- Revised Total Coliform Rule - ATCAVE 2016

An Overview of Proposed Rule Elements

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Agenda

- RTCR – Revision Key Points
- Total Coliform Bacteriological Monitoring
- Sample Site Plans
- Level Assessments
- Seasonal Start ups
- Violations
- Photos and Forms

RTCR – Revision Key Points

The RTCR retains basic TCR monitoring requirements, but, **offers greater opportunity for public health protection by the addition of new requirements** as summarized below:

A. Total Coliform Bacteriological Monitoring

- Keeps E. coli as the health indicator with an MCLG of zero and E. coli MCL similar to current TCR

B. Sampling Site Plans

- Sampling plan must include repeat sites if not within 5 service connections

C. Level Assessments

- Establishes a Treatment Technique (TT) in place of TC MCL Violations (i.e. Establishes a “find & fix” (Level 1 & 2 Assessments) approach to correcting bacteriological detections)

RTCR – Revision Key (cont.)

D. Seasonal Start Ups

- Requires Start-up Procedures for Seasonal Systems and sampling during high vulnerability
- TC Sample prior to opening to public

E. Violations

- 4 violation types (E.Coli MCL, Treatment Technique, Monitoring Violation, Reporting) and 3 Tiers (wrt Public Notification)

RTCR - Monitoring Requirements (cont.)

PWS TYPE	ROUTINE MONITORING	REDUCTION
CPWS <1000	monthly	quarterly
CPWS >=1000	monthly	NA
NTNC & TNCs	Quarterly	NA
Seasonal	Montly	Quarterly

Physical parameters (color, odor, turbidity and pH) in the distribution system have an MCLG

Retain the same coliform monitoring frequency at the time (i.e. Monthly or Quarterly)

Allows systems to transition at their current monitoring frequency during the transition from TCR to RTCR

Monitoring Requirements (cont.)

Number of Repeat Coliform Samples

- ALL PWSs of any size now take only 3 repeat samples for each TC+

TCR	RTCR
# of Repeats	# of Repeats
(-1 per Month or Quarter)	(-1 per Month or Quarter)
4 samples	3 samples

Note: Systems must collect a set of repeat samples for EACH routine TC+ sample, even if an MCL exceedance has occurred

RTCR - Monitoring Requirements (cont.)

Requires increase monitoring for high-risk small (<1,000 people) NC ground water systems with unacceptable compliance history

Beginning April 1, 2016,the State must perform a special monitoring evaluation during each sanitary survey to review the status of the system, including the distribution system, to determine whether the system is on an appropriate monitoring schedule.

The State may modify the system's monitoring schedule as necessary (NCWS).

RTCR - Monitoring Requirements (cont.)

- Small NC systems need to follow certain criteria to remain on a quarterly monitoring schedule or revert from monthly to quarterly by complying with the following criteria:

-Within the last 12 months, such non-community water system shall have a completed sanitary survey, a site visit by the department or a voluntary level 2 assessment conducted by a level 2 assessor or the department, be free of sanitary defects, and have a source or sources of supply that are protected and that meet the separating distance requirements.

And

-Such non-community water system shall have a “clean compliance history” for a minimum of 12 months.

Define: “clean compliance history” means a record of no maximum contaminant level violations, no monitoring violations, and no coliform treatment technique trigger exceedances or treatment technique violations.

RTCR - Sampling Siting Plans

PWSs are required to establish a written sampling siting plan that is representative of water quality throughout the entire distribution system.

Beginning on April 1st 2016, TC samples must be collected from these locations (and only those) identified in the SSP

The sample sites should include sites required for regulatory compliance monitoring - i.e. routine and repeat locations as required by the RTCR and the GWR and the collection schedule/frequency

SSP subject to state review and revision

RTCR - Level Assessments (1 or 2)

- **Requires systems to investigate and correct (AKA "Find & Fix") any "sanitary defects" found whenever monitoring results show a system may be vulnerable to contamination.**

  - Two levels (1 or 2) of assessment depending on the severity and frequency of contamination.

- **Sanitary defect:** "means a defect that is providing, or has the potential for providing, a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place" – sanitary defects are identified by L1 and L2 assessments.

