Triennial Capacity Development Report



Report Submitted to
Governor Bill Haslam
Prepared by the
Tennessee Department of Environment and Conservation
Division of Water Resources
Requirement of Section 1420, Federal Safe Drinking Water Act

September 2017

Executive Summary

In accordance with the Federal Safe Drinking Water Act (SDWA), Section 1420, Tennessee is required to submit a Triennial State Capacity Development Program Implementation Report to the Governor. This report provides an assessment of Tennessee's strategy and efforts toward assessing and improving the technical, managerial, and financial capacity of public water systems within the state. This report is intended to fulfill the requirement of Section 1420(c)(3) of the SDWA.

In response to federal requirements, Tennessee's Drinking Water Rules require all new public water systems to demonstrate technical, managerial and financial capacity (establishing the system as "viable") before serving water to the public. All new water systems are required to develop a Capacity Development Plan including a business plan that demonstrates the system can achieve and maintain compliance with the Safe Drinking Water Act on the day they begin serving drinking water to the public. Water system capacity is the ability to achieve and maintain compliance with all applicable drinking water standards.

Tennessee's capacity development strategy identifies community and non-community systems in non-compliance with the SDWA, and strives to provide such public water systems with technical, financial and managerial assistance and training where appropriate. Further, this regulatory strategy sets the stage for whatever level of enforcement is deemed necessary to ultimately achieve compliance and ensure safe drinking water.

The Need for a Capacity Development Strategy

In accordance with the 1974 Federal Safe Drinking Water Act, states are required to ensure that providers of drinking water systems meet minimum national standards. EPA and the state delegated programs have come to realize that full compliance can only be achieved through capacity development assessments that examine the financial, technical and managerial status of a water system.

The Federal Safe Drinking Water Act Amendments of 1996 mandate that states ensure that all new community water systems (CWS) and all new non-transient, non-community water systems (NTNCWS) demonstrate capacity to implement each drinking water regulation in effect. Section 1420(a) of the Federal Safe Drinking Water Act requires that a state obtain the legal authority or other means to ensure that all new CWS and new NTNCWS commencing operation after October 1, 1999 demonstrate technical, managerial and financial capacity, or lose a portion (20%) of the monies allotted for the state's drinking water revolving loan fund (DWRRF). In addition, the 1996 amendments require states to prepare a Capacity Development Strategy to identify and prioritize water systems lacking consistent compliance with drinking water regulations.

In addition to assessing newly constructed water systems, Tennessee has adopted a Capacity Development Strategy to address the viability of all existing public water systems. This strategy focuses on issues of viability for all existing water systems and

closely examines each system's record of regulatory compliance. If needed, Tennessee may require existing public water systems in non-compliance to develop plans showing that sufficient revenue is available and that the water system has adequate management and technical resources to operate in compliance with the SDWA. This requirement accelerates the compliance of existing systems with violations and encourages potentially significant non-compliers to take necessary efforts to achieve a satisfactory compliance status.

Enforcement is utilized as a tool in helping public water systems acquire, maintain, or improve their capacity and become viable water systems. The Environmental Protection Agency's enforcement targeting tool (ETT) is used to determine the level of non-compliance for all public drinking water systems. Appendix 1 includes the most recent list of water systems that have incurred violations scoring a non-compliance value of 11 or above on the ETT list and Appendix 1A includes Tennessee's 2016 Annual Compliance Report.

Compliance reports are the indicator and guiding mechanism to Tennessee's state capacity development strategy. Compliance reports provide a continuous means by which capacity development issues are identified and addressed. As water systems incur violations, Tennessee is able to focus on the specific issues of the system and aid in determining corrective actions. Those systems scoring 11 or higher on the ETT list are addressed with formal enforcement action. The enforcement process compels noncompliant systems to address capacity issues or face continuing and escalating enforcement action and financial disincentives in the form of fines. Tennessee's regulatory program is able to issue Notices of Violations (NOVs), engage in court actions, schedule Compliance Review Meetings, and issue Commissioner's Orders and Director's Orders. As part of capacity development, the Division of Water Resources can require existing water systems that have an ETT score of 11 or above and those with high potential for scoring above 11 to submit a capacity development plan identifying specific actions leading to the development of capacity. The plan must document and/or address all compliance issues faced by the system. The Division uses the Capacity Development Plan Guidance Document (Appendix 3) and the Capacity Development - Business Plan, Financial Self-Assessment Manual (Appendix 4) to ensure that public water systems develop a sufficient overall capacity development plan.

In order to identify water system needs as well as potentially effective compliance mechanisms, the state has established a water system baseline as required by Section 1420(c)(2)(D) the Federal Safe Drinking Water Act. This baseline is used to measure improvements in system capacity. The baseline uses the initial list of community water systems and non-transient, non-community water systems with a history of non-compliance, which was sent to EPA on August 1, 1997. Appendix 2, "Tennessee PWSs with a History of Violations, Compliance Status (1997-June 30, 2007)" shows many of the public water systems that have been identified as Significant Non-Compliers (SNCs) between 1997 and June 30, 2007.

As a brief summary of compliance in Tennessee during this triennial (state FY2015, FY2016 and FY2017) review, for the period ending June 30, 2017, there were seventeen

water systems with an ETT score of 11 or higher (See Appendix 1). The violations for the seventeen systems fall within the following rules:

Violation	Number of Violations
Total Coliform Rule (TCR) Monitoring Violations	15
Revised Total Coliform Rule (RTCR) Monitoring	4
Violations	
Revised Total Coliform Rule Treatment Technique	1
Surface Water Treatment Rule (SWTR) Monitoring	2
Violations	
Surface Water Treatment Rule Treatment Technique	1
Violations	
Long Term 1 Enhanced Surface Water Treatment Rule	30 (among 3 systems)
Treatment Technique Violations	
Long Term 1 Enhanced Surface Water Treatment Rule	2
Monitoring Violations	
Long Term 2 Enhanced Surface Water Treatment Rule	3
Monitoring Violations	
Consumer Confidence Report Submittal Violations	2
Public Notice Violation	12
Stage 2 D/DBP Monitoring Violations	35
Stage 2 D/DBP Maximum Contaminant Level Violations	50
Inorganic Compounds and Nitrate Monitoring	1
Volatile Organic Compounds Monitoring (2011-2013)	11

For the period ending July 31, 2016, there were nineteen water systems that had a score of 11 or higher on the Enforcement Targeting Tool (ETT list). The majority of the systems with violations of 11 or higher incurred Stage 2 Disinfection Byproducts (DBP) MCL violations. The next highest occurrence violation was TCR monitoring, followed by SWTR Treatment Technique violations.

For the period ending July 31, 2015, there were 20 water systems that had a score of 11 or higher on the Enforcement Targeting Tool (ETT list). The majority of the systems with violations (11) incurred Stage 2 DBP MCL violations. The next highest occurrence violation was TCR monitoring, followed by SWTR Treatment Technique violations.

State Objectives and Strategy

Tennessee's Capacity Development Strategy process provides a comprehensive assessment of available capacity development resources and demonstrates areas of focus to improve each program's effectiveness. The benefit of the Capacity Development Strategy is that the state is able to review the broad range of efforts (programs and activities) currently offered and undertaken by both the regulatory program and the drinking water system to maintain, develop, or improve compliance.

As an example of outreach and training offered by Tennessee, operator training is provided at TDEC's Fleming Training Center as well as through third party operator training programs offered by the Tennessee Association of Utility Districts (TAUD). Within the Department of Environment and Conservation is also housed the Operator Certification Board. The Operator Certification Board is in association with the Fleming Training Center which deals with the certification of water and wastewater operators and also has the authority to revoke operator certification for just cause. Other technical and financial controls have been developed including design standards, on-site inspections and on-site technical assistance. The Utility Management Review Board (UMRB), the Water and Wastewater Financing Board (WWFB) and the Division of Municipal Audit, all conduct financial reviews of water systems and are within the State Comptroller of the Treasury's Department. Water systems with a negative change in net assets after two years are considered by law to be under "financial distress" and subject to board action. Systems are also subject to board action for excessive water loss. The Division of Water Resources supplies the Commissioner's designee for the two boards (WWFB and UMRB). The oversights of these boards, as well as numerous other meaningful regulatory efforts are applied to improve or develop water system capacity in Tennessee. Appendix 5 includes a current list of systems benefiting from UMRB and WWFB oversight.

Further, examination of a system's water loss and it financial viability has become more of a point of focus. In 2009, the state legislature added the requirement that the UMRB must approve any new utility district being formed (T.C.A. 7-82-202(a)). In the 2009 legislative session, the WWFB and the UMRB were given the responsibility of setting acceptable water loss rates and addressing those systems with exorbitantly high losses (T.C.A. 68-221-1009(a)(8) and T.C.A. 7-82-401(h), respectively). In 2010, the legislature again modified the law to give the UMRB the authority to remove commissioners of utility districts for just cause (T.C.A. 7-82-307(b)(3)) and added a requirement for continuing education for utility commissioners (T.C.A. 7-82-308(h)). In 2011 the legislature modified the way in which utility commissioners are appointed, removing the option of a selfappointing board of commissioners and placing the authority to appoint commissioners with the county mayor (county executive) or by plurality of vote of the customers (T.C.A. 7-82-307(a)). For those utilities that serve multiple counties, all the county mayors in the service area must be involved in the utility commissioner selection process. The change to the law for utilities covering multiple counties was not in effect until 2012. Public Chapter 628 was passed during the 2014 legislative session, amending T.C.A. 7-34-115(a). This amendment mandates that general funds from a municipality can no longer subsidize the water or wastewater system funds with taxpayer dollars and the water/wastewater funds will be required to operate as separate enterprise funds – not a division of the general fund. In 2016, an amendment was introduced for the UMRB defining what fiduciary responsibility means as far as removal of water utility board commissioners. The amendment to the TCA Section 7-82-401 and TCA Section 68-221-1010 under both the Utilities Management Review Board and Water Wastewater Financial Board were signed by Governor Haslam on April 17, 2017. The amendments specifically state that grants cannot be used in financial tracking of solvency ("you can't live off of grants" bill). The amendments to the Acts took effect immediately after the Governor signed the bill. Additionally, a bill was passed in March 2017 requiring members of the municipal

utility board of commissioners to meet training and continuing education requirements and provides failure to meet such requirements could result in ineligibility to receive certain financial assistance or for members to be re-elected or reappointed.

The UMRB advises and assists financially distressed utility districts in the area of utility management. The UMRB also has the authority to prescribe a user rate structure that will allow the utility to be self-sufficient. In addition, the board must review the creation of a utility district and may undertake a study leading to the consolidation and regionalization of a utility district with another to achieve compliance. Similarly, the Water and Wastewater Financing Board reviews user rates necessary for water systems to be self-sufficient in their operation. Such reviews may also consider the consolidation of systems.

