



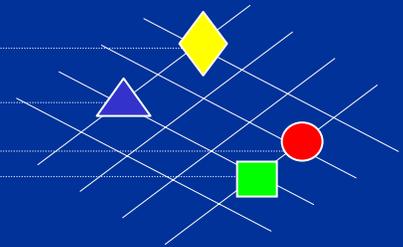
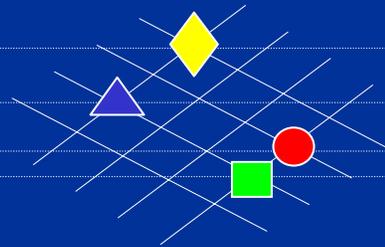
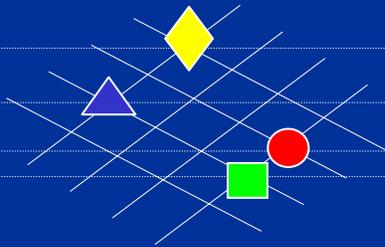
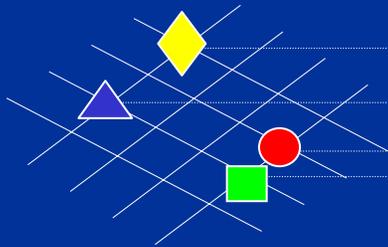
Average All Samples

Average All Samples

Average All Samples

Average All Samples

RAA of Quarterly Averages Must be Below MCL



$$(\text{Yellow Diamond} + \text{Yellow Diamond} + \text{Yellow Diamond} + \text{Yellow Diamond}) \div 4$$

$$(\text{Red Circle} + \text{Red Circle} + \text{Red Circle} + \text{Red Circle}) \div 4$$

$$(\text{Purple Triangle} + \text{Purple Triangle} + \text{Purple Triangle} + \text{Purple Triangle}) \div 4$$

$$(\text{Green Square} + \text{Green Square} + \text{Green Square} + \text{Green Square}) \div 4$$

EACH LRAA MUST BE BELOW MCL

Drinking Water Section

# What is an IDSE?

- 💧 IDSE = Initial Distribution System Evaluation
  - 💧 1<sup>st</sup> requirement of Stage 2
- 💧 Purpose of IDSEs:
  - 💧 Determine locations of high TTHM and HAA5 concentrations throughout distribution system
  - 💧 Results are used in conjunction with Stage 1 DBPR compliance monitoring to identify and select Stage 2 DBPR compliance monitoring locations

# IDSE Applicability

## 💧 CWS

- 💧 Uses or delivers water that has been treated with a primary or residual disinfectant other than UV light

## 💧 NTNCWS

- 💧 Serves at least 10,000 persons, and
- 💧 Uses or delivers water that has been treated with a primary or residual disinfectant other than UV light

# IDSE Options

- 💧 Very Small Systems (VSS) Waiver
- 💧 40/30 Certification
- 💧 Standard Monitoring Plan (SMP)
- 💧 System Specific Study (SSS)
  - 💧 Historical data
  - 💧 Hydraulic Modeling
  - 💧 Will not be covered in this presentation

# IDSE Schedules

<b><i>Systems...</i></b>	<b><i>Schedule</i></b>
Serving 100,000 or more people OR belonging to a CDS in which the largest systems serves 100,000 or more	1 (10)
Serving 50,000 to 99,999 people OR belonging to a CDS in which the largest systems serves 50,000 to 99,999	2 (17)
Serving 10,000 to 49,999 people OR belonging to a CDS in which the largest system serves 10,000 to 49,999	3 (36)
Serving fewer than 10,000 and not connected to a larger system	4 (138)