NOTE: A sanitary defect is different than a significant deficiency per GWR, however, in some instances there may be overlapping

Level 1 Assessment

<u>Triggers</u> that require Level 1 Assessment:

1. For a system collecting fewer than 40 samples per month, where more than one sample is TC (+);
2. The PWS fails to take every required repeat sample after any single routine TC (+)
3. For system collecting at least 40 samples per month where more than 5% of samples collected are TC (+)

NOTE: prior TC violation under the TCR becomes an assessment trigger under the RTCR;

Level 1 Assessment (cont.)

- Level 1 Assessments are conducted by the PWS, which is a basic examination of the source water, treatment, distribution system and relevant operational practices to identify sanitary defects

- Level 1 Assessment Reports must be submitted to DWS within 30 days of trigger
  - CT DPH Level 1 Assessment Form is being developed

- Sanitary Defects must be corrected within 30 days or per State approved correction plan

Level 2 Assessment

<u>Triggers</u> that require Level 2 Assessment:

1. Violation of the MCL for E. coli
    - The system has an E. coli (+) repeat sample following a TC (+) routine sample
    - The system has a TC (+) repeat sample following an E. coli (+) routine
    - The system fails to test for E. coli when any repeat sample tests (+) for TC
2. The system fails to take all repeat samples following a routine E. coli positive sample
3. Two Level 1 triggers in a 12 month period

The exception to this trigger is if the state has determined a likely reason for the TC+ samples that caused the initial Level 1 TT trigger, and the state establishes that the system has fully corrected the problem.

Level 2 Assessment (cont.)

- Level 2 Assessments are a more in-depth examination of the system and its monitoring and operational practices

- Performed by the DPH or a trained certified operator or a trained PE not currently employed by the system;
  - "trained" = completed CT DPH approved >= 6 hour course;
  - Assessment forms developed by DWS; will be provided to PWSs/web

- Level 2 Assessment Reports must be submitted to DWS within 30 days of trigger;

- Sanitary Defects must be corrected within 30 days or per State approved correction plan,

Corrective Actions = CA

Sanitary defects identified by L1 and L2 assessments => CA

Corrective action of Sanitary Defect - should prevent future incidences of contamination and exposure to fecal contamination and/or waterborne pathogens.

- A timetable for any corrective actions not already completed must also be specified in the form; the State will determine a schedule for implementing the corrective actions after consulting with the PWS
- The L1 or L2 form may also indicate that no sanitary defects were found
- The State determines if the assessment is sufficient

EPA developed a RTCR Assessments and Corrective Actions Guidance Manual – available on EPA and DWS website

RTCR - Seasonal Systems

Seasonal PWS, such as campgrounds, youth camps, some state parks, etc. are required to comply with new requirements to minimize the inherent risk in these systems:

- **Definition** – Seasonal PWS is a non-community water system that is not operated as a public water system on a year-round basis and starts up at the beginning and shuts down by depressurizing and dewatering the distribution system at the end of each operating season
- **Site Plan -** must designate the time period for monitoring based on high demand or vulnerability (if the PWS is monitoring less than monthly)
- Seasonal PWS must demonstrate completion of a State-approved start up procedure before the water is made available to the public

RTCR - Violations

Four different types of violations:

1. **E.Coli MCL Violation**
2. **Treatment Technique Violation**
3. **Monitoring Violation**
4. **Reporting Violation**

E. Violations (continued)

Four different types of violations:

1. **<u>E.Coli MCL violation</u> – TIER 1 VIOLAITON**

   Occur 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)

E. Violations (continued)

2. **Treatment technique violation – TIER 2 VIOLATION**

- A system fails to conduct a required Level 1 or Level 2 assessment within 30 days of learning of the trigger.
- A system fails to correct any sanitary defect found through either a Level 1 or 2 assessment within 30 days of learning of the trigger or in accordance with a schedule approved by the state.
- A seasonal system fails to complete state-approved start-up procedures prior to serving water to the public.

E. Violations (continued)

3. <u>Monitoring violation</u> – TIER 3 VIOLATION

PWS has failed to comply with a coliform monitoring requirement

- failure to take all required routine or additional routine samples
- failure to analyze for E. coli following a TC+ routine sample

4. <u>Reporting violation</u> – TIER 3 VIOLATION

PWS's failure to submit a monitoring results or completed assessment form after a system properly conducts monitoring or an assessment in a timely manner.