Capacity development is also approached with education training for utility commissioners (now required by law). Tennessee Association of Utility Districts (TAUD) has offered a variety of training classes specifically designed for utility board members and commissioners. State law requires for utility commissioners (gas and water) to attend classes and obtain continuing education credits. TAUD offers six conferences a year which include: the Utility Technology Conference, Operator Expo, Annual Meeting, Business of Running A Utility Conference, Leadership Conference and Administrative Professionals Conference. These conferences are designed to train and provide continuing education credits for all utility personnel including operators, managers, office managers, customer service staff, commissioners and municipal officials. Conference topics include: operations, policies, finance and budgets, etc. The Technology Conference, Operator Expo and Business Conference offer training that is more technical in nature and is approved for all operator licenses and professional engineers. The TAUD Training Station offers over 150 classes each year for operators across the state to maintain their continuing education.

The University of Tennessee's Municipal Technical Advisory Service (MTAS) has developed a Training Manual for Water and Wastewater System Board Members, *Water and Wastewater Management: A Training Manual for Board Members*.

MTAS also offers classroom training to elected officials called Elected Official Academy. The Level I classes cover the essentials of municipal government in Tennessee and covers topics such as:

- Foundation and Structure of Municipal Government
- Charter and Codes and Open Records
- Municipal Finance Overview
- Council at Work
- Ethics and Open Meetings

Level II Elected Official Academy includes topics such as:

- Economic Development
- Fire Review
- Human Resources
- Police Review
- Public Works
- Municipal Risk Management
- Water and Wastewater Operations

Municipal Administrative Program classes are offered throughout the year in several locations to train municipal staff and officials in the soft skills of administering and managing municipal operations including utilities.

Specialty Classes for municipal utility managers and operators are held in various locations throughout the state covering several topics in the technical areas.

In addition to the classroom training, MTAS will provide on-site technical training/assistance for water and sewer system staff per the request of a municipal utility. MTAS also provides help with financial distressed municipal utilities at the request of the city of a referral from the Water and Wastewater Financing Board (WWFB).

Implementation of the Strategy – New Systems

The Tennessee Division of Water Resources' legal authority was certified by the Attorney General and Reporter for the State on July 15, 1999. It certifies that the laws of Tennessee provide adequate authority to carry out the capacity development requirements of the Federal Safe Drinking Water Act Section 1420(a), 42 U.S.C. § 300g-9(a).

The Tennessee Department of Environment and Conservation (TDEC) reviews construction projects to ensure that new water systems have the technical capacity to comply with state drinking water requirements. Division of Water Resources Regulation 0400-45-01-.05 outlines the procedures that an applicant must follow for obtaining approval to construct a water system. Regulation 0400-45-01-.05(3) refers to minimum design standards for the construction of groundwater and surface water sources, treatment facilities, storage facilities, and distribution facilities (sources, treatment, storage and piping) to comply with the water quality standards and treatment technique standards specified in Regulations. Further, Division Rule 0400-45-01-.17(37) of the Drinking Water Regulations outlines the required information that must be submitted with the engineering documentation for approval to construct a new system. The regulations were amended to also include a "Business Plan" and "Capacity Development Plan." The definition of each of these plans can be found in Rule 0400-45-01-.04. Section 68-221-704(2)(E) of the Tennessee Safe Drinking Water Act grants the Tennessee Board of Water Quality, Oil and Gas the authority to adopt rules to ensure that all new community water systems and non-transient, non-community water systems commencing operation after October 1, 1999 demonstrate technical, managerial, and financial capacity to comply with the requirements of the Safe Drinking Water Act.

In addition, the URMB must approve the startup of new utility districts under the Utility District Law, T.C.A. 7-82-202(a). TDEC closely coordinates with both the WWFB and URMB with a designee from the Commissioner on each Board.

Control Points

The Tennessee Department of Environment and Conservation (TDEC) has two control points in ensuring that new community and new non-transient, non-community water systems demonstrate the technical, managerial and financial capacity to comply with the Safe Drinking Water Act (SDWA).

- 1.) The first control point is the submission of engineering documents for approval to construct a new water system. TDEC's engineering staff reviews the engineering documents for compliance with the procedures outlined in the regulation and the design standards. The water source must also be tested and approved. A staff accountant with the Division's State Revolving Fund (SRF) Loan program assists engineers, as needed, in reviewing the financial capacity of a proposed system. The proposal must demonstrate that the system will have the technical, managerial and financial capacity to meet the requirements of the SDWA. If the information contained in the engineering report is satisfactory to the Department, it is approved and the system can proceed with development plans and specifications. Before final approval is granted to begin construction of a new water system, it must develop and submit a Capacity Development Plan to document to the State that the system is a "viable water system." If at any time during this process the State determines the system is not a "viable water system," approval to proceed can be withheld and the project denied.
- 2.) The second control point is final construction approval. Rule 0400-45-01-.17(19) of the State Drinking Water Regulations requires that once construction has been completed, arrangements must be made for an inspection and approval before operations can begin. All new community and non-transient non-community public water systems are required to submit an engineering report summarizing the need for a new system, a summary of alternative solutions, and recommendations regarding sources of water, proposed treatment processes, project sites, distribution system, financing (rates, debt, etc.) and management. State regulations require water systems to obtain written approval from the Tennessee Department of Environment and Conservation to begin operation after construction is completed.

Implementation of the Strategy – Existing Systems Strategy

As discussed earlier, Tennessee has many programs and tools available to help existing public water systems acquire technical, managerial and financial capacity. These include training offered by Fleming Training Center (FTC), third party operator and board member

management training offered by the TAUD, the UT Municipal Technical Advisory Service, and others. The Division is also working with Communities Unlimited to assist systems facing potential enforcement action that are struggling with returning to compliance. Communities Unlimited funding comes from EPA and USDA/Rural Development Agency and their assistance is at no costs to the water system. Additionally, the Division conducts on-site inspections and on-site technical assistance. Further, assessments are performed by financial review boards, including the Comptroller of the Treasury's Utility Management Review Board, Water and Wastewater Financing Board and Division of Municipal Audit. A financial self-assessment tool is also offered by the Division of Water Resources. Finally, enforcement of state rules provides definitive guidance relative to capacity needs. Tennessee is now participating in EPA's Area-Wide Optimization Program (AWOP). This program provides tools and approaches to be utilized to aid systems in achieving/maintaining compliance and providing improved water quality to the public through optimization.

More specifically, programs and tools used to help water systems acquire capacity are offered in various formats and venues. Appendix 7 includes class titles and dates along with number of persons reached. The following list includes additional activities to aid systems in capacity development.

- □ Rule workshop updates provided to operators and system management by Fleming, Division of Water Resources staff and TAUD
- Operator Training at the Division's Fleming Training Center (FTC)
- □ Rulemaking Hearings open to the public and staff of PWSs conducted by Division of Water Resources staff
- Continuing Education Sessions for certified operators provided at American Water Works Association Conferences
- On-site and off-site technical assistance given to system operators and water system staff by Division of Water Resources Environmental Field Office (EFO) staff and Fleming Training Center
- On-site and off-site technical assistance given to system operators and water system staff by TAUD's "circuit riders"
- □ Financial Reviews of Municipal and Utility Districts by the Division of Municipal Audit in the State Comptroller's Office and subsequent action by either the Water Wastewater Finance Board or the Utilities Management Review Board.
- □ Elected Officials Training by MTAS (Municipal Technical Advisory Service)
- □ Commissioner Training by TAUD
- Division of Water Resources' Financial Self-Assessment Manual
- □ Small Water System Operator Guide
- □ The Division of Water Resources' Sanitary Survey Manual for Community Water Systems (CWSs) and Non-transient Non-community Water Systems (NTNCWSs), Revised June 2013
- Published Safe Drinking Water Rules
- □ Standard Operating Procedures (SOP) Requirements and Guidance
- □ TDEC Website Resources (Forms, Manuals and Links)

- □ Certified Laboratory Lists (available from the Division of Water Resources and the State's Website) & Lab Certification
- □ Certified Operator Lists (available from the Division of Water Resources and the Fleming Training Center)
- □ Sanitary Surveys providing comprehensive assessments of all public water systems
- □ State Revolving Loan Funds and staff technical assistance to eligible systems
- □ Emergency Operations Plan (EOP) Guidance (a/k/a Vulnerability and Security Plans) for all community water systems along with Drought management plans required
- □ Enforcement Targeting Tool (ETT)
- □ Enforcement Actions and Proceedings against all public water systems in non-compliance (Notices of Violation, Notices of Non-compliance, Show Cause Meetings, Compliance Review Meetings, Letter of Agreements, Commissioner's Orders, Directors Orders, Civil Penalty Assessments, and Contingent Civil Penalty Assessments)

Standard Operating Procedures (SOPs) – The Division of Water Resources requires public water systems to develop and adopt SOPs for operations, maintenance, and troubleshooting for at risk systems. Systems with a history of non-compliance may be required to develop and adopt SOPs and systems whose certified operator(s) cannot be on-site while the system is producing water must have SOPs in-place for use by those individuals designated to operate the water system. Drinking Water rules require all public water systems meeting the definition of a public water system under the State's Water and Wastewater Operator Certification Act to be operated by a certified operator in direct control. The Division of Water Resources has been strongly encouraging systems with surface water treatment plants serving greater than 10,000 persons to have appropriate level certified operators in attendance whenever the plant is in operation.

The Fleming Training Center (FTC) offers fundamental and advanced training in water treatment, water distribution systems, laboratory operation, security, wastewater treatment, and wastewater collection systems. Additionally, FTC offer seminars designed to assist operators in obtaining their required continuing education. The Operator Certification Board plays a major role in the certification of qualified operators under the State's Water and Wastewater Operatory Certification Act. The Division of Water Resources supplies the Department of Environment and Conservation Commissioner's designee for the Board. Previously, the Commissioner of Department Environment and Conservation provided the Director of the Division of Water Resources the authority to revoke operator certification for just cause. However, in July 2013, the legislature modified the Water and Wastewater Operator Certification Act to provide the Commissioner the opportunity to recommend an operator's revocation of certification to the Board while the Board determines revocation.

Additional information regarding the Fleming Training Center and the Operator Certification Program in Tennessee is available on Tennessee Department of Environment and Conservation's website (http://tn.gov/environment/topic/wr-ftc-fleming-training-center). Other operator resources available on the State's website include revised manuals

and forms, links to resources, annual violations lists, certified lab lists, construction design criteria, and the current sanitary survey manual.

