Waterworks Level 2 Assessment									
Waterworks Name:				PWSID No.:					
Source Water Type:		City/County:							
Waterworks Type:									
	Nontra	nsient Noncon	nmunity	Seaso	onal				
	Transie	nt Noncommu	unity	Seaso	onal				
Operator in Responsible	e Charge:					Phone:			
Compliance Monitoring	Period:		-						
Number of Samples		Required	Collected	Total colif	orm present	E. coli present			
Routine per monitoring	period								
Repeat									
Triggered source water									
Date ODW Notified Wa	erworks Leve	el 2 Assessmen	t Required:						
Assessment Due Date:									
		Waterworks	Personnel Con	sulted For As	sessment:				
1.				Phone:					
2.				Phone:					
ODW- FO Staff Conduct	ODW- FO Staff Conducting Assessment:								
Reason Level 2 Assessment is required									
1. 🗌 An <i>E.coli</i> m	An <i>E.coli</i> maximum contaminant level (MCL) violation								
2. 🗌 A second L	evel 1 Assess	ment required	l within a rollir	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	D No.:						
	Assessment Elements	Respon Y N			Describe any element of concern		
			Ν	N/A			
1. Sample					Γ		
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?						

Waterw	orke N	Waterwo	. NO LCI		1	D No.:
valeiw		ame.		Respon	_	
	Assessment Elements		Y	N	N/A	Describe any element of concern
3. Event	s That	May Have Caused a System Upset Prior to			-	nples
3.1	Have	e there been any operation and maintenance ities that could have introduced total coliforms /				r
	a.	Well#				
	b.	Well Lot				
	с.	Reservoir				
	d.	Stream/River Intake				
	e.	Treatment Plant / System				
	f.	Distribution piping network				
	g.	Pump Station				
	h.	Storage tanks (atmospheric or pressure)				
3.2	Has oper	there been a fire fighting event, flushing ration, sheared hydrant, etc.?				
3.3	Has acce	there been any vandalism and/or unauthorized ss to facilities?				
	a.	Well #				
	b.	Well Lot				
	с.	Reservoir				
	d.	Stream/River Intake				
	e.	Treatment Plant / System				
	f.	Distribution piping network				
	g.	Pump Station				
	h.	Storage Tanks (atmospheric or pressure)				
3.4		there any visible indicators of unsanitary ditions?				
3.5	com	e there been any TC+ samples that were not pliance samples, including well or raw water ples?				
3.6	resid distr	e there been any low or inadequate disinfectant dual readings at the entry point or in the ibution system?				
3.7	Are	there sites where it is historically difficult to ntain a residual without flushing?				
3.8	Have	e any other measured water quality parameters n out of normal ranges?				
3.9	Have	e there been any TC+ or E. coli results in the ibution system (esp. in the last 12 months)?				
3.10	Did t viola	the water system receive any chlorine monitoring ations in the past 12 months? If yes, when.				
3.11	Have	e there been any reports of community illness vected of being waterborne? (ODW/LHD)				

Waterworks Level 2 Assessment								
Waterwo	rks Na	ame:	PWSIE	D No.:				
		Assessment Elements	F	Respon	se	Describe any Floment of Concern		
		Assessment Elements	Y	Ν	N/A	Describe any Element of Concern		
4. Recent	: Oper	ational Changes To The System						
		e any new approved, previously inactive or		]				
4.1		pproved well sources been placed into						
		ice recently? e any emergency or contingent/reserve well						
4.2		ces been placed into service recently?						
		ere evidence of any potential contamination						
4.3		main breaks, low pressure, high turbidity,						
	loss	of disinfection, or other similar event?						
4.4		asonal, were there any problems during the						
	mos	t recent start-up procedure?						
5. Distrib				•				
		em pressure: Is there evidence that the						
5.1		system experienced low or negative pressure						
		r to sampling? If yes, describe event and n it occurred.						
		e there been any water main breaks or				-		
5.2		y line construction in the vicinity of the						
	sam	ple site? If yes, when?						
5.3	Pum	p stations		•				
	a.	Have there been any mechanical,						
		electrical, or operational problems?						
	b.	Are pump(s) currently operable? p maintenance service or repair in the last						
5.4		5) months?						
5.5		alves upstream of the sample tap						
5.5		nection:				-		
	a.	Is the air valve vault subject to flooding?				-		
	b.	Does the vent terminate below grade?				-		
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	5.7 tap been used recently?							
5.8		uthorized access or use of the distribution						
	system suspected or reported?							
5.9	Back	flow Prevention Devices				4		
	a.	Are any backflow devices in service in the distribution system near tap?						
		Are required inspections and certifications				4		
	b.	current?						
	с.	Is the certification or serviceability of any backflow prevention device suspect?						