- failure to notify the state, in a timely manner, following an EC+ sample
- failure to submit certification of completion of state-approved start-up procedures by a seasonal system.

Violation - Public Notification

Each violation requires a different level of response and public notification.

Public Notification is no longer required for total coliform (TC) positive results - many of the organisms detected by the total coliform methods are not of fecal origin and do not have any direct public health implication.

PN required

Violation Type	PN Tier
E. Coli MCL Violation	Tier 1 (24 Hours)
TT Violation	Tier 2 (30 Days)
Monitoring Violation	Tier 3 (365 Days)
Reporting Violation	Tier 3 (365 Days)

Forms for Seasonal Systems

Revised Total Coliform Rule
Certification of Seasonal System
Start-up Procedure

Connecticut Department of Public Health
Drinking Water Section
410 Capitol Avenue, MS #51WAT
P.O. Box 340308
Hartford, CT 06134-0308

Section 1: Public Water System Information

Public Water System ID	Public Water System Name		Date Completed
Primary Town/City	PWS Classification ○ NTNC ○ TNC	Anticipated Start-Up Date	Annual Operating Period (i.e. 1/1-12/31)

Section 2: Start-up Procedures

Minimum Required Elements (Check to verify completion of each element):
- ☐ Physical inspection of all sources of supply, pump houses, storage tanks, and completion of necessary repairs;
- ☐ Cleaning and disinfection of all storage facilities, including all chlorine contact chambers and storage tanks;
- ☐ Shock disinfection of all ground water sources and the distribution system;
- ☐ Flushing of the distribution system;
- ☐ Sampling and testing of the water prior to serving the public. Sample results must be recorded in Section 3 and reported to the Department electronically to be accepted for routine compliance monitoring requirements.

Section 3: Performance of Sampling and Testing

Distribution System

Sample Date	Sampling Point ID	Total Coliform (Present/Absent)	Physical Parameters (Optional) Color (cu)	Odor (ton)	Turbidity (NTU)	pH (su)

Nitrate and Nitrite Entry Point Monitoring

Sample Date	WSF Name	WSF ID	Nitrate (mg/L)	Nitrite (mg/L)

Section 4: Contact Information

Salutation	First Name	Last Name
Organization		Job Title
Mailing Address Line One		Mailing Address Line Two
City	State	ZIP Code

Business Phone (Ext.) ( )	Fax	Mobile Phone	Emergency Phone	E-mail Address

Section 5: Certification

I certify that the information contained herein which is being submitted to the Connecticut Department of Public Health for a drinking water regulatory compliance purpose is complete and accurate and understand that any false statement contained herein is punishable as a criminal offense under section 53a-157b of the Connecticut General Statutes.

Printed Name of Property Owner/Legal Contact: _____ Date: _____

Signature of Property Owner/Legal Contact: _____

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

CERTIFICATION OF A SEASONAL SYSTEM START-UP PROCEDURE FORM
Instructions

Background

The Revised Total Coliform Rule (RTCR) requires seasonal public water systems to complete a start-up procedure prior to serving water to the public at the beginning of each operating season. A seasonal system is defined as a non-community water system that is not operated as a public water system on a year-round basis and starts up at the beginning and shuts down by depressurizing and dewatering all or a portion of its distribution system at the end of each operating season.

The start-up procedure shall include, but not be limited to the following elements:

- Physical inspection of all sources of supply, pump houses, storage tanks, and completion of necessary repairs;
- Cleaning and disinfection of all storage facilities, including all chlorine contact chambers and storage tanks;
- Shock disinfection of all ground water sources and the distribution system;
- Flushing of the distribution system;
- Sampling and testing of the water for total coliform bacteria and nitrate and nitrite prior to serving the public.

The Department of Public Health Drinking Water Section (DWS) has developed guidelines to assist seasonal systems with the development of a start-up procedure that meets these requirements. The guidelines provide detailed information on the minimum elements that are required in a seasonal system's start-up procedure and on how to conduct an inspection of a seasonal water system. The guidelines are available on the DWS website at: http://www.ct.gov/dph/publicdrinkingwater.