The Division implemented the Revised Total Coliform Rule effective April 2016. To address the challenges of the new rule, the Division of Water Resources staff provided onsite visits and technical assistance to systems along with training sessions at the Fleming Training Center. In addition, the Division makes available revised manuals and forms, links to resources, annual violations lists, certified laboratory lists, construction design criteria and sanitary survey manuals.

Finally, the state's Emergency Operations Plan (EOP) requirement includes a Source Water Assessment, Source Water Protection Plan and Drought Management Plan component. This requirement compels systems to proactively examine and consider their source water, treatment and distribution capacities and build resiliency.

Identifying Systems in Need of Capacity

The Division of Water Resources also gives high priority to DWSRF applicants who must meet technical, managerial and financial capacity requirements in order to obtain funding. As described in this document, Tennessee continues to identify systems in need of capacity by monitoring water system compliance with rules and through the sanitary survey process. Systems with an elevated ETT score and that are lacking in capacity face a strategy of programs, actions and enforcement designed to develop system capacity and attain compliance. Tennessee continues to use construction approvals, continuing education for operators, DWSRF loan applications, municipal financial audit reports, reviews by the WWFB and UMRB, rule workshops, operator and board member training, sanitary survey assessments, compliance data (ETT list) and enforcement activities to reach systems lacking capacity.

Statewide Capacity Needs and Concerns

The nationwide issue of aging infrastructure is a serious issue in Tennessee. The aging infrastructure replacement needs run into the billions of dollars and far outweigh the available funding. Not replacing critical aging infrastructure creates a domino effect which affects such things as operations, water quality, maintaining compliance and water loss.

Review of Capacity Development Strategy

The Division of Water Resources reviews and reports its Capacity Development Strategy annually to EPA.

Tennessee continues to follow its capacity development plan as it was originally developed by initially assisting systems to develop capacity and potentially escalating to enforcement action where appropriate. Thus, no significant changes to the strategy are anticipated at this time.

New System Compliance

In 2015, four (4) new transient non-community water systems were established including: Songbird Campground Water System (inactivated May 2015), Wildlife Cove Campground Water System, Peace Lakeview Campground Water System and Elvira's Café Water System.

In 2016, two (2) new non-community water systems were established including: Bunch Hollow Campground & Resort Water System and Sunshine Hollow Water System (inactivated June 2016). Also, there was one (1) new community water system established which was Jasper Highlands Water System.

In 2017, one (1) new community water system was established which was Lakeview Utility District #2. Also, there were two (2) new transient non-community water systems established including: Cove Campground #2 and Hiwassee Whitewater Company.

None of the public water systems established within this triennial period (last 3 fiscal years) and as aforementioned have had an Enforcement Targeting Tool (ETT) sore of 11 or higher.

Conclusion

Despite the challenges facing the water systems and Tennessee's Drinking Water Program, the success of the State's Capacity Development Strategy is encouraging. In fact, the statewide drought of record of 2007 and 2016 and also the 2010 thousand year flood event have encouraged many water systems to work together and increase interconnections, examine regional approaches to water supply issues and collaborate more on compliance issues and new rules. The Division's reorganization (consolidation of the former Division of Water Supply, Water Pollution and Ground Water) has also allowed for quicker and more thorough responses to technical issues. Additionally, the Division's study of potential contaminants such as Harmful Algal Blooms may help to provide assistance to water systems. At the heart of these activities is State oversight and assistance. Undoubtedly, such efforts represent increased opportunities for enhancing the capacity of systems to comply with the Safe Drinking Water Act and to better meet future drinking water needs.

Appendices:

- 1 ETT Systems List 2015, 2016, 2017
- 1A 2016 Annual Compliance Report for Safe Drinking Water Act Separate Document
- 2 Systems with Significant Noncompliance in 1997 2007
- 3 Capacity Development Plan Guidance Document
- 4 Capacity Development Business Plan, Financial Self Assessment Manual
- 5 Utilities Management Review Board Utilities under Oversight; August 2017
- 6 DWSRF FY2017 Priority Ranking List Separate Document
- 7 Training Activities 2016-2017 (July 1, 2016-June 30, 2017) Separate Document

Glossary:

<u>Community water systems</u> (CWSs) are public water systems which serve at least fifteen (15) service connections used by year-round residents or regularly serve at least twenty-five (25) round-round residents.

<u>Environmental Protection Fund (EPF) Act</u> authorizes the department to assess fees (facility maintenance fees) for services provided.

Non-community water systems (NCWSs) are public water systems that are not community water systems.

<u>Non-transient, non-community water systems</u> (NTNCWs) are non-community water systems that regularly serve at least twenty-five (25) of the same persons over six (6) months per year.

<u>Transient, non-community water systems</u> (TNCWSs) are non-community water systems that regularly serve at least twenty-five (25) individuals daily at least sixty (60) days out of the year. A TNCWS is a public water supply system that generally serves a transient population such as hotels, motels, restaurants, camps, service stations, churches, commercial establishments and rest stops.

Appendix 1 Enforcement Targeting Tool (ETT) Systems List 2015/2016/2017 Scores 11 or more

ETT 2015 (through July 31, 2015)

PWSID	<u>System</u>	ETT Score	<u>Notes</u>
TN0000088	BYRDSTOWN WATER DEPT	15	ST2_DBP MCL violations.
TN0000090	CAMDEN WATER DEPT	15	ST2_DBP MCL violations.
TN0000159	SOUTH CUMBERLAND U.D.	17	ST2_DBP MCL violations.
TN0000291	HARTSVILLE-TROUDALE WAT/SEW U	12	IESWTR TT
TN0000338	JONESBOROUGH WATER DEPT	26	ST2_DBP MCLs and LT1ESWTR Tx Tech.
TN0000517	BEDFORD COUNTY UD	19	ST2_DBP MCL violations and CCR violation in 2012.
TN0000532	ONEIDA W&S COMM	15	ST2_DBP MCL violations.
TN0000573	NORTHWEST CLAY COUNTY UTILITY	13	ST2_DBP MCL and 2 IESWTR M/R violations.
TN0000593	ROGERSVILLE WATER SYSTEM	18	ST2_DBP MCL violations.
TN0000682	N0000682 SURGOINSVILLE UTILITY DISTRICT		8 months (Jan, Feb, Mar, Apr, Sept, Oct and Dec 2013) of failure to record individual filter turbidity, and PN violation.
TN0000756	WOODBURY WATER SYSTEM	12	Variety of M/R, MCL and Treatment Tech violations.
TN0000845	JACKSON COUNTY UD #3	20	ST2 DBP MCL violations; TCR/MRDL M/R violation in 2015.
TN0000863	GRANDVIEW UTILITY DISTRICT	15	ST2_DBP MCL violations.
TN0000924	RIVER LANDING DEVELOPMENT	70	GWR viol in Aug 2011, Turbidity M/R in Apr and Oct 2014, Turbidity TX Tech Oct 2014 through March 2015.
TN0000953	SOUTH SIDE U.D. #3	15	ST2_DBP MCL violations.
TN0002109	KELLOGG'S CONVENIENCE FOODS	13	ST1 and ST2 DBP M/R and Nitrate violations
TN0002120	THE COUNTRY PLACE MINISTRIES	12	TCR MCL and TCR M/R in 2014; and 2 GWR M/R in 2014
TN0002997	SPINKS CLAY CO.	11	Nitrate M/R violations,, 2 DBP M/R violations and 2 TCR M/R violations .
TN0004313	RESOLUTE FOREST PRODUCTS	11	LT2 Tx Tech (Jan 2012), 2 TOC violations (2012), MRDL 1st qtr 2015.
TN0005158	TENT CAMPING USA, INC.	17	Nitrate violations in 2012 and 2013.

ETT 2016 (through July 31, 2016)

PWSID	System	ETT	Notes
		<u>Score</u>	
TN0000924	RIVER LANDING CONDOMINIUM ASSOC	119	Multiple SWTR TT, TCR and PN violations.
TN0000532	ONEIDA W&S COMM	36	Multiple ST2 DBP MCL violations (July 2014- March 2016)
TN0000078	JACOBS CREEK JOB CORPS CENTER - USFS	32	SWTR TT Aug/Dec 2015, Feb 2016; TCR Sep 2015
TN0002697	BATTLE CREEK MARKET	28	Multiple SWTR TT violations, Nitrate violation in 2012,
TN0000593	ROGERSVILLE WATER SYSTEM	21	Multiple ST2 DBP MC violations, IOCs and VOCs (2011-2013)
TN0004313	RESOLUTE FOREST PRODUCTS	21	LT2 Tx Tech (Jan 2012 & Dec 2015), 2 TOC violations (2012), MRDL 1st qtr 2015.
TN0004326	ANTIOCH BAPTIST CH - HUMBOLDT	20	Nitrates 2012, TCR Repeat M/R Sept 2015, GWR Oct 2015
TN0002109	KELLOGG'S CONVENIENCE FOODS	17	Nitrates 2012 and 2013, TCR and PN violations
TN0000088	BYRDSTOWN WATER DEPT	16	ST2 MCLs 1st/3rd Qtr 2015, 1st Qtr 2016
TN0000573	NORTHWEST CLAY COUNTY UTILITY	16	ST2 MCLs 2014-2015, IESWTR Monitoring
TN0000845	JACKSON COUNTY UD #3	15	ST2 MCLs 4th Qtr 2015, 1st Qtr 2016.
TN0000174	DAYTON WATER DEPT	14	ST2 MCL 4th Qtr 2015, 1st Qtr 2016; IOCs 2011-2013
TN0003779	E.I. DUPONT, NEW JOHNSONVILLE	14	Nitrate Violations (2012-2013), Multiple TCR and PN violations.
TN0000517	BEDFORD COUNTY UD	13	Multiple ST1 and ST2 DBP MCL violations (July 2011-Sept 2015); Multiple SOC violations (2015-2016).
TN0002245	MAPLE SPRINGS BAPTIST CHURCH	13	Multiple TCR and GWR violations, Nitrate Viol in 2014.
TN0008220	LEAD MINE BEND WATER ASSOC.	12	Multiple TCR, MRDL, Nitrate, ST2 viol.
TN0000666	SPRINGFIELD WATER SYSTEM	11	SWTR TT March 2015.
TN0000875	CHANUTE-PALL MALL UTILITY DIST	11	ST2 MCLs 1st Qtr 2015, 1st Qtr 2016.
TN0003923	PIONEER LANDING	11	Nitrates 2014; TCR MCL Sept 2015

ETT 2017 (through June 30, 2017)