Vaterwo	orks Name:			PWSID	D No.:
		R	lespon	_	-
	Assessment Elements	Y	N	N/A	Describe any Element of Concern
5. Distribution 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. Treat	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							
Waterwo	orks Name:				PWSIC		
· · · ·			Res	pons			
	Assessment Elements	Y	1	N	N/A	Describe any Element of Concern	
7. Water Storage Tanks - Atmospheric							
7.1	Are the vents properly protected and screened?						
7.2	Are the storage facilities and sites secured to						
7.2	prevent unauthorized access?						
	Are the roof access hatches properly designed as	[					
7.3	shoebox lids, properly gasketed, sealed and						
	locked against unauthorized access?						
7.4	Does the tank have a screened drain line,						
7.4	separate from the overflow line, discharging to the atmosphere?						
7.5	Is the tank overflow outlet screened?						
	Does the tank overflow line terminate above						
7.6	ground surface (air-gap) with a downward						
	discharge screened end?			_			
	Are there any unsealed openings in the storage						
	facility, such as access doors, vents or joints,						
7.7	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						
7.0	equipment, etc.) observed?						
	Could the physical condition of the tank be a						
7.9	possible source of contamination?						
7.10	Does the tank "float" on the distribution						
	system?						
7.11	Are there separate inlet/outlet lines into the						
7.42	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					
	Are the pressure storage tanks maintaining an		,				
8.1	appropriate minimum pressure?						
0.2	Has proper O&M been performed per		1				
8.2	appropriate schedule?		l				
8.3	Any recent tank maintenance (i.e. interior		1				
0.5	inspection; painting/coating)? If yes, when?		J			-	
8.4	Is the measured free chlorine residual in the						
	water exiting the storage tank detectable?		-	_		4	
8.5	Is there any evidence of intentional contamination to the pressure storage tank?						
	Are there any other observations of the water		_	_		4	
8.6	storage facilities worthy of note?		l	$\square$	$  \square$		

		Waterwoo	rks Leve	el 2 As	sessmer	nt
Naterw	orks N				PWSID	
		Assessment Flowerts	R	espon	se	Describe on a flow out of Comment
		Assessment Elements	Y	Ν	N/A	Describe any Element of Concern
9. Water Supply Well(s)						
9.1	Is well house free of pests/vermin?					
9.2		posed well casing free of rust/pitting or age?				
9.3	ls w	ell casing floor penetration sealed?				
9.4	Wel	lhead 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	Wel	lhead 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?				
	с.	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				
0.0	-	ap and screened end? there any unprotected cross connections at				
9.8		wellhead?				
9.9		s the well casing extend 12-in. above grade?				
9.10		ere evidence of standing water near the head?				
	a.	In the wellhead enclosure				
	b.	Around the concrete pad				
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 (wit	e there been any sewer spills or other tamination activities in or around wellhead hin 50 ft.)?				
9.14	con: com	there any aspects of well or wellhead struction whether compliant or non- pliant with the VA. <i>Waterworks Regulations,</i> might affect bacteriological quality?				

Waterworks Level 2 Assessment							
Waterw	vorks Name:			PWSID	) No.:		
	Assessment Flows and		Respon	se			
	Assessment Elements	Y	N	N/A	Describe any Element of Concern		
10. Sou	rce – 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						
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		PWSID No.:						
		Summary							
		Assessment Elements/Sanitary Defects	Corrective Action Taken and Date						
Conclusi	ons:								
☐ Atta	ch a	dditional sheets as necessary							
		for the contamination was not found.							
	usei	or the contamination was not round.							
Assistan	ce w	ith assessment provided by:							
			•						
			Yes	No	Comments				
1.	Wa	s likely reason for TC+ occurrence or <i>E.coli</i> violation found?							
2	На	e all identified problems or sanitary defects been corrected							
2.	by	waterworks?							
		If 'No', has an approved schedule to complete remaining							
	а.	corrections been developed and accepted by the							
		waterworks? <u>See attachment</u> If a correction schedule is necessary, has schedule been							
	b.	entered into SDWIS?							
	1								
Print nam	ne of	ODW staff completing the form:							
			Deter						
Signatu	re:		Date:						
			-						
Print nam	ne of	Waterworks Representative:							
Signatur	۵.		Date:						
Signatur	с.		Date.						
Name of	Rovia	wer (Print)	Date:						
	I C VIC		Date.						
Commen	te ·								
commen	15.								