STANDARD OPERATING PROCEDURE															
	F2E—Escherichia coli (E. coli) detected AND repeat samples can not be taken as required						n not be taken as required								
SOP#	14	REASON CODE:	F4—Escherichia coli (E.coli) detected in an initial sample(s) is considered extensive and the water system has other known prob								REV:	(DATE:	Dec. 2015	
			F5—Escherichia coli (E.coli) detected and confirmed in repeat sample.												
BWA CAUSE IDENTIFICATION		7: ![RECOMMENDED STEPS TO ADDRESS BOIL WATER ADVISORY									IMPLEMENT PREVENTATIVE MAINTENANCE			
			THE STATE OF THE S								AILY Measure and record flow rates.				
			Implement Unique Short Term Corrective		Implemen	Short Term easures (cont'd)		Confirm Operation and Lift BWA (cont'd)							
Complete Assessi	nent Too		Measures Owner to provide training to samplers	_	Corrective Mo			Owner to contact Service NL office to request an Environmental Health Officer					-		
					☐ Investigate source system for source	e water and distribution es of fecal		to re-sample the drinking water system			☐ Visual inspection of chemical feed pumps and feed lines.				
<u> </u>	Identify Potential Cause(s)		on proper sampling protocol for site		contamination; on	n-site septic systems, s, sewer overflows,	V V	for compliance with provincial drinking water bacteriological and disinfection		□ Ме	☐ Measure and record chemical usage.			al usage.	
Identify Potentia			preparation, flushing service line/tap, sample collecting, handling, and	i	animal feces (don	nestic and wildlife), f, broken sewer mains/		standards.			☐ Measure and record free and total chlorine				
			transport.			er sources of sewage.		—				ut the distribution sy I branch lines).		ystem (first user, end of	
+	Cause #1		☐ Ensure samples shipped properly and		☐ Remove source of ☐ Owner should incorresiduals in accordated accordated accordated.			Implement Long Term							
Cause #			secure. Confirm that sample bottles were intact and not damaged prior to					Corrective Measures ☐ Owner should provide opportunities for		WEEK	EKLY				
Sampling errors			collection.	i		dance with provincial		training to increase operators knowledge		_	□ Visual inspection of chlorine injector for lea ensure operating normal.				
			☐ Owner to ensure appropriate			orimary and secondary		associated with cause and corrective measures.		ens	sure op	erau	ing normai.		
			sampling sites have been selected for bacteriological testing. If in doubt, owner may consult with Service NL and MAE.		disinfection syster	ms meet Drinking Water ard log inactivation		Owner should ensure operators have appropriate level of training/education to allow operators to be eligible for certification in accordance with provincial standards. Operator training may be obtained via ACWWA, on-line courses, and MAE Operator Education. Training	+	MONT	<u>ONTHLY</u>				
Cause #	2				requirements for t					□ Ins	Inspect and clean intake structure, intake screens				
Sampling site de	ficiency		☐ Owner to install dedicated sampling		the drinking water						and pipeline.				
			taps.								Inventory all consumables and order supplies as necessary.				
			☐ Collect follow-up samples.	i	the distribution sy	stem (e.g., via pressure ctions, fire fighting/flush		and MAE Operator Education, Training and Certification.			_		etering pump	is available, replace	
Cause #3		_			activities) treatme	nt breakthrough, pipe corrosion tubercles.					operating pump with back-up pump and insperinternal components.			p pump and inspect	
Fecal contamina	Fecal contamination of		Invalous and Charle Towns		sediment buildup	n pipes and storage		Conital Media Fundina		•		imponents.			
water from huma			Implement Short Term Corrective Measures		vents, etc., vanda	nin proof well caps, tank lism, exposure of water		Capital Works Funding			3 MONTHS ☐ Clean che		emical feed lines and solution tanks.		
	(sewage pipe leaks and private septic fields) and animal waste (livestock		☐ Municipalities are required to have Emergency Response Plans under the Emergency Services Act administered by			ponents (e.g., pipes), tative maintenance.		☐ Contact nearest MAE regional office to initiate evaluation of existing water			Jan Ono	,,,,,,	ar 1000 miles ar	ia dolation tallice.	
					☐ Owner should ass			infrastructure.		<u>6 MON</u>	6 MONTHS				
and wildlif	e)		the Department of Municipal Affairs and		treatment process additional treatme	to determine if					•		•	tial sources of	
			Environment (MAE). Scenarios for drinking water related emergencies are		required.	it processes are		 Owner to work with stakeholders (MAE, engineering consultants, etc.) to identify 			contamination (including development active storage of chemicals/fuels and animal active		-		
			typically included in these plans and enacted by municipalities as needed.					sustainable options.			_			,	
			☐ Take appropriate emergency responses					Owner to make an application to MAE for		<u>ANNU</u>	<u>AL</u>				
			in conjunction with Department of Health and Community Services - Disease			ļ.		Owner to make an application to MAE for project funding. Online applications can			Inspect dam and spillway for signs of deterior malfunction, blockages and public safety.			~	
			Control Manual (HCS, 2013) and input from other government departments (including Service NL, and MAE).		•	tion and Lift BWA		be made at: http://www.mae.gov.nl.ca/			_		_		
						e with the Drinking		capital_works/cwfunding.html.		mainte	more detailed information on preventative itenance schedules for water infrastructure vis			er infrastructure visit	
					Water Treatment					http://w		_	ov.nl.ca/waterr	es/waste/	