PWSID	MA_NAME	ETT Score	
TN0003779	CHEMOURS-NEW JOHNSONVILLE PLAN	38	SWTR Turbidity Standards and monitoring violations, LT2 monitoring plan violation, and Public Notice Violations
TN0000924	RIVER LANDING CONDOMINIUM ASSO	31	SWTR Turbidity Standards violations
TN0000085	CARDERVIEW UTILITY DISTRICT	28	DBP and Chemical Monitoring violations (2014-2015)
TN0000078	JACOBS CREEK JOB CORPS CENTER	24	SWTR Turbidity and Disinfection Standards violations, Total Coliform Rule and Disinfectants monitoring violations
TN0000532	ONEIDA W&S COMM	21	DBP Standards (MCLs) violations
TN0000230	ERIN WATER DEPARTMENT	15	DBP Standards (MCLs) violations
TN0000469	MINOR HILL WATER UTIL DIST	15	DBP Standards (MCLs) and Monitoring violations
TN0000649	SOUTH GILES UTILITY DISTRICT	15	DBP Standards (MCLs) violations
TN0000706	TRACY CITY WATER SYSTEM	15	DBP Standards (MCLs) violations
TN0000604	ST JOSEPH WATER SYSTEM	13	DBP Monitoring violations
TN0000079	BRISTOL-BLUFF CITY UTILITY DIS	12	Total Coliform Rule, Disinfectants, and Chemical monitoring violations
TN0000088	BYRDSTOWN WATER DEPT	12	DBP Standards (MCLs) and Chemical Monitoring violations
TN0000405	LIVINGSTON WATER DEPT	12	DBP Standards (MCLs) violations
TN0000650	WITT UTILITY DISTRICT	12	DBP Standards (MCLs) and Monitoring violations
TN0000657	NEWPORT RESORT WATER SYSTEM	12	Total Coliform Rule, Disinfectants, and Chemical monitoring violations
TN0001263	CADES COVE CAMPGROUND	12	DBP and Chemical Monitoring violations
TN0004905	RACEWAY RESTAURANT	11	Total Coliform Rule Monitoring violations

Appendix 1A Annual Compliance Report 2016 Safe Drinking Water Act

Attached as separate document

Appendix 2 Systems with Significant Noncompliance Compliance Status (1997- June 30, 2007)

PWSID	SYSTEM NAME	COMMENTS
0000023	ASHLAND CITY WATER DEPT	HAA5 & TTHM violations. (Cumberland River Source) RTC Aug 05
0000044	BELL BUCKLE WS	TTHM and HAA5 Jul 02-Jun03 RTC Jul 03. DWR-03017 issued Nov 03
0000046	BELVIDERE RURAL UD	CO 94-0378 issued Sep 94, RTC Dec 94
0000061	BLUFF CITY WATER DEPT	Construct filter for Underwood Spring source, RTC 18 Feb 96 Disinfection Mon Violation Apr-Jun 06 Bact Mon Violation Apr 06
0000062	CHINQUAPIN GROVE UD	CO 96-0080 issued May 96, RTC 9 Jul 1997, Deactivated Jun 05
0000078	JACOBS CREEK JOB CORPS - USFS	Technical Assistance ca Aug 96
0000083	LOON BAY PROP. OWNERS ASSOC	System gave PN for Nitrate Mon violation (Dec 97), RTC 16 Dec 96
0000085	CARDERVIEW UD	SWTR Jun-sep 99, RTC Oct 99Pb and Cu Jul 98-Jun 99, RTC Oct 99
0000094*	FIRST UD OF CARTER CO	(6) IESWTR Tx Tech & M/R Nov-Nov 06
0000099*	CELINA WATER SYSTEM	(6) IESWTR M/R 06-Nov 06
0000101	CENTER GROVE- WINCHESTER SPGS	CO 94-0373 issued Nov 94, RTC Dec 95
0000103	CENTERVILLE WATER SYSTEM	SWTR Tx Tech, Nov 03 – July 05, NONC 2/9/06
0000104	CHAPEL HILL WS	CO 96-0105 issued Jul 96, RTC 17 Jun 98 IESWTR Record Keeping Violation Nov 05 SWTR Treatment Technique Violation Dec 05
0000115	CLARKSBURG UD	DWR-0038 issued Nov 00, RTC Oct 00
0000119*	CLIFTON WATER DEPT	(14) IESWTR M/R May 05-Feb 07; order Apr 07
0000127	COLLINWOOD WATER DEPT	CO 96-02010 issued Sep 96 and DO DWR-0032 Jan 01, RTC Jun 001 SWTR Treatment Technique Violation Apr 06
0000138	CHEROKEE HILLS UTILITY DIST	SWTR, Tx Tech, Oct 96 – May 98, Order 4/17/97
0000149*	CROSS ANCHOR UD	(6) D/DBP MCL and M/R Jan 04-Dec 06; LOA Mar 07
0000180	OAK SHADOWS MHP	CO 96-0333 issued Nov 96 and deactivated Jan 97
0000183	DECATUR WATER DEPT	CO 96-0181 issued Sep 96, RTC 31 Aug 97
0000187	DECHERD WATER DEPT	CO 91-3216 issued Oct 91, RTC 1 Feb 95
0000221	ELIZABETHTON WATER DEPT	Technical Assistance ca Feb 96
0000223	NORTH ELIZABETHTON WATER CO-OP	TCR Mon, Aug 97 – April 2005, Order 8/3/99
0000230	ERIN WTP	CO 96-0119 issued Jun 96, inactivated source
0000231	ERWIN UTILITIES	CO 96-0453 issued Mar 97, RTC 20 Dec 96 BACT MCL Feb 06

0000232	ESTILL SPRINGS WATER DEPT	Failure to Filter Jul 1996 through May 00, RTC June 00
0000246*	FRANKLIN WATER DEPT	(7) IESWTR M/R Aug 03-Dec 05; TCR M/R Jul 97- Jun 05; Order Jun 09
0000274	NORTH GREENE UD	TTHM MCL violations (Lick Creek Source) RTC May 05
0000291	HARTSVILLE WATER DEPT	(6) D/DBP MCL Jul 04-Sep 05; NONC Jan 07
0000294	HENDERSONVILLE UD	(14) IESWTR Mon & Tx Tech Jan 022-Nov 06; Order Apr 04
0000317	HUNTLAND WS	CO 96-0058 issued Apr 96, RTC 9 Jul 97
0000324*	JAMESTOWN WATER DEPT	(11) D/DBP MCL Jul 02-Sep 06; Order Oct 08
0000389	NORTHEAST LAWRENCE UD	HAA5 & TTHM MCL violations (Lawrenceburg Source) RTC Aug 05
0000391	NEW PROSPECT UD	HAA5 & TTHM MCL violations, (Lawrenceburg Source) RTC Aug 05
0000392	LAWRENCEBURG WATER SYSTEM	IESWTR Mon, Dec 03 – July 05, Order 7/09
0000396	LENOIR CITY UTILITY BOARD	IESWTR Mon, Jan 02-Jan 03,
0000402*	LEXINGTON WS	(6) D/DBP M/R Oct 02-Jun 05; NONC Aug 08
0000405	LIVINGSTON WATER DEPT	HAA5 MCL Oct 02 through Jun 03, RTC Jul 03
0000410	PINEY UTILITY DIST	CO 95-0122 issued Jul 95, RTC 20 Apr 96, deactivated Nov 99
0000426	HIWASSEE COLLEGE WS	(26) SWTR/IESWTR Apr 98-Nov 06; (6) TCR May 06-Nov 06; Order Jul 06
0000455	MIDDLETON WATER DEPT	DWR-0037 issued Nov 00. RTC Jan 01
0000472	MOORESBURG UD	Construct new filter plant (in-service Jan 97)
0000479	MOUNTAIN CITY WATER DEPT.	CO 96-0116 issued Aug 96, RTC 31 May 99
0000485	COLD SPRINGS UD	CO 96-0182 issued Aug 96, RTC 1 Feb 98
0000517	BEDFORD COUNTY UD	HAA5 Violations, (Duck River Source) RTC Sep 05
0000520	BRUSHY MTN PRISON	IESWTR monitoring violations, RTC Jul 06
0000525	OCOEE UTILITY DIST	CO 96-0195 issued Sep 96, RTC 16 Sep 98
0000559	PORTLAND WATER SYSTEM	IESWTR Records and Exceedances Feb through Sep 02, RTC Oct 02
0000572	RED BOILING SPRINGS WS	CO 93-0587 issued Dec 93, DWR-0005 issued Feb 00, RTC 1 Nov 96
0000607	SAMBURG UTILITY DIST	7 TCR Mon, Dec 96 – July 04, Order 8/01
0000616	SEQUATCHIE WATER WORKS	Deactivated Aug 96
0000640	SNEEDVILLE UD	CO 96-0319 issued Nov 96, GUDI inactivated Bact Mon Violations Dec 05 and Jan 06
0000652*	SPARTA WS	(7) IESWTR Mon&TxTech Nov 06-Feb 07; Order Apr 08
0000656	SPRING CITY WATER SYSTEM	CO 94-0374 issued Nov 94, GUDI inactivated
0000678	THE FARM WATER SYSTEM	Lead & Copper, Jan 98 – Jun 00,
0000706	TRACY CITY WATER SYSTEM	Addressed in CO 84-0222 issued Aug 84, sources abandoned 1 Nov 96
0000724	VANLEER WATER DEPT	Chem SNC, RTC Jul 99