(201) indicates number of systems in CT

# IDSE Schedule

<b>SCHEDULE</b>	<b>POPULATION:</b>	<b>SUBMIT SM Plan or SSS Plan or 40/30 Certification By:</b>	<b>Complete Standard Monitoring or SSS By:</b>	<b>Submit IDSE Report By:</b>
<b>1</b>	<b><math>\geq 100,000</math></b>	<b>Oct 1, 2006</b>	<b>Sept 30, 2008</b>	<b>Jan 1, 2009</b>
<b>2</b>	<b>50,000–99,999</b>	<b>April 1, 2007</b>	<b>Mar 31, 2009</b>	<b>July 1, 2009</b>
<b>3</b>	<b>10,000–49,999</b>	<b>Oct 1, 2007</b>	<b>Sept 30, 2009</b>	<b>Jan 1, 2010</b>
<b>4</b>	<b><math>&lt; 10,000</math></b>	<b>April 1, 2008</b>	<b>Mar 31, 2010</b>	<b>July 1, 2010</b>

# VSS Waivers

## 💧 Eligibility

- 💧 Systems serving < 500 persons
- 💧 Must have taken TTHM and HAA5 samples

## 💧 Stage 2 Compliance

- 💧 Monitor at Stage 1 DBPR compliance monitoring locations for Stage 2 DBPR compliance monitoring

Alternatives: Complete Standard Monitoring or System Specific Study if system has not taken TTHM and HAA5 samples or if otherwise required by the State

Note: A VSS waiver is automatic unless eligibility criteria is not met or the State informs the system that an IDSE will be required. We send confirmation letters in both situations.

# 40/30 Certification

## 💧 Eligibility

- 💧 All required Stage 1 DBPR compliance samples have been taken
- 💧 No individual Stage 1 sample exceeded 0.040 mg/L for TTHM
- 💧 No individual Stage 1 sample exceeded 0.030 mg/L for HAA5
- 💧 No TTHM or HAA5 monitoring violations

# 40/30: Eligibility Period and Deadline

Sch.	Population	Eligibility Period Beginning No Earlier Than*:	Submit 40/30 Certification By:
1	$\geq 100,000$	January 2004	Oct. 1, 2006
2	50,000-99,999		Apr. 1, 2007
3	10,000-49,999	January 2005	Oct. 1, 2007
4	$< 10,000$		Apr. 1, 2008

\*System is required to base the 40/30 Certification on 8 consecutive calendar quarters of Stage 1 compliance monitoring results

# Example: Reviewing 40/30 Data

**System's data does not qualify for 40/30 Certification**

SW system serving 5,000 with 1 treatment plant on routine monitoring

	TTM	RAA	HAA5	RAA
10/9/2005	0.034	0.035	0.023	0.022
1/7/2006	0.039	0.037	0.020	0.022
4/7/2006	0.036	0.036	0.025	0.023
7/6/2006	0.034	0.036	0.022	0.023
10/4/2006	0.030	0.035	0.019	0.022
1/2/2007	0.027	0.032	0.024	0.023
4/2/2007	0.032	0.031	0.032	0.024
7/1/2007	0.030	0.030	0.029	0.026

# Standard Monitoring Plan (SMP)

- Plan that identifies monitoring locations expected to have high TTHMs/HAA5s
- System will use distribution system maps, historical water quality data and operational data to locate ideal IDSE Standard Monitoring sites

# Components of an SMP

- ◆ Schematic of distribution system
  - ◆ Entry points and sources
  - ◆ Locations and dates of all projected standard monitoring
  - ◆ All Stage 1 DBPR compliance monitoring locations
  - ◆ Storage Tank locations
- ◆ Justification of standard monitoring location selection and all additional data used to justify site selection
- ◆ Population served and system type

# Standard Monitoring – Sampling Locations

- 💧 Must be different from existing Stage 1 DBPR monitoring locations
- 💧 Must be distributed throughout distribution system
- 💧 System will continue to conduct compliance monitoring at existing Stage 1 DBPR locations
- 💧 Number of locations is determined by system population and source water type
  - 💧 Monitoring may not be reduced

# Standard Monitoring

- 💧 Standard Monitoring:
  - 💧 Collect dual sample sets at each location
    - 💧 One sample analyzed for TTHM
    - 💧 One sample analyzed for HAA5
  - 💧 One sample must be collected:
    - 💧 During the peak historical month for TTHM or HAA5, or
    - 💧 During the month of warmest water temperature
      - 💧 Review available data to determine this month