Reporting Requirements

After completing the start-up procedure at the beginning of each operating season, each seasonal system must submit a completed and signed Certification of a Seasonal System Start-up Procedure form to the DWS. The certification form is also available at the DWS website listed above. **The system shall not serve water to the public until the start-up procedure has been completed and the certification has been filed with the Department.**

Instructions to Complete the Certification Form

Section 1: Public Water System Information

Public Water System ID: Provide the Public Water System (PWS) ID assigned to the system.
Public Water System Name: Provide the name of the PWS.
Date: Provide the date that the start-up procedure was completed.
Primary Town/City: Provide the town/city where the PWS is located.
PWS Classification: Provide the classification of the PWS.
NTNC = Non-Transient Non-Community;
TNC = Transient Non-Community
Anticipated Start-Up Date: Provide the date the system intends to open for the season.
Annual Operating Period: Provide the typical annual seasonal opening and closing dates.

Improper Well Caps

Watertight (PAS-97) Well Caps

Sampling Taps

Not a certified watertight well cap

Less than 6” above grade

Subject to surface wash
(depression around well)

Electrical conduit carrying pump wires Is not watertight

Defective Casings


2”

DPH Keeping Connecticut Healthy

Drinking Water Section


10/04/2004

Damaged Concrete Tank

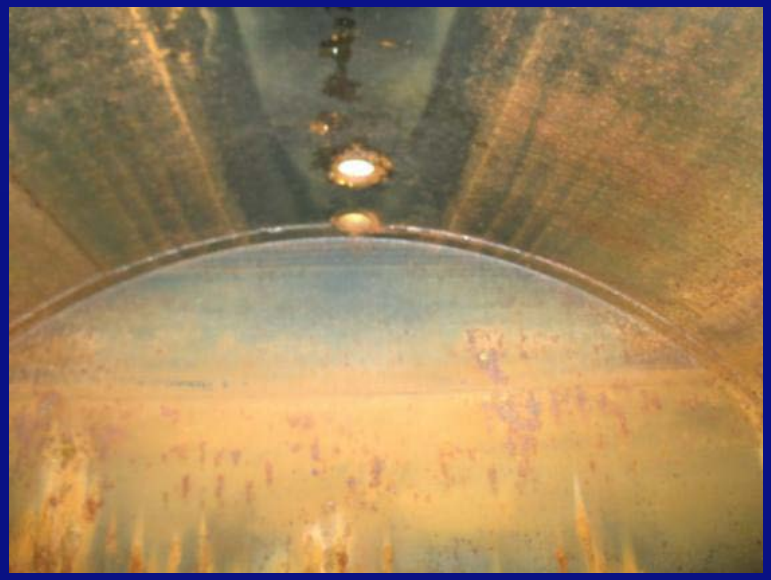
Underground Concrete Tank

Inadequate Hatch Seal

Tuberculation build-up inside tank

Atmospheric Storage Tank Deficiencies

Foundation wall leaking water



Holes in the roof

Leak in floor of tank

Level I Form & Instructions

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
Revised Total Coliform Rule Level 1 Assessment Form

PWS ID#: **PWS Name:** **Town:**

System Type: CWS ☐ NTNC ☐ TNC ☐ **Date form completed:**

Assessment Trigger Date: **Assessment Trigger:** (Check one)
- ☐ - For a system collecting at least 40 samples per month, more than 5.0% of samples collected are TC (+)
- ☐ - For a system collecting fewer than 40 samples per month, more than one sample is TC (+)
- ☐ - The PWS fails to take every required repeat sample after any single routine TC (+)

NOTE: Form to be completed based on an examination of the source water, treatment, distribution system including storage facilities and relevant operational practices data and documents available to the PWS and returned to the department as soon as practical but no later than 30 days after the system has identified that it had exceeded a level 1 treatment technique trigger.

Section 1 to 8: Review and evaluate all of the elements listed. Write Y (Yes) or N (No) if any potential causes of contamination are identified or write "NA" (Not Applicable) if the element is not applicable to the PWS. All sections of this form must be completed. If Y or N then provide details with the corrective action details. If additional space is needed, please attach additional pages and make reference to the element section number in first column. A PWS with multiple facilities (wells, tanks, water treatment plants, etc.) must complete a separate form for each facility.

