

## Center for Drinking Water Quality

# Level 2 Assessment

General Public Water System (PWS) Information									
PWSID:			Р	WS Name:					
Select	Community			Stree	t Address:				
PWS	🗌 Non-T	ransient No	on-Community		City:				
Туре:	Transient Non-Community				ZIP:				
Source Fac	cility Code	(s):							
Population	Served:								
PWS Opera	otor/Ownor								
•									
Address (S	Street, City,	ZIP):							
Phone:			Email:						
Sample Co	llector Nar	ne:							
Address (S	Street, City,	ZIP):							
Phone:				Email:					
			PWS A	ssessment	History				
			Date Level 2 Assessn						
				e of current	-				
Select Re	eason for	<i>E.coli</i> Max	kimum Contaminant Le					☐ Yes	□ No
Assess	sment:					la agation			
			If Yes, which sample(s) from the <i>Present Sample</i> section:						
		Second (o	r more) assessment tr	iggered in r	olling 12 m	onth period	d:	🗌 Yes	🗌 No
			If Yes, total number of	assessment	s triggered:				
					L				

#### Instructions

Please answer each item in this assessment by checking off Yes, No, or N/A. A checked off response that is in a gray-shaded block constitutes a sanitary defect. A **sanitary defect** is a defect to a water system's infrastructure that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of failure or imminent failure in a barrier that is already in place. Provide details in the sections under each question, including corrective actions that were taken or will be taken. See below for an example.

ple	Is the well cap vented with the vent facing downward?	🗌 Yes	✓ No	□ N/A
E	Explain: Well cap is not vented; The well cap must be replaced with a durable, stainless- steel bolted well cap with a downward-facing vent that is screened with #24 mesh.			

If PWS has multiple wells, surface water intakes, surface water purchases, or water storage tanks: Make as many copies of the corresponding worksheets (*Source - Well*, *Source - Surface Water*, *Source - Purchased*, and *Water Storage*) as needed and complete each of them. To make copies of worksheets in Excel, right click on worksheet tab on the ribbon at the foot of the window. Select *Move or Copy...* from the pop-up menu. Check off *Create a copy* and select *OK*. You may also choose to make hardcopies after printing off the workbook.

#### Section A: Present Sample Site Evaluation

Complete for each TC (total coliform) or EC (*E.coli*) Present sample location. Report chlorine residual at the time of the TC/EC Present sample, including unit of measurement (for example, 0.15 mg/L).

	Present Sample #1		
Sample Location:			
Sample Date:			
Evaluation	1. Was the sample collected according to total coliform sample site plan?	🗌 Yes	🗌 No
Questions:	2. Was the condition of the tap appropriate for collection?	🗌 Yes	🗌 No
	3. Was the sample collected in accordance with proper protocols?	🗌 Yes	No No
Sampler Name:			
Chlorine Residual at time of TC/EC+:	☐ Free ☐ Total ☐ Not Measured ☐ N/A		
For any Ev	aluation Question(s) above checked off in a gray-shaded block, complete	the follo	wing.
Describe Issue:			
Proposed Corrective Action(s):			
	Present Sample #2		
Sample Location:			
Sample Date:			
Evaluation	1. Was the sample collected according to total coliform sample site plan?	🗌 Yes	🗌 No
Questions:	2. Was the condition of the tap appropriate for collection?	🗌 Yes	No No
<b>Q</b> =======	3. Was the sample collected in accordance with proper protocols?	🗌 Yes	🗌 No
Sampler Name:			
Chlorine Residual at time of TC/EC+:	☐ Free ☐ Total ☐ Not Measured ☐ N/A		
For any Ev	aluation Question(s) above checked off in a gray-shaded block, complete	the follo	wing.
Describe Issue:			
Proposed Corrective Action(s):			

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Present Sample #3					
Sample Location:					
Sample Date:					
Evolution	1. Was the sample col	lected according to total coliform sample site plan?	🗌 Yes	🗌 No	
Evaluation Questions:	2. Was the condition o	f the tap appropriate for collection?	🗌 Yes	No	
Questions.	3. Was the sample col	lected in accordance with proper protocols?	🗌 Yes	🗌 No	
Sampler Name:					
Chlorine Residual at time of TC/EC+:		Free Total Not Measured N/A			