0000738	WESTMORELAND WS	HAA5 and TTHM MCL violations (Gallatin Source) RTC Aug 05
0000743	WEST WILSON UD	IESWTR monitoring and exceedances, Jan through
0000745	WHITE HOUSE UD	Aug 02, RTC Sep 02 Equip repaired, RTC 1 Mar 99. No SWTR violations, RTC Oct 00
0000749	WHITWELL WATER DEPT	SWTR and IESWTR violations (RTC Jan 06)
0000754	WINCHESTER WS	THM MCL Oct 02-Dec 02 RTC Jan 03; Apr 03-Sep 03 RTC Dec 03
0000768	ANDERSON COUNTY UB	TOC Mon Jan-Mar 02 and HAA5 Mon Jan-Mar 02, RTC Apr 02
0000790	WILSON CO WATER & WASTEWATER	HAA5 MCL violations (Lebanon Source) RTC Apr 05
0000848	CUMBERLAND MTN RETREAT	DWR-9931 issued Dec 99, RTC Mar 99. Nitrate viol FY00, RTC May 01
0000888	MIDWAY TRAILER COURT	Mon and Pn for PB and CU – Nov 96, RTC 11 May 96, Deactivated Jan 06
0000899	HICKORY STAR MARINA	CO 96-0072 issued May 96, system to achieve compliance 1 Sep 01
0000916	LEATHERWOOD WATER DIST, INC	CO 97-0107 issued Aug 97, RTC 19 Sep 96
0000921	NATCHEZ TRACE YOUTH ACADEMY (formerly Seven Hawks Wilderness Program)	CO 96-0151 issued Jul 96, RTC 28 Feb 95 Bact Mon Violations Nov and Dec 05
0000923	HARBERT HILLS ACADEMY N.H.	10 TCR Mon, Dec 97 – May 2005,
0000952	HERITAGE ACADEMY	6 Rad MCL, July 00 – Mar 03, RTC 8/03
0000954*	COLONIAL HARBOR WS	(9) TCR Feb 00-Sep 05, Pb 7 Cu Jul 04-Dec 06; NONC Mar 06
0000958	BLUEBIRD HILLS MOBILE HOME formerly Wildwood MHP)	DWR-9702 issued Jul 97 and DWR-9906 issued Apr 99
0000961	ACORN VILLAGE MHP (formerly Gabbard's MHP)	Court Injunction (Case 96-0471) and deactivated Mar 01
0000962	DOALNARA RESTORATION SOC USA (formerly Elijah Gospel Mission)	DWR-9901 issued 27 Jan 99, RTC 8 Feb 99 Bact Mon Violation Apr 06
0002024	CLINCH SCHOOL	8 TCR Mon, Apr 99 – Oct 07,
0002109	KELLOGG'S CONVENIENCE FOODS	6 TCR Mon MCL, Oct 99 – Dec 04
0002645	KYLES FORD SCHOOL Deactivated May 01	DWR-9802 in Feb 98 and DWR-0006 in Feb 00, RTC 9 Jan 95,
0002997	SPINKS CLAY CO.	6 TCR Mon, Jan 08 – Oct 01
0003779	E.I. DUPONT, NEW JOHNSONVILLE	11 SWTR/IESWTR Mon, Aug 97 – Feb 05
0004300*	E.I. DUPONT, OLD HICKORY	(7) D/DBP Jan 04-Sep 06
0004441	H & H WHOLESALE, PRO- LINE	CO 96-0148 issued Nov 96, deactivated Aug 96
0004725	LITTLE TYKE'S DAYCARE	Deactivated Oct 00
0004726	COLLINWOOD HEAD START	Deactivated Aug 95
0004737	ANN AND ANDY'S DAY	8 TCR Mon, Apr 98 – Sep 03

	CARE CENTER	
0004800	LITTLE PEOPLE	CO 97-0116 issued Jul 97, deactivated Aug 97
	UNIVERSITY	
0004910	ACCURATE ENERGETIC	6 TCR Mon, Jan 01 – July 03
	SYSTEMS	
0005063	NORTHWEST HEADSTART	3 Lead & Copper, July 02 – Dec 03
	OF HUMBOLT	
0008033	COLD SPRINGS II WS	DWR-0003 issued Jan 01, deactivated Jun 00
0008130	LEWIS TRAILER PARK	7 TCR Mon, Oct 99 – Feb 05
0008233*	WARREN COUNTY UD #2	(6) D/DBP MCL Jan 07-Jun 07; Order May 09
0009940	BEECHVIEW CORPORATION	System Deactivated Mar 06

^{*} Denotes system added for this reporting period.

Total: 92 Public Water Systems

CO – Commissioner's Order

DWR-### - Director's Order

DWR – Division of Water Resources

GUDI – Ground Water Under Direct Influence of Surface Water

Mon – Monitoring

PN – Public Notification

PWS – Public Water System

RTC – Return to Compliance

SS – Sanitary Survey

TA – Technical Assistance

Appendix 3 Capacity Development Plan Guidance Document

Pursuant to Tennessee Code Annotated Sections 68-221-706 and 68-221-707 the Department shall exercise general supervision over the construction, operation and maintenance of public water systems throughout the State of Tennessee. As one aspect of such general supervision, all new community public water systems shall submit a **Capacity Development Plan** for review and approval by the Department. Components of the Capacity Development Plan include an **Operation and Maintenance Plan**, an **Emergency Operations Plan**, a **Bacteriological Site Sampling Plan**, a **Business Plan**, etc. Together, these plans when followed assure continuous satisfactory operation of a water system. The submittal should be submitted to the Department's Division of Water Resources (DWR) and shall include, at minimum, the following information:

- Name, address and telephone number of the owner(s) or ultimate responsible party of the facility
 or public water system. Leaseholders or business owners may be responsible for managing and
 operating the facility on a day-to-day basis and included in list to obtain correspondence, but they
 are not the ultimate responsible party. The ultimate responsible party is (are) the property
 owners.
- Agreement to retain the services of a properly certified operator.
- Proof of retention of certified operator (copy of signed Operator Agreement).
- Name, address and telephone number of the certified operator in direct charge of the public water system. The certified operator also may be held responsible for violations incurred as a result of his/her oversight.
- An Operation and Maintenance Plan must be developed. The plan shall include information on staffing and organizational structure, accountability; and the system's fiscal management and controls. The plan shall identify Environmental Field Office (EFO) contacts, certified labs and lab contacts, the location of all operational component plans and the names and phone numbers of those responsible for implementing those plans, data management systems used, routine activity and facility maintenance schedules, training programs, and safety procedures and guidelines in effect.
- Agreement and statement of understanding indicating that Plans and Specifications shall be prepared and submitted for approval for any change, alteration or construction regarding the public water system. These include changes in process that affect water quality, hydraulic conditions, or the function of a process. These must be submitted and approved by the DWR. Projects that are being funded with Drinking Water State Revolving Funds (DWRRF) are submitted to the State Revolving Fund Loan Program (formerly the Division of Community Assistance or DCA). Such approval shall be obtained prior to initiation of the proposed project. "As-Builts" shall be submitted on completion of a project. A long-range system plan, including capital improvements plan is not required by the DWR, but may be desirable to the system.

- A Source Water Assessment and Protection Plan and/or Wellhead Protection Plan must be developed and submitted to the DWR for approval.
- Prepare and submit for review and approval a **Monitoring Plan** to the Division of Water Resources based on rules, and guidelines provided by the Division. Such plan will identify all parameters to be monitored (including Benzo(a)pyrene and asbestos) and a schedule for conducting that monitoring. Such plan will include all bacteriological contaminants and chemical parameters required by and in accordance with Division rules. One component of the Monitoring Plan will be a **Bacteriological Site Sampling Plan** (Information and guidance material is available upon request). The plan should address the number and location of follow-up sampling, public notification, etc. The Monitoring Plan should include (or execute) a **consolidation agreement** with parent water systems (where applicable) for the monitoring of lead and copper tap water. The Monitoring Plan should also note any parameters waived and when a parameter waiver expires.
- Establish and submit an Emergency Operations Plan (and Drought Management Plan if appropriate) for review and approval by the Division. The system may enter into an agreement indicating the intent to cooperate with the parent water system in the event of an emergency that interrupts water service and conveying its willingness to supply alternative potable water during a state of emergency if needed. (information and guidance material available upon request). An Emergency Operations Plan will outline system options, responses, conservation plans and other provisions in case of flooding, power outage, major fire, contamination, major line break, source contamination, drought, chemical release, etc.
- Develop a Customer Complaint File regarding water related issues to be maintained on site.
 Customer complaints with CWSs which relate to financial and/or managerial issues should have a
 UMRB or SRF number assigned. The file must contain customer name and address, date of
 complaint, nature of complaint, and action(s) taken to resolve the complaint. A Customer
 Relations plan is not required by the DWR, but may be desirable to the system.
- Agreement and statement of understanding indicating that Monthly Operation Reports (MORs) shall be submitted to the Division no later than ten (10) days following the end of the month being reported. The MOR shall accurately reveal the operation and performance of the water system during the reporting period.
- A Cross Connection Control Program Plan for the detection and elimination of cross connections must be submitted and approved by the Division of Water Resources (Information and guidance material is available upon request).
- A Record Keeping Plan shall be developed and maintained. Records kept shall include storage tank inspection and maintenance reports, Individual facility maintenance records, flushing records with beginning and ending chlorine residuals, chlorine residuals at new taps, facility security records (including vandalism, break-in, theft, and trespass), equipment maintenance and repair records (maintenance, calibrations, dates out-of-service, and repairs of pumps, meters, feeders and alarms), line breaks maintenance and repair, distribution maps. Other records that must be kept include: bacteriological sample analyses, cross connection plans and inspection records, chemical analysis, sanitary surveys, actions to correct violations, turbidity records, daily

worksheets and shift logs used to produce MORs, lead and copper related records, and public notices.

- A Public Notifications and Public Education File should be maintained. Efforts to inform customers of violations, Boil Water Advisories, and community education should be kept in a file. Further, Community Water Systems (CWSs) must prepare and submit a Consumer Confidence Report (CCR) annually.
- Agreement to remit annual Facility Maintenance Fees to the Division plus any penalties and interest charges which have accrued due to late or non-payment of the annual facility maintenance fee. Public water systems must also submit a Business Plan. The plan shall identify source(s) of income or revenue sufficient to meet expenses over a three (3) year period. The business plan will identify costs related to retaining a certified operator, estimated annual infrastructure repair cost, depreciation, facility maintenance fees, estimated annual monitoring costs, estimated costs of providing public notices, estimated administrative costs, and any other operational, treatment, and related costs (e.g. chemicals and other supplies used to treat water, etc.). The business plan must include the re-payment of borrowed and amortized funds.
- Agreement to comply with any and all laws, rules and/or regulations which are necessary or applicable to the public water system.

Appendix 4

Capacity Development - Business Plan (Financial Self-Assessment Manual)

The purpose of a business plan for a water system is to show that the proposed or continued operation of a water system will be viable from a financial standpoint. Business Plans can be/are a means of determining/assuring the viability of water systems from a financial standpoint. Operating a water system is like operating any business, and for any business to be successful, it needs to have a "business plan." The attached worksheet (or Financial Self-Assessment Manual) provides a framework to summarize and evaluate your business. Three columns are provided in order to show anticipated income and expenses over the next three years. "Year One" should cover the system's current business year. Columns are provided for listing "Income" and "Expenses" for the second and third years, if different, otherwise the figures shown in "Year One" will be assumed as intended. The "Total" or bottom line of the plan should combine "Total of all Expenses" and the "Total of all Income." If "Expenses" exceeds "Income" then rates, fees and/or other income must be increased or expenses must decrease in order for the system to be viable. If the cost of operating the water system is unacceptable, the water system may want to consider what alternatives are available. If drinking water, which meets Safe Drinking Water Act requirements is available or can be made available from another public water system at a reasonable cost it may be possible to deactivate the water system. Other options may exist if the water system is extremely small and water use is minimal. Your Environmental Field Office (EFO) must be consulted in this event (1-800-523-4873).