1	General Questions Have any of the following occurred prior to collecting bacteria samples?	Review Y / N / NA	Observations & Provide Detail	Date and detail information for Corrective Action has been taken or Planning to take with action Plan
1.1.	Have there been any visible or physical indicators of unsanitary conditions?			
1.2.	Have there been any signs of vandalism or forced entry?			
1.3.	Have there been any other water quality issues within distribution or plumbing systems (color, turbidity, taste, and odor)?			

Additional space for section 1:

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
Revised Total Coliform Rule Level 1 Assessment Form

INSTRUCTIONS

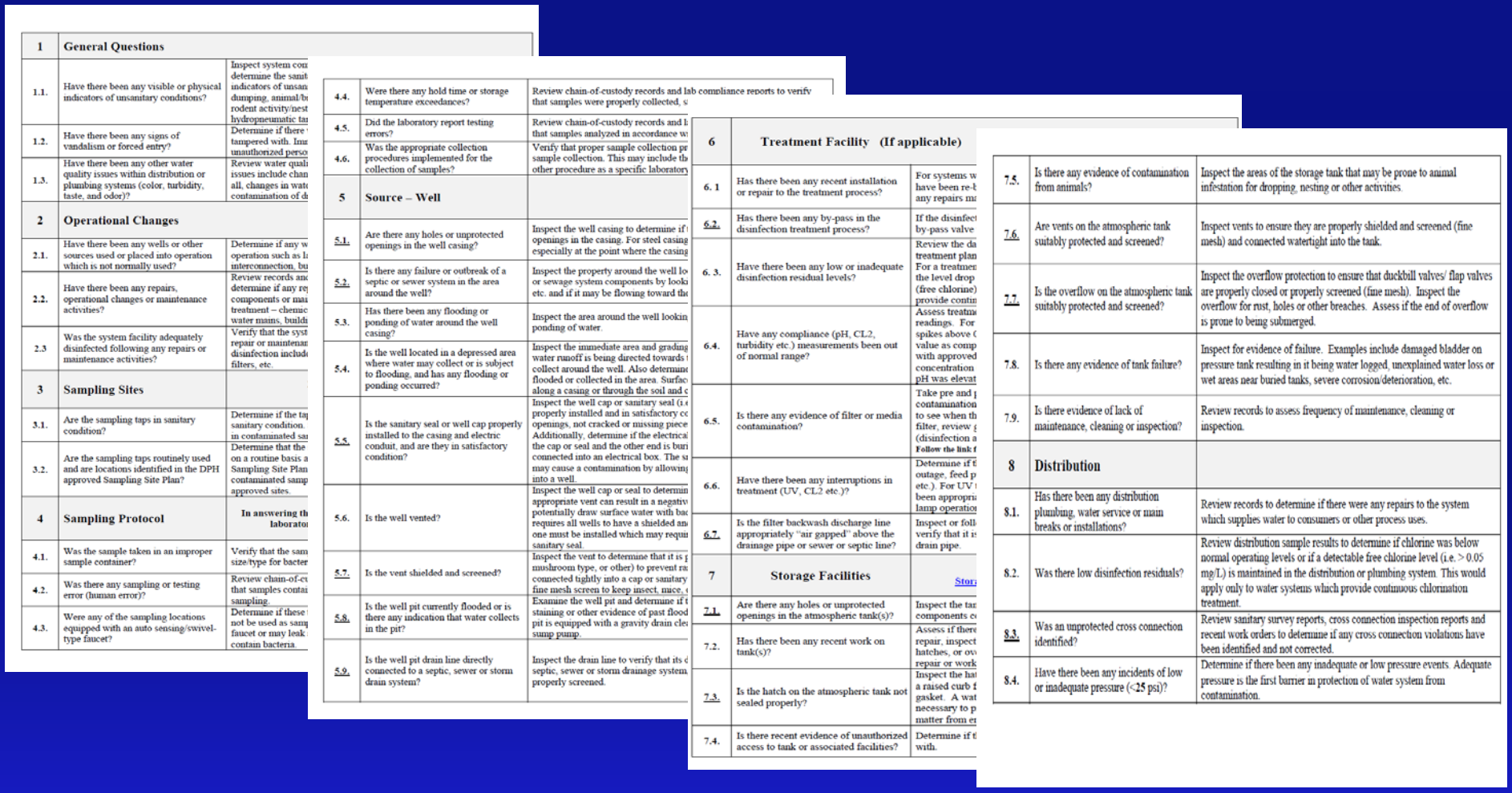
Section 19-13-B10219-13-B102(a)(69) and Section 19-13-B102 (x)(9)(B)(ii) of the Regulations of Connecticut State Agencies (RCSA) requires all water system to conduct a Revised Total Coliform Rule Level (RTCR) 1 assessment when a system collecting at least 40 samples per month has more than 5% of samples collected are TC (+), or a system collecting fewer than 40 samples per month has more than one sample is TC (+), or when the PWS fails to take every required repeat sample after any single routine TC (+). The RTCR Level 1 assessment is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. It is conducted by the system operator or owner. Minimum elements include review and identification of a typical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The system must conduct the assessment consistent with the department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