# For any Evaluation Question(s) above checked off in a gray-shaded block, complete the following.

Describe Issue:	
Proposed Corrective Action(s):	

Present Sample #4					
Sample Location:					
Sample Date:					
Evolution	1. Was the sample collected according to total coliform sample site plan?	🗌 Yes	No		
Evaluation Questions:	2. Was the condition of the tap appropriate for collection?	🗌 Yes	No		
Quootiono.	3. Was the sample collected in accordance with proper protocols?	🗌 Yes	No		
Sampler Name:					
Chlorine Residual at time of TC/EC+:	☐ Free ☐ Total ☐ Not Measured ☐ N/A	—			

#### For any Evaluation Question(s) above checked off in a gray-shaded block, complete the following.

Describe Issue:	
Proposed Corrective Action(s):	

	Section B: Source - Well	PWS		does not	
ph	omplete one <i>Source - Well</i> worksheet for each well, including any wells that are unused or ysically disconnected. Add explanation or details if needed. If the PWS does not have wells, ease check the box to the right and proceed to next worksheet.		have w		
	Source: WL				
1.	Is the well located in a pit that was flooded or shows signs of previous flooding/submergence?	🗌 Yes	🗌 No	🗌 N/A	
	Explain:				
2.	Is the source a dug well?	🗌 Yes	🗌 No		
	Explain:				
3	Is the ground graded to prevent surface water from collecting around the well casing?	🗌 Yes	🗌 No	🗌 N/A	
	Explain:				
4	Are the exposed portions of the well structurally sound, showing no signs of deterioration?	🗌 Yes	No	🗌 N/A	
	Explain:				
5	Does the well have a secured sanitary seal?	🗌 Yes	No		
	Explain:				
6	Is the electrical conduit secure (with no openings)?	🗌 Yes	No		
	Explain:				
7	Is the well cap vented with the vent facing downward?	🗌 Yes	No	🗌 N/A	
	Explain:				
8	Is the well cap screened with screen intact?	🗌 Yes	No		
	Explain:				
9	Is there an appropriate air gap between the well vent and the ground?	🗌 Yes	🗌 No	🗌 N/A	
	Explain:				

10	Are appropriate backflow prevention devices installed, maintained, and tested on all cross connections?	🗌 Yes	🗌 No	
	Explain:			
11	Has the water system observed turbidity readings that are higher than usual?	Yes	🗌 No	🗌 N/A
	Explain:			
12	Are there any sewer/septic systems, construction, land disturbances, or other conduits for potential contaminants within the protective radius of the well? Conduits for potential contaminants can include but are not limited to: dumpsters, portable restrooms, dug wells, unapproved wells, unused or improperly abandoned wells, etc.	🗌 Yes	🗌 No	
	Explain:			
13	Are there any signs of obvious contamination or vandalism in the 200-400 feet of the well?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
14	Were any of the pumps repaired or replaced within the three (3) months prior to the assessment being triggered?	🗌 Yes	🗌 No	□ N/A
	Explain:			
15	Have there been serious/unusual weather events that may have impacted this well?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
16	Has the yield for the well changed?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
17	Was the well cover removed during the L2A to ensure the gasket is intact and that no animals/insects are getting into the well?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			

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18	Was the well disinfected following the <i>Well Disinfection Procedure</i> provided by RIDOH after well cover was removed per item 17 above? If not, indicate below when disinfection will occur.	🗌 Yes	🗌 No	□ N/A
	Explain:			
19	Has the PWS ever had the well scoped/videoed by a well professional?	🗌 Yes	🗌 No	
	Explain:	🗌 Unkı	nown	

