Waterworks Level 2 Assessment									
Water	works	Name:		PWSID No.:					
Source Water Type:					City/County:				
Water	works	Type: Co	mmunity		Population Served:				
		☐ No	ntransient Noncon	nmunity	Seasonal				
		Tra	insient Noncommu	ınity	Seasonal				
Opera	tor in	Responsible Charge:				Phone:			
Compl	iance	Monitoring Period:							
Numb	er of S	Samples	Required	Collected	Total coliform presen	t E. coli present			
Routin	ie per	monitoring period							
Repea									
		ource water							
Date C) DW I	Notified Waterworks	Level 2 Assessmen	t Required:					
Assess	ment	Due Date:							
			Waterworks I	Personnel Con	sulted For Assessment:				
1.					Phone:				
2.					Phone:				
ODW-	FO St	aff Conducting Asses	sment:						
Reason Level 2 Assessment is required									
1.		An <i>E.coli</i> maximum	contaminant level	(MCL) violatio	n				
2.		A second Level 1 As	sessment required	within a rollin	ng 12-month period				

Waterworks Assessment Instructions

Consider each assessment element listed in the following evaluation form to determine if the element listed may have contributed to the "present" bacteriological sample results.

A response in a highlighted box suggests the assessment element may have contributed to the "present" bacteriological sample results and is a potential Sanitary Defect. Provide an explanation of why the highlighted element could have contributed to the "present" bacteriological sample results in the column titled "Describe any element of concern." Use the "Additional Comment" space on page 8, if needed, and always refer to the assessment element number. Also, provide the date and description of Corrective Actions taken/required as required on Page 9.

Notes:

- 1. For wholesale and consecutive waterworks:
 - a. Review records related to flows, pressures, and water quality parameters at the connection(s) with wholesale water supplier.
 - b. Consecutive waterworks owners shall notify wholesale water supplier whenever the consecutive system has been triggered to perform a Level 2 Assessment.
 - c. Wholesale waterworks owners shall notify consecutive waterworks owners as total coliform could have spread to consecutive waterworks distribution system.
- 2. The Level 2 Assessment must be completed based on a site visit plus the data and documentation available and maintained on file by the waterworks and ODW-Field Office.

Waterworks Level 2 Assessment									
Waterwo	orks Name:			PWSI	D No.:				
Assessment Elements			espor		Describe any element of concern				
				N/A	Describe any clement of concern				
1. Sample	e Site								
1.1	Were all sites used listed on approved BSSP?								
1.2	If the sample site is listed on the approved BSSP, does it remain an appropriate sample site?								
1.3	Are the sample tap and the surrounding area clean?								
1.4	Describe sample tap fixture (e.g., outdoor hose bib, indoor cold water faucet, etc.)				Description:				
1.5	Is the sample tap fixture a swivel faucet?								
1.6	Is the sample tap location used regularly?								
1.7	Any plumbing breaks or changes in vicinity of sample site or premise plumbing?								
1.8	Are there any identified cross connections after the service connection or in premise plumbing? Describe if present.								
1.9	Were all of the backflow prevention devices at the sample location operational and maintained?								
1.10	Were there any low pressure events or changes in water pressure after the service connection or in the premise plumbing: immediately prior to sample? If yes, when?								
1.11	Are there any treatment devices after the service connection or in the premises of the sample site?								
2. Sample	e Collection Protocol								
2.1	Was the sample collector properly instructed in collection procedures?								
2.2	Were taps flushed adequately (approx. 5 minutes)?								
2.3	Were aerators removed?								
2.4	Were sample containers sealed/unopened prior to use?								
2.5	Were the sample containers/rim or cap contaminated during sampling?								
2.6	Were the taps disinfected?								
2.7	Were samples delivered per laboratory instructions?								