Note: 2nd time RTCR Level 1 trigger within 12 rolling months requires PWS to conduct RTCR Level 2 assessment.

Public Water System (PWS) Information

PWS ID:	Public Water System Identification Number (CTXXXXXXX).
PWS Name:	Name of the Public Water System.
Town:	Town where Public Water System is located
Date form completed:	Date when the form is completed
System Type:	a Community (CWS) a Non-Transient Non- Community public water system (NTNC) a Transient Non- Community public water system (TNC)
Assessment Trigger Date:	Date when the system has identified a level 1 assessment

Level I Forms and Instructions



1	General Questions	
1.1.	Have there been any visible or physical indicators of unsanitary conditions?	Inspect system com determine the sanit indicators of unsan dumping, animal/b rodent activity/nest hydropneumatic ta
1.2.	Have there been any signs of vandalism or forced entry?	Determine if there tampered with. Ins unauthorized perso
1.3.	Have there been any other water quality issues within distribution or plumbing systems (color, turbidity, taste, and odor)?	Review water quali issues include chan all, changes in wat contamination of d
2	Operational Changes	
2.1.	Have there been any wells or other sources used or placed into operation which is not normally used?	Determine if any w operation such as l interconnection, bu
2.2.	Have there been any repairs, operational changes or maintenance activities?	Review records and determine if any re components or mai treatment – chemic water mains, buildi
2.3	Was the system facility adequately disinfected following any repairs or maintenance activities?	Verify that the syst repair or maintenan disinfection includ filters, etc.
3	Sampling Sites	
3.1.	Are the sampling taps in sanitary condition?	Determine if the ta sanitary condition. in contaminated sa
3.2.	Are the sampling taps routinely used and are locations identified in the DPH approved Sampling Site Plan?	Determine that the on a routine basis a Sampling Site Plan contaminated samp approved sites.
4	Sampling Protocol	In answering th laborato
4.1.	Was the sample taken in an improper sample container?	Verify that the sam size/type for bacter
4.2.	Was there any sampling or testing error (human error)?	Review chain-of-cu that samples contai sampling.
4.3.	Were any of the sampling locations equipped with an auto sensing/swivel-type faucet?	Determine if these not be used as samp faucet or may leak contain bacteria.

4.4.	Were there any hold time or storage temperature exceedances?	Review chain-of-custody records and lab compliance reports to verify that samples were properly collected, s
4.5.	Did the laboratory report testing errors?	Review chain-of-custody records and l that samples analyzed in accordance w
4.6.	Was the appropriate collection procedures implemented for the collection of samples?	Verify that proper sample collection pr sample collection. This may include th other procedure as a specific laboratory
5	Source – Well	
5.1.	Are there any holes or unprotected openings in the well casing?	Inspect the well casing to determine if openings in the casing. For steel casing especially at the point where the casing
5.2.	Is there any failure or outbreak of a septic or sewer system in the area around the well?	Inspect the property around the well lo or sewage system components by looki etc. and if it may be flowing toward the
5.3.	Has there been any flooding or ponding of water around the well casing?	Inspect the area around the well lookin ponding of water.
5.4.	Is the well located in a depressed area where water may collect or is subject to flooding, and has any flooding or ponding occurred?	Inspect the immediate area and grading water runoff is being directed towards collect around the well. Also determine flooded or collected in the area. Surfac along a casing or through the soil and c
5.5.	Is the sanitary seal or well cap properly installed to the casing and electric conduit, and are they in satisfactory condition?	Inspect the well cap or sanitary seal (i.e properly installed and in satisfactory co openings, not cracked or missing piece Additionally, determine if the electrical the cap or seal and the other end is buri connected into an electrical box. The s may cause a contamination by allowing into a well.
5.6.	Is the well vented?	Inspect the well cap or seal to determin appropriate vent can result in a negativ potentially draw surface water with bac requires all wells to have a shielded an one must be installed which may requir sanitary seal.
5.7.	Is the vent shielded and screened?	Inspect the vent to determine that it is p mushroom type, or other) to prevent ra connected tightly into a cap or sanitary fine mesh screen to keep insect, mice,
5.8.	Is the well pit currently flooded or is there any indication that water collects in the pit?	Examine the well pit and determine if t staining or other evidence of past flood pit is equipped with a gravity drain cle sump pump.
5.9.	Is the well pit drain line directly connected to a septic, sewer or storm drain system?	Inspect the drain line to verify that its d septic, sewer or storm drainage system properly screened.

