TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION
DIVISION OF WATER RESOURCES – DRINKING WATER UNIT
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Ave., 11th Floor
Nashville, TN 37243-1102
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REVISED TOTAL COLIFORM RULE LEVEL 1 ASSESSMENT

Water System Name:	_____
PWSID #:	_____
Assessment Performed By:	_____
Date of Assessment:	_____
	(1.) Sampling
☐ Yes ☐ No **If Yes, explain**	**(a.) Review total coliform sample results and chlorine residuals for the past three months (six months, if sampling quarterly). Are there any trends in bacteria samples or chlorine residuals?**
	_____ _____ _____ _____ _____ _____
	(b.) Sampling Guidance
	• The water should be allowed to run for a few minutes to ensure it was from the distribution system and not household plumbing. • The faucet should be disinfected. • The chlorine residual should be taken but not using the bacteria sample bottle. • Care should be taken not to touch the inside of the bottle or lid, not to set the lid down and not rinse the bottle out. Container should not touch faucet. • The water should be flowing in a slow, steady stream. • Container should not be overfilled and should be sealed immediately. • Outdoor faucets, frost-proof faucets should be avoided. • If possible, avoid faucet connected to water heater, pressure tank; hot water faucet, new faucet, swing/swivel faucets, janitor sink faucets or other potentially contaminated faucets.
	(c.) Describe below the sampling technique used for bacteria sampling:
	_____ _____ _____ _____ _____
	(d.) Name of Sampler
	_____

☐ Yes ☐ No If Yes, explain	(e.) Are conditions at the sample tap unsanitary and prone to external contamination?
☐ Yes ☐ No Explain setting/use of tap	(f.) Has the sample site been in regular use? Would the typical use of the tap be prone to contamination (food preparation, utility sink, etc.)?
	(g.) Describe how the samples were processed:
	I. Samples shipped or delivered? II. Time between sample collection and delivery to lab? III. Samples cooled or ambient temperature? IV. Fresh sample bottles? V. Properly stored sample bottles?
	(h.) If the system has a certified bacteriological lab, review their lab procedures, QA/QC and the cleanliness of the lab. Provide observations below:
	(2.) General – File Review
	(a.) Review last sanitary survey and survey letter for identified problems affecting water quality, particularly repeat issues. Provide observations below:
	(b.) Review Monthly Operating Reports (MORs) for past 6 months paying special attention to chlorine residual leaving plant and turbidity levels.

	Provide observations below:
	_____ _____ _____ _____
	(c.) Review files for filter exceedance reports, filter performance reports, identify filter run times. Provide observations below:
	_____ _____ _____ _____
□ Yes □ No If Yes, explain	(d.) Has there been a loss of service due to a failure of water transmission or distribution facilities?
	_____ _____
□ Yes □ No If Yes, explain	(e.) Could any operation or maintenance activities have introduced contamination?
	_____ _____
□ Yes □ No If Yes, explain	(f.) Has there been recent delivery of new treatment chemicals? Were they confirmed to be the correct chemical and strength?
	_____ _____ _____ _____
□ Yes □ No If Yes, explain	(g.) Has there been vandalism or unauthorized access to facilities identified?
	_____ _____ _____ _____ _____
	(3.) Distribution System
□ Yes □ No	(a.) Have all issues identified in the last professional tank inspection and sanitary survey been addressed? Describe below:
	_____ _____ _____ _____ _____
□ Yes □ No	(b.) Have there been line replacements, water line breaks or repairs or new construction within the past 3 months? Describe disinfection techniques employed below:
	_____ _____

	_____ _____
☐ Yes ☐ No	(c.) If the tank or clearwell inspection or repair was within the past 3 months, was proper disinfection employed afterward? When were the tanks last cleaned out? Describe disinfection technique below:
	_____ _____ _____ _____
☐ Yes ☐ No	(d.) Is there an ongoing flushing program and when was the last flushing performed? Describe below:
	_____ _____ _____ _____
☐ Yes ☐ No If yes, explain	(e.) Are there any areas where it is difficult to maintain chlorine residual without flushing?
	_____ _____ _____ _____
☐ Yes ☐ No If Yes, explain	(f.) Has there been any firefighting in the area within the past 3 months that would have dropped water pressure or other low pressure events such as line breaks?
	_____ _____ _____ _____
	(4.) Cross Connections
☐ Yes ☐ No	(a.) Are backflow prevention devices being tested annually?
☐ Yes ☐ No If Yes, explain	(b.) Are there backflow prevention devices in the vicinity of the total coliform positive site or places that should have backflow prevention devices?
	_____ _____ _____ _____
☐ Yes ☐ No If Yes, explain	(c.) Have any failed backflow prevention devices missed being repaired/replaced and retested within the previous 12 months?
	_____ _____ _____ _____
☐ Yes ☐ No	(d.) Within the area of concern, have there been surveys conducted for the detection and elimination of hazards associated with cross-connections? Describe the area (e.g., residential, commercial, sparsely populated rural, etc.) and any known backflow prevention devices and potential risks.
	_____ _____