Section C: Source - Surface Water			
Complete one <i>Source - Surface Water</i> worksheet for all intakes, even if unused or physically disconnected. If the PWS does not have surface water intakes, please check the box to the right and proceed to the next worksheet.	PWS does not have surface water		
Source: IN			
1. Are intake structures screened and routinely maintained?	☐ Yes ☐ No ☐ N/A		
Explain:			
2. Are the intake pump houses protected from unauthorized access?	☐ Yes ☐ No ☐ N/A		
Explain:			
3. Did raw water quality data collected within 30 days prior to the total coliform present sample indicate an issue with the quality of source water? If yes, note the date below.	□ Yes □ No □ N/A		
Explain:			
4. Are there obvious sources of contamination within the watershed?	□ Yes □ No □ N/A		
Explain:			
5. Were there severe weather events such as heavy rainfall, rapid snowmelt, or drought within 30 days prior to the assessment being triggered? If yes, note the date below.	□Yes □No □N/A		
Explain:			
6. Did seasonal turnover occur in any surface water reservoir within 30 days prior to the assessment being triggered? If yes, note the date below.	□ Yes □ No □ N/A		
Explain:			
7. Have there been any sewer/septic overflows or spills, or other disturbances in the area of the reservoir?	□ Yes □ No □ N/A		
Explain:			

<b>Section D: Source - Purchased</b> Fill out one <i>Source - Purchased</i> worksheet for all interconnections, even if unused or physically disconnected. If the PWS is not consecutive to another water system, check the box to the right.	PWS is not consecutive
Source: C	
1. Was the Wholesale PWS contacted in order to accurately answer the questions in this section?	? 🗌 Yes 🗌 No 🗌 N/A
Explain:	
2. Did the Wholesale PWS have any TC/EC present results within two (2) months prior to the assessment being triggered?	🗌 Yes 🗌 No 🗌 N/A
Explain:	
3. Was the interconnect pit found to be flooded or the interconnect/meter found to be submerged?	? 🗌 Yes 🗌 No 🗌 N/A
Explain:	
4. Is the interconnection free of leaks?	Yes No N/A
Explain:	
<ol> <li>Is proper distribution system pressure (&gt; 20 psi) on the upstream side of the interconnection being maintained by the Wholesale PWS? If No, explain below.</li> </ol>	Yes No N/A
Explain:	
6. Did the Wholesale PWS receive any water quality complaints from customers within two (2) months prior to the assessment being triggered?	Yes No N/A
Explain:	
7. Were there line breaks, large fire-fighting events, or reverse flow events within the Wholesale PWS within two (2) months prior to the assessment being triggered?	Yes No N/A
Explain:	

	Section E: Treatment Process	_	D/V/C 4~	es not use
Fil	I out the <i>Treatment Process</i> worksheet. If PWS does not use treatment, check box at right and	[		
	ip to next worksheet.			
	Treatment Plant: TP			
1.	Were there interruptions in any of the treatment processes within 30 days prior to the			
	assessment being triggered?	Yes	∐ No	
	Explain:			
2	Did the treatment plant(s) or finished water pumps experience any power interruptions within the			
2.	30 days prior to the assessment being triggered? If yes, include the date below.	🗌 Yes	🗌 No	
	Explain:			
3.	Was there any installation or repair of treatment equipment within the 30 days prior to the assessment being triggered (including changing media of a cartridge filter)? If yes, include the	🗌 Yes	□ No	
	date below.			
	Explain:			
4				
4.	Have there been changes to any treatment process? (For example, using new media or materials, etc.)	🗌 Yes	🗌 No	
	Explain:			
5.	If PWS is a chlorinated system have additional chlorine residual measurements been collected	☐ Yes	No	□ N/A
	throughout the distribution system?			
	Explain:			
6.	Are appropriate backflow prevention devices installed, maintained, and tested on all treatment			
	cross connections?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
7	Are all treatment processes operational and maintained?			
1.		∐ Yes	□ No	
	Explain:			
8.	Are all drain and equipment waste lines equipped with appropriate air gaps? (Note – an air gap			
	should be twice the diameter of the effective opening of the supply pipe. In no case shall the gap	🗌 Yes	🗌 No	🗌 N/A
	be less than one inch)			
	Explain:			

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9. Did a review of PWS turbidity records reveal any anomalies?			🗌 N/A
Explain:			
10. Did any permitted surface water treatment plants fail to meet required contact time (CT) values for any length of time? If yes, specify how long below.	🗌 Yes	🗌 No	🗌 N/A
Explain:			
11. Did the treatment plant flow rates exceed the permitted capacity at any time during the 30 days prior to the assessment trigger? If yes, include the date below.	🗌 Yes	🗌 No	□ N/A
Explain:			
12. Did any groundwater treatment plant fail to meet 4-log inactivation of viruses for any length of time during the 30 days prior to the assessment being triggered? If yes, note the date and for how long below.	🗌 Yes	🗌 No	🗌 N/A
Explain:			
13. Were there any issues with treatment monitoring equipment during the 30 days prior to the assessment trigger? If yes, include the date below.	🗌 Yes	🗌 No	🗌 N/A
Explain:			