# TTHM and HAA5 IDSE Standard Monitoring

**For GW systems or systems that purchase GW**

Population	Frequency	Total	Near EP	ART	High TTHM	High HAA5
< 500 consecutive	1 (during peak historical month)	2	1	-	1	-
< 500 non-consecutive		2	-	-	1	1
500-9,999	4 (every 90 days)	2	-	-	1	1
10,000 – 99,999		6	1	1	2	2
100,000-499,999		8	1	1	3	3
≥ 500,000		12	2	2	4	4

# TTHM and HAA5 IDSE Standard Monitoring

For Subpart H systems and systems that purchase Subpart H water

Population	Frequency	Total	Near EP	ART	High TTHM	High HAA5
<500 consecutive	1 (during peak historical month)	2	1	-	1	-
<500 non-consecutive		2	-	-	1	1
500-3,300 consecutive	4 (every 90 days)	2	1	-	1	-
500-3,300 non-consecutive		2	-	-	1	1
3,301-9,999		4	-	1	2	1
10,000-49,999	6 (every 60 days)	8	1	2	3	2
50,000- 249,999		16	3	4	5	4
250,000-999,999		24	4	6	8	6
1,000,000-4,999,999		32	6	8	10	8
≥ 5,000,000		40	8	10	12	10

# Selecting IDSE Standard Monitoring Locations

- Some locations will be obvious
  - Near entry point
- Others will require professional judgment
  - Consider geographic representation
  - Consider hydraulic representation (pressure zones)
  - Consider areas fed by sources with higher DBPs
  - Use sites that “multi-task”
  - Consider accessibility

# What's Next?

- 💧 Once the system has collected and analyzed its information, it must prepare the plan and submit it to EPA and CT
- 💧 CT will review the monitoring plan submitted by the system and approve or request revisions
- 💧 CT has been reviewing the plans with PWS personnel present to answer questions

**If EPA or the state does not take action within 12 months from the date when the Standard Monitoring Plan was due, the system can consider the plan approved.**



## What's Next? (cont.)

- 🔥 Conduct monitoring based the SMP
  - 🔥 As approved or amended by EPA or the state
  - 🔥 Begin monitoring as outlined in plan after plan has been approved or 12 months from submission deadline
  - 🔥 Monitor HAA5 and TTHM at every site

# What's Next?

- 🔹 Prepare and submit IDSE report
  - 🔹 Purpose of the report is to identify Stage 2 DBPR Compliance Monitoring Sites
  - 🔹 Deadline – depends on schedule (3 months from deadline for conducting monitoring)
  - 🔹 Submit compliance monitoring plan
- 🔹 Begin Stage 2 DBPR Compliance Monitoring as recommended in IDSE Report or Stage 2 DBPR monitoring plan
- 🔹 Monitor at no fewer than the number of locations listed in the tables on subsequent slides