In addition, operating a water system requires two additional plans: a facility and specifications plan (technical), **and** an operation and maintenance plan (technical and managerial capacity), in addition to a business (financial) plan. In summary, a viable water system is "a public water system which has the commitment and the financial, managerial and technical capacity to consistently comply with the Tennessee Safe Drinking Water Act and these regulations." A water system is determined to be "non-viable" if it cannot meet state requirements.

Definitions:

Sales of Water (Conn x Rate x Min Mo Water Use) – The amount of income derived from water revenues. Such revenue typically is based on the number of connections, the rate or cost of water, and the minimum amount an account is allowed to be charged.

Tap Fees, Reconnect Fees and Bad Check Fees – Fees derived from setting new taps; fees collected after service is discontinued and there is a reconnection; and fees related to checks returned due to insufficient funds, etc.

Interest Earned – Revenue derived from interest accrued from system bank accounts, etc.

Other – Monies earned from rental or sale of equipment, services provided to other agencies or businesses, etc.

Cost of Water – If purchased from a PWS (Public Water System), royalties due to water rights holders, etc.

O&M – Expenses related to Operations and Maintenance. These would include the cost of chemicals (chlorine, lime, etc.), power, fuel (gas, gasoline and diesel fuel), transportation and communication expenses (vehicles and vehicle maintenance, repair equipment, mobile phones, etc.), monitoring costs (sample collection and lab costs), materials and supplies, normal repairs to lines and filters, and salaries and benefits of employees.

Administrative Costs – Insurance, office supplies, postage, legal, accounting, telephone, salaries and benefits for managers, and clerical workers.

Facility Maintenance Fee – Fee payable to the Division of Water Resources (DWR), Tennessee Department of Environment and Conservation (TDEC) on or about October 1 of each year.

A/E & Professional Services, Fees (including Billing Services) – Architectural and Engineering Fees, Professional Service Fees, including the cost of contracted billing services, etc.

Contracts – Backflow Prevention Testing, Certified Operators (on contract), etc.

Taxes or Payments in Lieu of Taxes – Payments of local, state and/or the federal government.

Debt Repayment – Loan Debt Service

Capital Improvements – The cost of physical improvements made to the facility. Capital improvements specifically related to a water system include the addition of filtration equipment, pumps to improve flows, the extension of the piping system.

Other Expenses - Public Notification (PN), public relations costs, employee training, civil penalties, etc.

Operating Cash Reserves – Funds available to meet expenses from a cash flow standpoint. Invariably there will be times when expenses will exceed anticipated revenues, whose obligations must be met prior to receiving additional income.

Emergency Reserves – Funds which are available to replace, repair, or meet unexpected new additional requirements, etc. which are unexpected due to a variety causes, including thief, fire, flood, vandalism, etc.

Business Plan Worksheet

Category	Specific Budget Items	Amount	Amount	Amount
NCOME		Year One	Year Two	Year Three
	Sales of Water (Conn X Rate X Min Mo Water Use)			
	Fees – Tap Fees			
	Fees – Reconnect Fees			
	Fees – Bad Check Fees			
	Interest Earned			
	Other (specify)			
Sub-Total	(Total Of All Income)			
EVDENICES				
EXPENSES	Cost of Water (if purchased from another PWS)			
	Operating and Maintenance Expenses			
	O&M – Chemicals			
	O&M – Electrical Power and other Fuel			
	O&M – Transp and Comm (Vehicle expense)			
	O&M – Monitoring			
	O&M – Materials, Supplies and Parts			
O&M – Operator Salaries and Benefits				
	Administrative			
	Adm – Insurance			
	Adm – Ofc Supplies, Equipment and Postage			
	Adm – Legal and Accounting			
	Adm – Telephone			
	Adm – Salaries/Benefits - Managerial/Clerical			
	TDEC Facility Maintenance Fee			
	A/E & Prof Services/Fees (incl Billing Service)			
	Contracts (incl Backflow Prevention Testing, etc.)			
	Taxes or Payments in Lieu of Taxes			
	Debt Repayment (Bond/Loan Debt Service) Expense			
	Capital Improvements			
	Depreciation Expense			
	Other Expenses (PN, PR, Employee Training, etc.)			
	Operating Cash Reserves			
	Emergency Reserves			
Sub-Total	(Total Of All Expenses)			
FOTAL ¹	Not Income (or Lega)			
OTAL	Net Income (or Loss)			

Signature:	Date:	

¹ Note: Subtract "Total of All Expenses" from "Total of All Income." If "Expenses" exceeds "Income" then Rates and Fees must increase and/or Expenses must decrease. If no "Expenses" and "Income" are shown for the second and third years, figures are the same as shown in "Year One."

Appendix 5 UMRB and WWFB Oversight List 2017

Entity Referred	County	Grand Division	Board Referred To	Referral Type
City of Charlotte	Dickson	Middle	WWFB	Negative Change in Assets
own of Woodbury	Cannon	Middle	WWFB	Negative Change in Assets
oring Creek Utility District	Hardeman	West	UMRB	Negative Change in Assets, Water Loss Calculation Accuracy
auderdale County Water System	Lauderdale	West	WWFB	Water Loss Calculation Accuracy
aywood County Utility District	Haywood	West	UMRB	Negative Change in Assets
ortheast Henry County Utility District	Henry	West	UMRB	Negative Change in Assets
own of Newbern	Dyer	West	WWFB	Negative Change in Assets
ity of Smithville	Dekalb	Middle	WWFB	Water Loss
own of Maury City	Crockett	West	WWFB	Water Loss
ity of Dunlap	Sequatchie	East	WWFB	Negative Change in Assets
akeview Utility District	Hawkins	East	UMRB	Negative Change in Assets
ortheast Lawrence Utility District	Lawrence	Middle	UMRB	Water Loss
all River Utility District	Lawrence	Middle	UMRB	Negative Change in Assets, Water Loss
ity of Collinwood	Wayne	Middle	WWFB	Water Loss Calculation Accuracy, Water Loss
ity of Niota	McMinn	East	WWFB	Negative Change in Assets
randview Utility District	Morgan	East	UMRB	Negative Change in Assets
herokee Hills Utility District	Polk	East	UMRB	Water Loss Calculation Accuracy
own of Gleason	Weakley	West	WWFB	Negative Change in Assets
ity of Sunbright	Anderson	East	WWFB	Negative Change in Assets
own of Obion	Weakley	West	WWFB	Negative Change in Assets
altillo Utility District	Hardin	West	UMRB	Water Loss
own of Stanton	Haywood	West	WWFB	Negative Change in Assets
own of Tiptonville	Tipton	West	WWFB	Water Loss Calculation Accuracy
auderdale County Water System	Lauderdale	West	WWFB	Water Loss Calculation Accuracy
umphreys County Wastewater	Humphreys	Middle	WWFB	Negative Change in Assets
ity of Niota	McMinn	East	WWFB	Negative Change in Assets, Water Loss Calculation Accuracy
ansi Sewer Utility District	Cumberland	East	UMRB	Negative Change in Assets
hanute Pall Mall Utility District	Fentress	East	UMRB	Negative Change in Assets
own of Monterey	Putnam	East	WWFB	Negative Change in Assets
ity of LaVergne	Rutherford	Middle	WWFB	Water Loss
own of Gainesboro	Jackson	Middle	WWFB	Negative Change in Assets
own of Alamo	Crockett	West	WWFB	Negative Change in Assets
own of Alexandria	DeKalb	Middle	WWFB	Water Loss
aywood County Utility District	Haywood	West	UMRB	Negative Change in Assets
owelltown-Liberty Waterworks	Dekalb	East	WWFB	Water Loss
edford County Utility District	Bedford	Middle	UMRB	Water Loss Negative Change in Assets
· · · · · · · · · · · · · · · · · · ·	Hardeman	West	UMRB	
pring Creek Utility District	Franklin	Middle	WWFB	Water Loss Calculation Accuracy
own of Estill Springs				Water Loss Calculation Accuracy
ity of Algood	Putnam	East	WWFB	Water Loss
ity of Friendship	Crockett	West	WWFB	Water Loss
arderview Utility District	Johnson	East	UMRB	Negative Change in Assets
own of Chapel Hill	Marshall	Middle	WWFB	Water Loss Calculation Accuracy
ity of Pikeville	Bledsoe	East	WWFB	Water Loss
own of Kenton	Obion/Gibson	West	WWFB	Water Loss Calculation Accuracy, Water Loss
edar Grove Utility District	Franklin	Middle	UMRB	Negative Change in Assets
own of Mason (2014)	Tipton	West	WWFB	Water Loss
own of Mason (2015)	Tipton	West	WWFB	Water Loss
ity of Maynardville	Union	East	WWFB	Water Loss Calculation Accuracy
own of Greenbrier	Robertson	Middle	WWFB	Water Loss
ity of Pulaski	Giles	Middle	WWFB	Water Loss Calculation Accuracy
ity of Covington	Tipton	West	WWFB	Water Loss
own of Graysville	Rhea	East	WWFB	Negative Change in Assets
own of Sharon	Weakley	West	WWFB	Negative Change in Assets
lay Gas Utility	Clay	Middle	UMRB	Default on Debt
own of McLemoresville	Carroll	West	WWFB	Water Loss ,Water Loss Calculation Accuracy
ity of Smithville	Dekalb	East	WWFB	Water Loss ,Water Loss Calculation Accuracy
own of Huntingdon	Carroll	West	WWFB	Negative Change in Assets
urgoinsville Utility District	Hawkins	East	UMRB	Negative Change in Assets
ry Run Utility District	Johnson	East	UMRB	Water Loss , Water Loss Calculation Accuracy
own of Maury City	Crockett	West	WWFB	Negative Change in Assets, Water Loss
offee County Water and Wastewater Authority	Coffee	Middle	WWFB	Negative Change in Assets
/ayne County Public Utility Fund	Wayne	West	WWFB	Water Loss , Water Loss Calculation Accuracy
own of Cumberland Gab	Claiborne	East	WWFB	Negative Change in Assets, Water Loss
ity of Collinwood	Wayne	Middle	WWFB	Water Loss , Water Loss Calculation Accuracy
own of Henning	Lauderdale	West	WWFB	Water Loss Calculation Accuracy, Water Loss
ast Sevier County Utility District	Sevier	East	UMRB	Water Loss , Water Loss Calculation Accuracy
ity of Lebanon	Wilson	Middle	WWFB	Water Loss
evier County Public Utility Fund	Sevier	East	WWFB	Water Loss
ity of Loudon	Loudon	East	WWFB	Water Loss , Water Loss Calculation Accuracy
irst Utility District of Carter County	Carter	East	UMRB	Water Loss
heatham County Water & Wastewater Authority	Cheatham	Middle	WWFB	Negative Change in Assets
pringville Utility District	Henry	West	UMRB	Negative Change in Assets
ity of Sunbright	Morgan	East	WWFB	Negative Change in Assets
own of Englewood	McMinn	Middle	WWFB	Water Loss
olensville-College Grove Utility District	Williamson	Middle	UMRB	Negative Change in Assets
ry Run Utility District	Johnson	East	UMRB	Water Loss Calculation Accuracy
ookeville Boat Dock Utility District	Putnam	East	UMRB	Water Loss
all River Road Utility District	Lawrence	Middle	UMRB	Negative Change in Assets
ity of South Fulton	Obion	West	WWFB	Water Loss Calculation Accuracy
own of Gates	Lauderdale	West	WWFB	Water Loss Calculation Accuracy
ity of Dunlap	Sequatchie	East	WWFB	Negative Change in Assets
own of Baileyton	Greene	East	WWFB	Negative Change in Assets
one Oak Utility District	Sequatchie	East	UMRB	Negative Change in Assets
akeview Utility District	Hawkins	East	UMRB	Negative Change in Assets
randview Utility District	Rhea	East	UMRB	Water Loss
elvidere Rural Utility District	Franklin	Middle	UMRB	Water Loss
herokee Hills Utility District	Polk	East	UMRB	Water Loss - Report Not Included
Ainor Hill Utility District	Gies	Middle	UMRB	Water Loss Calculation Accuracy & Water Loss
ity of Munford	Tipton	West	WWFB	Water Loss Water Loss
	pcom			
	Marion	East	UMRB	Negative Change in Assets
Griffith Creek Utility District Town of Parrottsville	Marion Cocke	East East	WWFB 17	Negative Change in Assets Negative Change in Assets