	(5.) Plant Operation/Treatment
☐ Yes ☐ No If No, explain	(a.) Are all of the facilities secure to prevent unauthorized access?
☐ Yes ☐ No	(b.) Is the treatment facility operated and manned 24 hours a day? Explain below:
	(c.) If unmanned while in operation, what monitoring/shutdown alarms are in place at the treatment facility (turbidity, chlorine residual, etc.) and are they operational? Describe below:
☐ Yes ☐ No If Yes, explain	(d.) Has there been any unusual filter performance within the past 3 months?
☐ Yes ☐ No If Yes, explain	(e.) Review turbidity records for the past three months. Have there been any turbidity exceedances of more than 1 NTU in either the individual filters or combined?
	(f.) Have there been any other parameters out of normal range within the past 3 months? Describe below:
☐ Yes ☐ No If Yes, explain	(g.) Have there been any disruptions within the past 3 months that could have affected turbidity or disinfection (chlorine feed or UV disinfection)?

☐ Yes ☐ No If Yes, explain	(h.) Are there any unsanitary conditions, rodents, birds, general housekeeping problems at any of the facilities?
	_____ _____
☐ Yes ☐ No If Yes, explain	(i.) Were there any observed leaks or other signs of poor maintenance within the facilities? :
☐ Yes ☐ No	_____ _____ _____ _____
☐ Yes ☐ No	(j.) If there is a pressure tank present, is it maintaining appropriate pressure?
☐ Yes ☐ No	(k.) If the system is using a cartridge filter, is the filter the correct absolute 1 micron cartridge and is it changed according to manufacturer's recommendation? Provide comments below:
	_____ _____ _____ _____ _____
	(6.) Chlorine Residual
☐ Yes ☐ No	(a.) Has the system been achieving the proper contact time, if required (minimum of 15 minutes)? Indicate below if system is not chlorinating and discuss system's contact time below:
	_____ _____ _____ _____
☐ Yes ☐ No	(b.) Is there consistent chlorine residual in the water leaving the plant? Describe below: Indicate below if system is not chlorinating. Describe below:
	_____ _____ _____ _____
	(7.) UV Disinfection – If applicable
☐ Yes ☐ No	(a.) Is the unit operational?
☐ Yes ☐ No	(b.) Is the turbidity low enough for it to work properly?
☐ Yes ☐ No	(c.) Does the unit have the proper UV lamp?
☐ Yes ☐ No	(d.) Does the lamp need replaced?
☐ Yes ☐ No	(e.) Is the lamp sleeve clean?
	(8.) Source
☐ Yes ☐ No If Yes, explain	(a.) Have there been any new or auxiliary sources brought online?
	_____ _____ _____

	_____
☐Yes ☐No If Yes, explain	If seasonal, were there any problems with the startup procedure?:
	_____ _____ _____ _____
	(9.) Well/Spring
☐Yes ☐No	(a.) Is springbox in good condition? Describe springbox below:
	_____ _____ _____ _____
☐Yes ☐No	(b.) Is springbox/well head protected from surface water drainage/infiltration? Describe below:
	_____ _____ _____ _____
☐Yes ☐No	(c.) Is well casing above grade/flood zone? Describe setting below:
	_____ _____ _____ _____
☐Yes ☐No	(d.) Is the sanitary seal on the well casing is intact?
☐Yes ☐No	(e.) Is well vent screened?
☐Yes ☐No If Yes, explain	(f.) Was there any heavy precipitation or flooding within the 30 days prior to the total coliform positive event?:
	_____ _____ _____ _____
	(10.) Intake
☐Yes ☐No If Yes, explain	(a.) Any conditions that might increase turbidity or introduce contamination?
	_____ _____ _____
☐Yes ☐No If Yes, explain	(b.) Is the intake or equipment in need of repair?
	_____ _____ _____ _____
☐Yes ☐No	(c.) Was there any heavy precipitation or flooding within the 30 days prior to the

If Yes, explain	total coliform positive event?
	_____ _____ _____ _____
□ Yes □ No If Yes, explain	(d.) Have there been any changes in sources of potential contamination in proximity of the water source?
	_____ _____ _____ _____
	(11.) Assessment Statement and Proposed Remedy
	_____ _____ _____ _____

Attach additional sheets if necessary

Certification Statement

I certify, under penalty of law, including but not limited to penalties for perjury, that this document and all attachments were prepared by me, or under my direction or supervision; that all of the submitted information is to the best of my knowledge and belief true, accurate, and complete; and that I am lawfully present in the United States as a U.S. citizen or a qualified alien as defined in 8 U.S.C. §1641(b). As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury. I understand that the penalties for providing false information and making false or fraudulent statements or representations include revocation in a fine, permit or license, civil penalties, and/or criminal prosecution resulting in a fine, imprisonment or both.

_____ _____

Signature **Date**