6	Treatment Facility (If applicable)	
6. 1	Has there been any recent installation or repair to the treatment process?	For systems w have been re-l any repairs ma
6.2.	Has there been any by-pass in the disinfection treatment process?	If the disinfect by-pass valve
6. 3.	Have there been any low or inadequate disinfection residual levels?	Review the da treatment plan For a treatmen the level drop (free chlorine) provide contin
6.4.	Have any compliance (pH, CL2, turbidity etc.) measurements been out of normal range?	Assess treatme readings. For spikes above value as comp with approved concentration pH was elevat
6.5.	Is there any evidence of filter or media contamination?	Take pre and p contamination to see when th filter, review (disinfection a Follow the link f
6.6.	Have there been any interruptions in treatment (UV, CL2 etc.)?	Determine if t outage, feed p etc.). For UV been appropria lamp operation
6.7.	Is the filter backwash discharge line appropriately "air gapped" above the drainage pipe or sewer or septic line?	Inspect or foll verify that it is drain pipe.
7	Storage Facilities	Stor
7.1.	Are there any holes or unprotected openings in the atmospheric tank(s)?	Inspect the tan components c
7.2.	Has there been any recent work on tank(s)?	Assess if there repair, inspect hatches, or ov repair or work
7.3.	Is the hatch on the atmospheric tank not sealed properly?	Inspect the hat a raised curb t gasket. A wat necessary to p matter from e
7.4.	Is there recent evidence of unauthorized access to tank or associated facilities?	Determine if t with.

7.5.	Is there any evidence of contamination from animals?	Inspect the areas of the storage tank that may be prone to animal infestation for dropping, nesting or other activities.
7.6.	Are vents on the atmospheric tank suitably protected and screened?	Inspect vents to ensure they are properly shielded and screened (fine mesh) and connected watertight into the tank.
7.7.	Is the overflow on the atmospheric tank suitably protected and screened?	Inspect the overflow protection to ensure that duckbill valves/ flap valves are properly closed or properly screened (fine mesh). Inspect the overflow for rust, holes or other breaches. Assess if the end of overflow is prone to being submerged.
7.8.	Is there any evidence of tank failure?	Inspect for evidence of failure. Examples include damaged bladder on pressure tank resulting in it being water logged, unexplained water loss or wet areas near buried tanks, severe corrosion/deterioration, etc.
7.9.	Is there evidence of lack of maintenance, cleaning or inspection?	Review records to assess frequency of maintenance, cleaning or inspection.
8	Distribution	
8.1.	Has there been any distribution plumbing, water service or main breaks or installations?	Review records to determine if there were any repairs to the system which supplies water to consumers or other process uses.
8.2.	Was there low disinfection residuals?	Review distribution sample results to determine if chlorine was below normal operating levels or if a detectable free chlorine level (i.e. > 0.05 mg/L) is maintained in the distribution or plumbing system. This would apply only to water systems which provide continuous chlorination treatment.
8.3.	Was an unprotected cross connection identified?	Review sanitary survey reports, cross connection inspection reports and recent work orders to determine if any cross connection violations have been identified and not corrected.
8.4.	Have there been any incidents of low or inadequate pressure (<25 psi)?	Determine if there been any inadequate or low pressure events. Adequate pressure is the first barrier in protection of water system from contamination.