	Section F: Distribution - Single Service Connections			ultiple servio
	the PWS has multiple service connections, check the box to the right and proceed to the next orksheet.	L .	connection	5
1.	Has the water system experienced pressure fluctuations or drops below 20 psi at any point within the distribution network?	☐ Yes	🗌 No	
	Explain:			
2.	Was there fixture replacement/repairs conducted at the site within the 30 days prior to the assessment being triggered?	🗌 Yes	🗌 No	
	Explain:			
3.	Was plumbing work conducted within the 30 days prior to the assessment being triggered where the total coliform present sample(s) were collected?	🗌 Yes	🗌 No	□ N/A
	Explain:			
4.	Are appropriate backflow prevention devices installed, maintained, and tested on all cross connections?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
5.	Is the PWS evaluated for new cross connections each time plumbing work is conducted? (TNCs can be N/A)	🗌 Yes	No	🗌 N/A
	Explain:			
6.	Were there an appropriate number of coliform samples collected during the repeat process?	🗌 Yes	🗌 No	
	Explain:			
7.	Does water quality data collected from the plumbing/distribution network show results indicative of a <u>widespread</u> or <u>localized</u> problem? Check one if applicable.	🗌 Yes	🗌 No	🗌 N/A
	Explain:		espread Ilized	
8.	Did the PWS receive water quality-related customer complaints (taste, color, odor, adverse effect) within the 30 days prior to the assessment being triggered? If yes, include date(s) below.	🗌 Yes	🗌 No	
	Explain:			

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9.	Has the PWS been made aware by customers of possible waterborne illness outbreaks within			
	the 30 days prior to the assessment being triggered? If yes, include date(s) below.	Yes	🗌 No	
	Explain:			
10.	Were any leaks observed at any point in the distribution network for the PWS?	🗌 Yes	🗌 No	
	Explain:			
	Does the PWS have a copy of RIDOH's <i>Well Disinfection Procedure</i> from previous assessments?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			

	Section G: Distribution - Multiple Service Connections he PWS has only one service connection, check the box to the right and proceed to next orksheet.	1 1	WS has sin onnection	gle service
1.	Has the PWS experienced pressure fluctuations or drops below 20 psi at any point within the distribution network?	🗌 Yes	🗌 No	
	Explain:			
2.	Were there fixture replacement/repairs conducted at the sampling site building/facility within the 30 days prior to the assessment being triggered?	🗌 Yes	🗌 No	
	Explain:			
3.	Was plumbing work conducted inside of the building(s) of any of the sampling sites within 30 days prior to the trigger where the Total Coliform present sample(s) were collected?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
4.	If line breaks occurred within the 30 days prior to the assessment being triggered, were they repaired in accordance with American Water Works Association Standard C651?	🗌 Yes	🗌 No	□ N/A
	Explain:			
5.	Did large firefighting events or other flushing events occur within the 30 days prior to the assessment being triggered that resulted in low pressure in any portion of the distribution system?	Yes	🗌 No	
	Explain:			
6.	Does the PWS have a flushing program in place?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
7.	Is there any evidence of intentional contamination or vandalism/tampering within the distribution network (including pump stations)?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
8.	Are pump stations protected from unauthorized access?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			