Waterworks Level 2 Assessment							
Waterwo	rks Na	ame:			PWSI	D No.:	
	Assessment Elements			Respon		Describe any element of concern	
3. Events That May Have Caused a System Upset Prior to			Y	N	N/A	-	
3. Events		there been any operation and maintenance	Collec	ction of	ic san	npies	
3.1	activ	ities that could have introduced total coliforms /					
	a.	Well#					
	b.	Well Lot					
	c.	Reservoir					
	d.	Stream/River Intake					
	e.	Treatment Plant / System					
	f.	Distribution piping network					
	g	Pump Station					
	h.	Storage tanks (atmospheric or pressure)					
3.2		here been a fire fighting event, flushing ation, sheared hydrant, etc.?					
3.3	Has t	there been any vandalism and/or unauthorized ss to facilities?					
	a.	Well#					
	b.	Well Lot					
	c.	Reservoir					
	d.	Stream/River Intake					
	e.	Treatment Plant / System					
	f.	Distribution piping network					
	g.	Pump Station					
	h.	Storage Tanks (atmospheric or pressure)					
3.4	cond	here any visible indicators of unsanitary itions?					
3.5		there been any TC+ samples that were not pliance samples, including well or raw water ples?					
3.6	Have there been any low or inadequate disinfectant residual readings at the entry point or in the distribution system?						
3.7	main	here sites where it is historically difficult to tain a residual without flushing?					
3.8	been	e any other measured water quality parameters out of normal ranges?					
3.9	distri Whe						
3.10	viola	he water system receive any chlorine monitoring tions in the past 12 months? If yes, when.					
3.11	Have	there been any reports of community illness ected of being waterborne? (ODW/LHD)					

Waterworks Level 2 Assessment									
Waterwo	rks Na	me:			PWSID	No.:			
		Assessment Elements	F	Respon	se	Describe any Element of Concern			
			Υ	N	N/A	Describe any Element of Concern			
4. Recent		ational Changes To The System	ı						
4.1		e any new approved, previously inactive or							
4.1	unapproved well sources been placed into service recently?			ш					
4.2	Have	e any emergency or contingent/reserve well		П					
		ces been placed into service recently?							
4.3		ere evidence of any potential contamination main breaks, low pressure, high turbidity,		П					
1.3		of disinfection, or other similar event?							
4.4	If seasonal, were there any problems during the								
4.4	most	recent start-up procedure?							
5. Distrib		-		1					
		em pressure: Is there evidence that the							
5.1	system experienced low or negative pressure								
	prior to sampling? If yes, describe event and when it occurred.								
		there been any water main breaks or							
5.2		y line construction in the vicinity of the							
		ole site? If yes, when?							
5.3	Pum	p stations							
	a.	Have there been any mechanical,		П					
	b.	electrical, or operational problems? Are pump(s) currently operable?							
	_	p maintenance service or repair in the last							
5.4		b) months?							
5.5	Air v	alves upstream of the sample tap							
3.3	conn	ection:							
	a.	Is the air valve vault subject to flooding?		Ц					
	b.	Does the vent terminate below grade?		Ш					
5.6		e any fire hydrants in the vicinity of the ole tap connection been used recently?							
		e any blow-offs in the vicinity of the sample							
5.7	tap been used recently?								
5.8	Unauthorized access or use of the distribution			П					
	system suspected or reported?								
5.9	Back	flow Prevention Devices							
	a.	Are any backflow devices in service in the distribution system near tap?							
	b.	Are required inspections and certifications	П						
		current? Is the certification or serviceability of any							
	c.	backflow prevention device suspect?							