# Compliance Monitoring *Frequency & Locations*

## Groundwater or systems that purchase groundwater

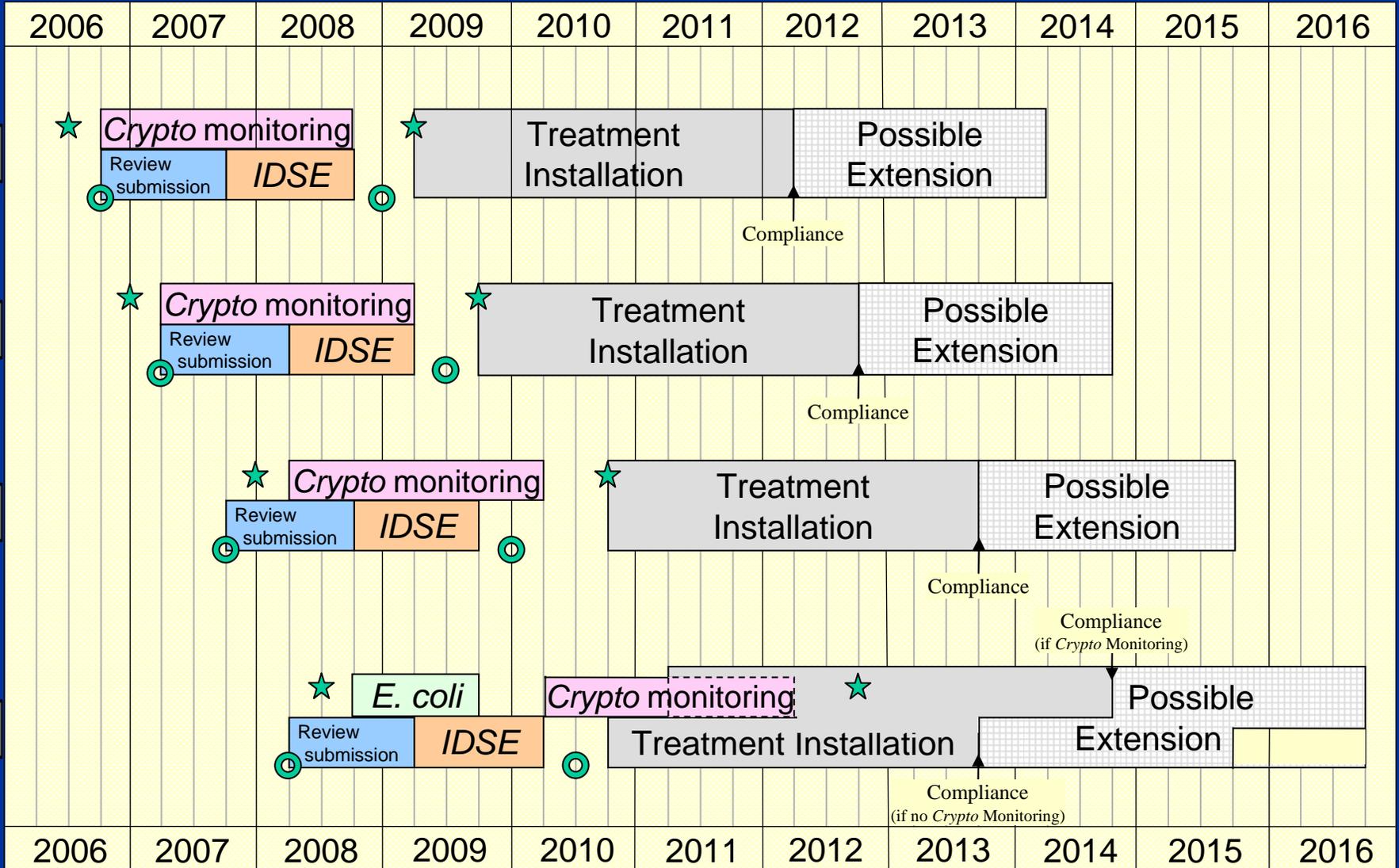
Population Size Category	Monitoring Frequency	Distrib. System Monitoring Location Total per Monitoring Period
<500	Per year	2
500-9,999	Per year	2
10,000-99,999	Every 90 days	4
100,000-499,999	Every 90 days	6
≥500,000	Every 90 days	8

# Compliance Monitoring *Frequency & Locations*

**SW or GWUDI systems or systems that purchase SW or GWUDI water**

<b>Population Size Category</b>	<b>Monitoring Frequency</b>	<b>Distrib. System Monitoring Location Total per Monitoring Period</b>
<b>&lt; 500</b>	<b>Per year</b>	<b>2</b>
<b>500-3,300</b>	<b>Every 90 days</b>	<b>2</b>
<b>3,301-9,999</b>	<b>Every 90 days</b>	<b>2</b>
<b>10,000-49,999</b>	<b>Every 90 days</b>	<b>4</b>
<b>50,000-249,999</b>	<b>Every 90 days</b>	<b>8</b>
<b>250,000-999,999</b>	<b>Every 90 days</b>	<b>12</b>
<b>1,000,000-4,999,999</b>	<b>Every 90 days</b>	<b>16</b>
<b>≥5,000,000</b>	<b>Every 90 days</b>	<b>20</b>

# Implementation Schedule



★ LT2 Plan or bin classification due  
○ Stage 2 IDSE Plan or report due

# Additional Information

Drinking Water Section Website:

<http://www.ct.gov/dph>

## Presenter Information:

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