Appendix 6 DWSRF 2017 Priority Ranking List

Attached as separate document

Appendix 7 Training Activities (July 1, 2016-June 30, 2017)

Attached as separate document



Division of Water Resources

2016 Annual Compliance Report

Foreword

The 1996 Amendments of the Federal Safe Drinking Water Act requires States with drinking water primacy to prepare and submit to EPA an annual report regarding public water system violations. Further, the report is to be published and made available for public review. The Tennessee Department of Environment and Conservation, Division of Water Resources, has prepared this report to provide the required information to EPA and to the general population.

This year's report covers the calendar year 2016 and contains three major sections: a narrative description of the Division's oversight of public drinking water systems; a summary of violations regarding each contaminant (Appendix A); and a detailed listing of public drinking water systems with violations meeting the criteria to be included in the report (Appendix B). Only violations that have not returned to compliance (i.e. violations that have not been corrected) occurring within or extending into 2016 are included.

The majority of the water systems and operators in Tennessee are very conscientious about the quality of water provided to their customers. However, situations do occur that result in monitoring violations caused by either an oversight on the part of the water utility or due to newly implemented monitoring requirements or standards. The majority of the health based violations that occurred during 2016 were due to a change in the disinfection by product rules, where compliance with the standards changed from system-wide to location specific.

The Division has worked with water utility managers/owners and operators to address each of the violations included in this report. Site visits and technical guidance are the first steps utilized by the Division to achieve compliance with the regulations. In certain situations, it becomes necessary to initiate formal enforcement action and establish compliance schedules in order to have a system return to compliance.

The Division hopes this report provides violation information in a concise an easy to understand manner. If you have questions concerning the information contained in this report, please contact your local water utility, the nearest Division's Regional Environmental Field Office at 1-888-891-8332, or the Nashville Central Office at 615-532-0625.

Safe Drinking Water Act

The Federal Safe Drinking Water Act (SDWA) was enacted in 1974 in order to assure that the public is provided with safe drinking water. Pursuant to the Safe Drinking Water Act and Amendments to the Act, national limits or standards were established on contaminant levels in drinking water to ensure that drinking water is safe for human consumption. Such standards are known as Maximum Contaminant Levels (MCLs).

The SDWA also establishes treatment techniques, in lieu of maximum contaminant levels, for certain contaminants that are difficult for laboratories to measure. For example, treatment techniques have been established for giardia lamblia, cryptosporidium, viruses, heterotrophic bacteria, Legionella, and turbidity. In addition, the SDWA regulates how frequently public water systems must monitor and report the results of monitoring for contaminants that may be present in the drinking water, as well as the effectiveness of treatment processes.

A public water system is required to monitor and verify that the levels of contaminants present in the water do not exceed an established maximum contaminant level. If a public water system fails to monitor as required or fails to report monitoring results correctly, then a monitoring or reporting violation occurs. Generally, the larger the population served by a water system, more frequent monitoring and reporting is required. Additionally, the SDWA requires public water systems to notify the public when they have violated these regulations. The 1996 Amendments to the SDWA require public notification to include a clear and understandable explanation of the nature of the violation, its potential adverse health effects, the steps that the public water system is undertaking to correct the violation and the possibility of alternative water supplies.

The SDWA applies to all fifty (50) States and U.S. territories, and allows States and Territories to seek EPA approval to administer their own Public Water System Supervision Program. The authority given to a state to operate a Public Water System Supervision Program is called "Primacy". In order to receive primacy, a state must meet certain requirements specified in the SDWA and regulations promulgated pursuant to the Act. The State of Tennessee received primacy in 1977 and assumes primary enforcement responsibility for public water systems operating in Tennessee.

Public Water Systems

The SDWA defines a "public water system" as a system for the provision of water for human consumption through pipes or other constructed conveyances, if such system serves fifteen (15) or more service connections or which regularly serves twenty-five (25) or more individuals daily at least sixty (60) days out of the year. A public water system includes:

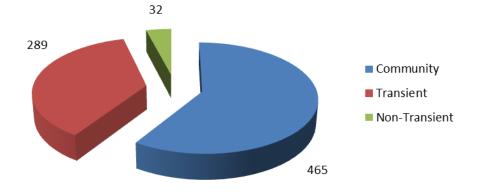
- (i) Any collection, treatment, storage or distribution facility under control of the operator of such system and used primarily in connection with such system; and
- (ii) Any collection or pretreatment storage facility not under such control which is used primarily in connection with such system.

The Division of Water Resources currently possesses regulatory responsibility for approximately 786 public water systems throughout the state. A "Public Water System", as defined above, is either a "community water system" or a "non-community water system".

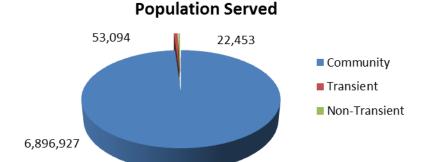
"Community Water System" means a public water system that serves at least fifteen (15) service connections used by year-round residents. Examples are municipalities and utility districts.

"Non-Community Water System" means a public water system that is not a community water system. This type of water system is further defined as either "Non Transient", serving the same people each day; and "Transient", which serves a different group of people each day.

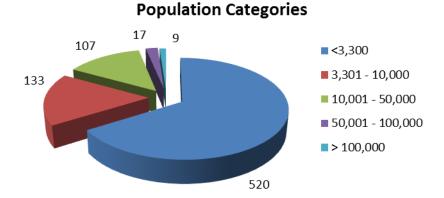
Tennessee Public Water Systems



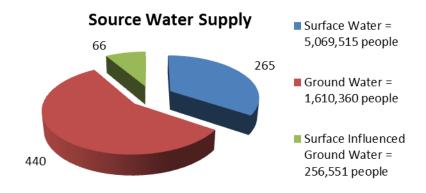
Combined, all of Tennessee public water systems (community, transient and non-transient) serve an estimated population in excess of 6,972,000 individuals.



The 9 largest public water systems in Tennessee serve over 2,500,000 people. In contrast, there are 520 water systems, which serve less than 3,300 people each, providing drinking water to an estimated 318,000 people.



Public water systems utilizing ground water sources are the most prevalent in Tennessee. However, surface water is provided to the majority of our population.



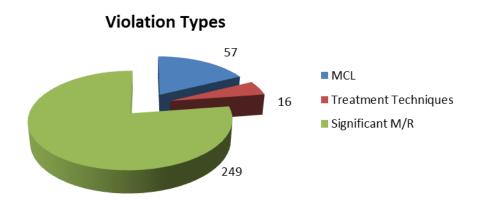
Violation Information

Primacy States, such as Tennessee, submit data to the EPA Safe Drinking Water Information System (SDWIS) on a quarterly basis. Data submissions include public water system inventory statistics, the incidence of Maximum Contaminant Level, Major Monitoring, and Treatment Technique violations, and the enforcement actions initiated against violators.

In addition to the quarterly data submittal to the EPA, the 1996 Amendments of the Federal SDWA require States with primacy to prepare and submit an annual report to EPA regarding public water system violations. Further, states with primacy are required to publish and distribute summaries of their reports. After the submittal of the state reports, EPA evaluates and summarizes the reports in an annual national report.

The Annual Compliance Reports, submitted by the Division to both the public and EPA are required to encompass violations pertaining to (1) maximum contaminant levels, (2) treatment requirements, (3) variances and exemptions, and (4) significant monitoring and reporting violations. This report includes those violation types listed above, that occurred during the 2016 calendar year, or were identified prior to calendar year 2016 and remain uncorrected into 2016. It is important to note that the State of Tennessee does not utilize variances and/or exemptions with respect to primary drinking water regulations.

For the calendar year 2016, a total of 322 individual violations met the criteria to be included in this year's report.



Appendix A to this report provides a summary compilation of violations regarding each contaminant. Appendix B provides a detailed listing of public water systems with significant monitoring, significant reporting, treatment technique and MCL violations.