Waterworks Level 2 Assessment								
Waterwo	rks Name:			PWSIE	No.:			
			Respon	se	5 11 51 1.60			
	Assessment Elements	Υ	N	N/A	Describe any Element of Concern			
5. Distri	bution System - continued							
5.10	Was there any scheduled flushing of the distribution system? If yes, when?							
5.11	Is there any evidence of intentional contamination in the distribution system?							
5.12	Has there been a large variation in chlorine residual values in the system?							
5.13	Have any unusual circumstances/incidents involving the water distribution system been observed or reported?							
5.14	Authorized/unauthorized water haul trucks filled at any fire hydrant?							
5.15	Yard hydrants near sample location?							
5.16 Have there been any customer complaints about pressure and/or water quality prior to sampling?								
6. Treati	ment Process							
6.1	Have there been any interruptions in treatment processes from power outages or other causes? If yes, provide details for which part, when and for how long?							
6.2	Is treatment equipment operational and maintained?							
6.3	Has there been any new equipment installation or repair of treatment equipment recently?							
6.4	Has useful life of filter media/cartridges expired?							
6.5	Have there been any recent changes in the treatment process (e.g., addition of a process, change in chemical or dosage)? If yes, provide details for the change and when it occurred?							
6.6	Was the free chlorine residual measured immediately downstream from the point of application adequate for chlorine contact time?							
6.7	Has the desired free chlorine residual goal and range been consistently achieved?							
6.8	Did a review of the filter turbidity profiles reveal any anomalies?							
6.9	Were there any failures in meeting the required chlorine contact time?							
6.10	Was any process flow loading rate above the rated capacity?							
6.11	Was there anything unusual about the settled water turbidity?							
6.12	Other observations on the treatment system?							

Waterworks Level 2 Assessment									
Waterworks Name:					PWSIE	O No.:			
A				spon	se	- " - · · · · · · · · · · · · · · · · ·			
	Assessment Elements	Υ		N	N/A	Describe any Element of Concern			
7. Water Storage Tanks - Atmospheric									
7.1	Are the vents properly protected and screened?								
7.0	Are the storage facilities and sites secured to								
7.2	prevent unauthorized access?	Ш			Ш				
7.3	Are the roof access hatches properly designed as shoebox lids, properly gasketed, sealed and								
	locked against unauthorized access?								
7.4	Does the tank have a screened drain line, separate from the overflow line, discharging to the atmosphere?								
7.5	Is the tank overflow outlet screened?								
7.6	Does the tank overflow line terminate above ground surface (air-gap) with a downward discharge screened end?								
7.7	Are there any unsealed openings in the storage facility, such as access doors, vents or joints, target float wire penetrations; cathodic protection/ ice free electrode holder penetrations in the tank roof or wall; have any leaks been observed?								
7.8	Was any physical deterioration of the tank appurtenances (ladders, communications equipment, etc.) observed?								
7.9	Could the physical condition of the tank be a possible source of contamination?								
7.10	Does the tank "float" on the distribution system?								
7.11	Are there separate inlet/outlet lines into the tank?								
7.12	Does the tank have an altitude valve assembly, air release assembly or other device associated with the tank inlet/outlet or fill/release line?								
8. Water	Storage - Hydropneumatic/Bladder Storage Ta	anks							
8.1	Are the pressure storage tanks maintaining an appropriate minimum pressure?]						
8.2	Has proper O&M been performed per appropriate schedule?]						
8.3	Any recent tank maintenance (i.e. interior inspection; painting/coating)? If yes, when?								
8.4	Is the measured free chlorine residual in the water exiting the storage tank detectable?]						
8.5	Is there any evidence of intentional contamination to the pressure storage tank?								
8.6	Are there any other observations of the water storage facilities worthy of note?								