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9.	Are pump stations maintained and equipment operational?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
10.	Are appropriate backflow prevention devices installed, maintained, and tested on all cross connections?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
11.	Is the PWS evaluated for new cross connections each time plumbing work is conducted? (TNCs	🗌 Yes	🗌 No	🗌 N/A
	can be N/A) Explain:			
12.	Have there been any new service connections established in the two (2) months prior to the	🗌 Yes	□ No	□ N/A
	assessment being triggered? (TNCs can be N/A) Explain:			
13.	Prior to allowing new connections, does the PWS ensure that new customers have appropriate		<b>—</b>	
	backflow prevention? (TNCs can be N/A)	🗌 Yes	No	□ N/A
	Explain:			
11	Was the appropriate number of coliform samples collected during the repeat process?		_	
14.	Explain:	∐ Yes	∐ No	
15.	Did the PWS receive water quality-related customer complaints (taste, color, odor, adverse			
	effect) with the 30 days prior to the assessment being triggered? If yes, include date(s) below.	∐ Yes	∐ No	
	Explain:		<u> </u>	
16.	Has the PWS been made aware by customers of possible waterborne illness outbreaks within 30 the days prior to the approximate being triggered? If yes, include date(a) below.	🗌 Yes	🗌 No	
	the days prior to the assessment being triggered? If yes, include date(s) below. Explain:			
17.	Were additional chlorine residual measurements collected as part of this assessment?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			I
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18.	Does water quality data collected from the plumbing/distribution network show results indicative of a <u>widespread</u> or <u>localized</u> problem? (Check one if applicable.)	🗌 Yes	🗌 No	🗌 N/A
	Explain:		despread	d
19.	Does the PWS have a copy of RIDOH's <i>Well Disinfection Procedure</i> from previous assessments?	🗌 Yes	🗌 No	□ N/A
	Explain:			
20.	Were any leaks observed at any point in the distribution network for the PWS?	🗌 Yes	🗌 No	
	Explain:			
21.	Can the PWS show that there are no areas of stagnant water in the distribution network?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			

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Section H: Water Storage				
Complete one <i>Water Storage</i> worksheet for each tank (storage, hydropneumatic, etc.)				٦
Finished Water Storage ST:				
1.	Is the tank being maintained and free of rust, holes, or leaks?	🗌 Yes	🗌 No	
	Explain:			
				_
2.	Are there signs of unsealed openings in the tank facilities such as vents, joints, or doors?	🗌 Yes	🗌 No	
	Explain:			
3.	Are there signs of intentional contamination or vandalism/tampering?	🗌 Yes	🗌 No	
	Explain:			
4.	Are the pressure tanks maintaining an appropriate minimum air pressure/charge of >20 psi?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
5.	Does the well pump turn on immediately each time a faucet/tap/spigot is opened?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
6.	Does the access opening for the water storage tank have a proper gasket and seal?	🗌 Yes	🗌 No	🗌 N/A
	Explain:			
7.	Are vents and overflow pipes appropriately screened/protected from intrusion?	□ Yes	□ No	□ N/A
	Explain:			
8.	Do overflow pipes, splash pads, and downspouts drain away from the structure?	🗌 Yes	No	🗌 N/A
	Explain:			
9.	Has the interior of the tank been inspected within the past five (5) years?	☐ Yes	No	□ N/A
	Explain:			
10.	Can the tank be isolated from the PWS to allow for proper inspection/disinfection?	🗌 Yes	No	□ N/A
	Explain:			

Additional Comments and Certification		
Operator comments regarding bacterial contamination		
If the system has an operator, what is the operator's best professional opinion as to the source of the bacterial contamination?	□ N/A	

#### **Additional Comments**

Use this section for additional comments related to observed sanitary defects that were not captured by the assessment worksheets. Include any deficiencies observed during the Level 2 Assessment that may not have caused the total coliform present sample but could pose harm to the PWS or those it serves.

	Certification Checklist			
, .	nd entering in my assessor ID number below, I hereby certify that I am authorized to s in the State of Rhode Island and that:			
The information	n contained herein is true and correct to the best of my knowledge.			
I have made every effort to contact all relevant parties, including the designated operator, the administrative contact, the system sampler, etc., and any information obtained pertinent to the resilience of the public water system is disclosed in this assessment.				
☐ I was present o	n site to perform this assessment.			
Assessor Name:				
Professional Engineer	Certified Drinking Water Operator (check off license/licenses held below)			
	Distribution: 🗌 VSS 🗌 1 🗌 2 🛄 3 🗌 4			
	Treatment: VSS 1 2 3 4			
Assessor ID Number:	Date:			
Your Assessor ID Number wi	Il act as your electronic signature. This Level 2 Assessment, if completed electronically, will			

not be considered without the number.