Level II Forms & Instructions

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
Coliform Bacteria Level 2 Assessment Form

PWS ID#: **PWS Name:** **Town:**

System Type: CWS ☐ NTNC ☐ TNC ☐ **Date form completed:**

Assessment Trigger Date: **Assessment Trigger:** (Check one)
☐ - 2nd Level 1 Assessment triggered in a rolling 12 month period
☐ - *E.coli* MCL Violation
☐ - Sampling Reduction Request (**for use in conjunction with DPH records**)

NOTE: Form to be completed based on data and documents available to the PWS and returned to the department as soon as practical but no later than 30 days after the assessment trigger date.

Section 1 to 6: Review and evaluate all of the elements listed. Write Y (Yes) or N (No) if any potential causes of contamination are identified or write "NA" (Not Applicable) the element is not applicable to the PWS. **All sections of this form must be completed.** If Y or N then provide details with the corrective action details. If additional space is needed, please attach additional pages and make reference to the element section number in first column. A PWS with multiple facilities (wells, tanks, water treatment plants, etc.) must complete a separate form for each facility.

1	General Questions	Review Y/N/NA	Observations & Provide Detail	Date for Corrective Action has been Taken or Planning to take with action Plan
1.1.	Are there any unresolved significant deficiencies from the last CT DPH Sanitary Survey?			
1.2.	Have there been heavy rainfall and/or flooding?			
1.3.	Have you noticed any changes in source productions?			
1.4.	Have there been any interruptions to electrical power? If yes, when and for how long?			

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STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH
Revised Total Coliform Rule Level 2 Assessment Form

1	General Questions	Instructions
1.1.	Are there any unresolved significant deficiencies from the last CT DPH Sanitary Survey?	Review most recent CT DPH Sanitary Survey Report or response letter and determined if all significant deficiencies have been corrected. Any unresolved significant deficiencies may be contributing to the contamination and must be corrected.
1.2.	Have all sanitary defects identified in any prior Level 1 Assessments been corrected?	Review any Level 1 Assessments in the past 12 months and determine if all sanitary defects have been corrected. Any unresolved sanitary defects may be contributing to the contamination and must be corrected.
1.3.	Have there been any community illnesses suspected of being waterborne (e.g., Does the community public health official indicate that an outbreak has occurred.)	Contact LHD, CT DPH Drinking Water Section and review system records and complaints to determine if there have been reported illnesses, which may be the result of bacteriological contaminated water.
1.4.	Have there been any visible or physical indicators of unsanitary conditions?	Inspect system components: wells, tanks, etc. and the area around them to determine the sanitary conditions and if it may be a concern. Physical indicators of unsanitary conditions may include but are not limited to: trash dumping, animal/bird droppings, overflowing septic systems, mice or rodent activity/nesting near the well, air compressor intake for hydropneumatic tanks or unpressurized storage tanks.
1.5.	Have there been any signs of vandalism or forced entry?	Determine if there were signs that water system components were tampered with. Immediately notify police if vandalism or forced entry was done.
1.6.	Have there been any other water quality issues within distribution or plumbing systems (color, turbidity, taste, and odor)?	Review water quality physical tests and system complaints. Water quality issues include changes in water color, odor, taste, cloudiness. Some, not all, changes in water quality can be attributed to the bacteriological contamination of drinking water systems.
1.7.	Has there been a fire fighting events, flushing activities, water main breaks, etc.?	Review records to determine if there have been any fire-fighting events, system flushing activities or water main breaks, etc., which may have contributed to the bacteriological contamination.

Technical Questions?

Questions /Comments:

vicky.carrier@ct.gov

Desk: 860-509-7333 ext 7315

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Water Quality or Monitoring Questions?

Call Carissa Madonna
Or Christopher Roy

Main Phone Number is 860-509-7333

- Carissa Madonna, carissa.madonna@ct.gov
- Christopher Roy, christopher.roy@ct.gov

Mark your Calendars for Upcoming Level 2 Assessor Training Events

All at DOT Facility at 2800 Berlin Turnpike in Newington, CT

- March 24, 2016
- March 28, 2016
- June 13, 2016
- June 20, 2016
- November 17, 2016
- November 22, 2016
- Also watch for a RTCR review and other exciting drinking water topics at CEHA-Yankee Conference 2016 on September 21 and 22, 2016 in Mystic, CT

Thank you for being an operator!