	Waterworks Level 2 Assessment									
Waterwo	Waterworks Name:				PWSID) No.:				
		Assessment Elements	R	Respon	se	Describe any Element of Concern				
		Assessment Elements	Υ	N	N/A	Describe any Element of Concern				
9. Water	9. Water Supply Well(s)									
9.1	Is we	ell house free of pests/vermin?								
9.2	Is ex dam	posed well casing free of rust/pitting or age?								
9.3	Is we	ell casing floor penetration sealed?								
9.4	Well	head with Sanitary Seal								
	a.	Is the sanitary seal intact and tightened down?								
	b.	Is the seal properly vented and screened?								
	C.	Are all other penetrations through the seal protected?								
9.5	Well	head with Caps (pitless adapter installations)								
	a.	Is the cap a PAS-97 watertight cap?								
	b.	Is the watertight cap and gasket properly installed and evenly tightened?								
	c.	Is the vent screen intact?								
	d.	If the cap has been modified for any purpose, is the cap properly sealed and is any vent securely installed and screened?								
9.6		e well casing cover fitted to permit surement of depth to water level?								
	a. If yes, is the installation satisfactory?									
9.7		s the well blowoff terminate with approved ap and screened end?								
9.8		there any unprotected cross connections at wellhead?								
9.9		s the well casing extend 12-in. above grade?								
9.10		ere evidence of standing water near the nead?								
	a.	In the wellhead enclosure								
	b.	Around the concrete pad		Ш						
9.11		s the Well have a suitable 6 ft. x 6 ft. concrete in good condition?								
9.12	Is th	e wellhead secured in a locked enclosure?								
9.13	cont (with	e there been any sewer spills or other amination activities in or around wellhead nin 50 ft.)?								
9.14	cons	there any aspects of well or wellhead truction whether compliant or non-pliant with the VA. Waterworks Regulations, might affect bacteriological quality?								

	Waterworks Level 2 Assessment									
Waterw	vorks Name:			PWSID	No.:					
	Assessment Elements			se	Describe and Flament of Course					
				N/A	Describe any Element of Concern					
10. Sou	10. Source – Surface Water Supply (Lake/Reservoir)									
10.1	Have there been any sewer overflows, chemical spills or other disturbances into the source?									
10.2	Have there been any algal blooms?									
10.3	Has water turnover occurred?									
10.4	Has there been heavy rainfall, flooding, or rapid snowmelt in the past 60 days that have resulted in raw water turbidities exceeding 100 NTU?									
10.5	Any other surface water comments relevant to bacteriological quality?									
11. Sou	rce – Spring(s)	•								
11.1	Recent heavy rainfall, flooding event within 7 days prior to sampling?									
11.2	Recent incident of raw water turbidity (≥100 NTU) within 14 days prior to sampling?									
11.3	Has there been any damage, change or repairs to the spring(s) infrastructure?									
11.4	Has there been any damage, change or repairs to the treatment processes used at the spring(s)?									
11.5	Have there been any unusual changes or incidents within the spring drainage area?									
12. Env	ironmental Events	ı	I	I						
12.1	Have there been changes in the availability of water supply, such as a significant drop in water table, ground well levels in the wells, reservoir capacity, etc.?									
12.2	Have there been any extremes in heat or cold?									
Additio	nal Comments									

Waterworks Level 2 Assessment									
Waterw	orks	Name:	PWSID No.:						
		Summary							
	- 4	Assessment Elements/Sanitary Defects	Corrective Action Taken and Date						
						_			
Conclusi	ons:	<u> </u>				_			
Atta	ch a	dditional sheets as necessary							
		or the contamination was not found.							
	use i	or the contamination was not round.							
Assistan	ce w	th assessment provided by:							
			Yes	No	Comments				
1.	Wa	s likely reason for TC+ occurrence or <i>E.coli</i> violation found?		П		_			
		ve all identified problems or sanitary defects been corrected							
2.		waterworks?		Ш					
	~,	If 'No', has an approved schedule to complete remaining							
	a.	corrections been developed and accepted by the							
		waterworks? <u>See attachment</u>							
	h	If a correction schedule is necessary, has schedule been							
	b.	entered into SDWIS?		Ш					
Print nan	ne of	ODW staff completing the form:							
Signatu	ro:		Date:						
Signatu	ie.		Date.						
			_'						
Print nan	ne of	Waterworks Representative:							
. .									
Signature:			Date:						
			_						
Name of	Revie	wer (Print)	Date:						
			-						
Commen	ts:								