Definitions

To aid in the interpretation and understanding of the data included in this year's report, the following definitions are offered:

- Consumer Confidence Report (CCR): By July 1st of each year, every community public water system is required to prepare and distribute a CCR to customers served by the system. The report is required to contain information including the system's source of water, contaminants detected in the water, potential health effects information, mechanisms for customers to influence decisions made by the water system and any violations of drinking water standards that may have occurred during the previous calendar year.
- Ground Water Rule (GWR): Establishes requirements to ensure protection from microbiological pathogens in true ground water sources.
- "Ground water under the direct influence of surface water" means any water beneath the surface of the ground with (1) significant occurrence of insects or other macroorganisms, algae, or other large diameter pathogens such as Giardia lamblia, or (2) significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or surface water conditions. Direct influence must be determined for individual sources.
- Inorganic Contaminants: Non-carbon based compounds such as metals, nitrates, and asbestos. These contaminants are naturally occurring in some water but can gain access through farming practices, chemical manufacturing, and other human activities.
- Long Term 1 Enhanced Surface Water Treatment Rule (LT1 ESWTR): Establishes criteria that water systems supplied by surface water or ground water under the direct influence of surface water must meet.
- Long Term 2 Enhanced Surface Water Treatment Rule (LT2 ESWTR): Expands on the LT1 rule with microbiological pathogen monitoring at the source, prior to treatment.
- "Maximum Contaminant Level (MCL)" means the maximum permissible level of a contaminant in water which is delivered at the free flowing outlet of the ultimate user of a public water system, except in the case of turbidity and other contaminants so designated where the maximum permissible level is measured at the point of entry into the distribution system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

- Monitoring Waiver: Permission or consent conveyed to a public water system by the Division of Water Resources upon satisfactory completion of criteria established and necessary to obtain such waiver.
- Organic Contaminants: Carbon based compounds, such as industrial solvents and pesticides. These contaminants generally gain access to water through runoff from cropland or discharge from factories.
- Revised Total Coliform rule: Effective on April 1, 2016, revisions to the existing Total Coliform Rule required water systems to revise their bacteriological sampling plans, modified the existing Total MCL to an E.Coli MCL, added treatment technique violations, and assessment requirements following certain conditions.
- "Significant Monitoring Violations" are generally defined as a monitoring violation that occurred when no samples were taken or no results were reported during a compliance period.
- Stage 1 Disinfection/Disinfectant Byproducts Rule (DBP): Establishes requirements to provide protection from microbiological pathogens and limit the amount of disinfection byproducts delivered to the consumer.
- Stage 2 Disinfection/Disinfectant Byproducts Rule (ST 2 DBP): Expands on the Stage 1 rule by requiring a comprehensive distribution system analysis and monitoring at specific locations.
- Surface Water Treatment Rule (SWTR): Establishes criteria under which water systems supplied by surface water or ground water under the direct influence of surface water must provide filtration as a treatment technique.
- Treatment Technique: A water treatment process or procedure that is required instead of a maximum contaminant level for contaminants that laboratories cannot adequately measure.
- Trihalomethanes (THMs) and Haloacetic Acids (HAAs): Disinfection by-products produced as a result of the interaction of a disinfectant (chlorine) with naturally occurring organic material that may be present in the water.
- Total Coliform Rule: Microbiological monitoring conducted within the water system's infrastructure for the presence of coliform bacteria.

MICROBIOLOGICAL DATA

Microbiological contaminant sampling is conducted by all public water systems in Tennessee in an effort to detect biological contaminants that may be present in drinking water. All community public water systems (CWSs) must conduct monitoring on a monthly basis with the number of samples based on the population served. At a minimum, non-community water systems (NCWSs) must monitor each calendar quarter. Non-community systems that serve more than one thousand (1,000) persons, utilize a ground water source under the direct influence (GWUDI) of surface water or utilize surface water in total or in part must monitor on a monthly basis.

The Revised Total Coliform Rule became effective April1, 2016 and modified several elements of the bacteriological sampling and monitoring requirements. The existing Maximum Contaminant Level (MCL) violation was replaced with Treatment Technique violations based on total coliforms and presence of E.coli, and an MCL for E.coli was established. Assessments and corrective actions are now required based on monitoring results reported, and seasonal Non-Community water systems are required to perform startup procedures prior to opening for the season.

All samples containing total coliforms must be analyzed for the presence of E.coli bacteria. The results of all routine and repeat samples are included in determining compliance with treatment techniques, which may identify the need for corrective actions and assessments. The maximum contaminant level is based on the presence or absence of E.coli in a sample.

If any repeat sample is E.coli-positive, or if any repeat sample is total coliform-positive following an E.coli-positive routine sample, an E.Coli MCL violation is incurred. For systems which collect forty (40) or more samples per month, if greater than five (5) percent of samples collected yield total coliform-positive results, the water system is required to perform a Level 1 assessment. Further, for systems collecting fewer than forty (40) samples per month, if more than one (1) sample collected yields a total coliform-positive the water system is required to perform a Level 1 assessment. For systems that incur an E.Coli MCL violation, a Level 2 assessment must be conducted.

Failure by a public water system to perform the required monitoring, corrective action, or assessment constitutes a significant monitoring violation.

Appendix B provides detail information for MCL and significant monitoring violations at each Tennessee public water system.

SURFACE WATER TREATMENT RULES

The Enhanced Surface Water Treatment Rule (ESWTR), the Long Term 1 Enhanced Surface Water Treatment Rule (LT1 ESWTR) and the Long Term 2 Surface Water Treatment Rule (LT2SWTR) utilizes and establishes treatment techniques in lieu of maximum contaminant levels for Giardia lamblia, cryptosporidium, viruses, heterotrophic plate count bacteria, Legionella, and turbidity. Treatment techniques are water treatment processes employed for the treatment and/or removal of contaminants in lieu of establishing a Maximum Contaminant Level for contaminants that are very difficult to measure. In accordance with such requirements, water systems supplied by surface water or ground water sources under the direct influence of surface water must utilize water treatment processes (filtration and disinfection) that will achieve removal of cryptosporidium and/or inactivation of Giardia lamblia cysts and viruses. Water systems must perform analyses of the water in order to ensure the proper operation and effectiveness of the filtration and disinfection treatment.

In accordance with the Enhanced Surface Water and Long Term 1 Enhanced Surface Water Treatment Rules, water systems must monitor the water for turbidity (cloudiness of the water) and disinfectant residual. If a water system fails to conduct required monitoring, or fails to monitor and report less than ninety (90) percent of the required samples, as determined by population served and duration of water plant operation, then a significant monitoring violation is incurred. If a water system conducts required monitoring and reporting and the results reveal that less than ninety-five (95) percent of samples collected met the turbidity standard or disinfectant residual standard, then a treatment technique violation is incurred. Additionally, if a water system utilizing surface water or ground water under the direct influence of surface water fails to meet all criteria to avoid filtration treatment and does not install the necessary filtration treatment within the allowable eighteen (18) month deadline, then a violation is incurred regarding the failure to filter requirement.

The goal of the Long Term 2, Surface Water Treatment Rule is to reduce the risk of disease caused by Cryptosporidium and other microorganisms by identifying those systems at the greatest risk for source water contamination. Under this rule, most filtered systems were required to conduct an initial round of sampling of their untreated source water for the presence of Cryptosporidium and/or E. colform bacteria. Results from this initial round were used to determine if additional treatment of the source water was required. The second round of source water monitoring is currently underway for public water systems in Tennessee serving over 10,000 people. Over the next 2 years, all surface water systems will have completed the monitoring requirements of this rule.

Treatment technique and significant monitoring violations pertaining to any of the applicable Surface Water Treatment Rules are included in the detailed listing of violations provided in Appendix B.

INORGANIC CONTAMINANTS VIOLATIONS

Inorganic contaminant sampling is conducted by all public water systems in Tennessee in an effort to detect inorganic contaminants such as metals, nitrates or asbestos that may be present in the drinking water. Maximum contaminant levels have been established for inorganic contaminants and monitoring determines compliance with such standards. Monitoring intervals for inorganic contaminants are determined considering the type of source water utilized by the public water system with the exceptions of nitrate and asbestos. Monitoring to determine compliance with the maximum contaminant level for nitrate may be conducted no less frequently than annually. Monitoring to determine compliance with the maximum contaminant level for asbestos is conducted with consideration to population served and the vulnerability of the system to asbestos contamination (asbestos-cement piping, etc.).

Significant monitoring violations pertaining to any of the inorganic contaminants are included in the detailed listing of violations provided in Appendix B. During the calendar year 2015, there were no public water systems that incurred a maximum contaminant level violation regarding inorganic contaminants.

ORGANIC CONTAMINANTS VIOLATIONS

Organic contaminant sampling is conducted by all community, and certain non-community public water systems in Tennessee, which have not received a waiver of the monitoring requirements, in an effort to detect any organic contaminants such as solvents or pesticides which may be present in the drinking water. Maximum contaminant levels have been established for organic contaminants and monitoring determines compliance with such standards. Monitoring intervals for organic contaminants are determined considering the type of source water utilized and the type of population served by the public water system. Water systems that conduct monitoring for organic contaminants and do not detect a contaminant may reduce the sampling frequency regarding organic contaminants or request permission from the State to reduce sampling frequency.

Significant monitoring violations pertaining to any of the organic contaminants are included in the detailed listing of violations provided in Appendix B. During the calendar year 2015, there were no public water systems that incurred a maximum contaminant level violation regarding organic contaminants.

DISINFECTION BY-PRODUCT and BY-Product PRECURSOR VIOLATIONS

Trihalomethane (THM) and haloacetic acid (HAA5) sampling is conducted by all community public water systems in Tennessee. Trihalomethanes and haloacetic acids are disinfection by-products that are produced as the disinfectant (chlorine) reacts with naturally occurring organic matter, such as leaf litter, which may be present in the water. Monitoring is conducted in an effort to detect the presence of trihalomethanes or haloacetic acids in the drinking water. A maximum contaminant level has been established for both total trihalomethanes and total haloacetic acids and monitoring determines compliance with the standards. Monitoring is conducted for both total trihalomethanes (TTHMs) and haloacetic acids generally on a quarterly basis and on each water treatment plant used by a system. Other monitoring schedules may be followed depending on the size of the system and the type of source water.

The standard or maximum contaminant level for total trihalomethanes is 80 parts per billion (ppb) while the standard for haloacetic acids is 60 ppb.

MCL and significant monitoring violations pertaining to disinfectants, disinfection by-products and disinfection by-product precursors are included in the detailed listing of violations provided in Appendix B.

LEAD AND COPPER VIOLATIONS

Lead and Copper sampling is conducted by all community and certain non-community public water systems in Tennessee at high risk sites in an effort to detect excessive levels of lead and/or copper in drinking water. The maximum allowable concentrations of lead and/or copper in drinking water are denoted as "action levels". Treatment techniques have been established that include requirements for corrosion control treatment, source water treatment, lead service line replacement and public education for systems which exceed the action levels for lead and/or copper. Tap water monitoring determines compliance with such standards. Initial tap water monitoring is conducted for lead and copper on six (6) month monitoring intervals. If a water system meets the action levels for lead and copper during each of two (2) consecutive six (6) month monitoring periods, or maintains optimal corrosion control, the system may request and be granted reduced monitoring frequencies.

Violations for failure to monitor or for the failure to provide public education materials during the calendar year 2016, are included in the detailed listing of violations provided in Appendix B.

CONSUMER CONFIDENCE REPORT VIOLATIONS

Beginning in 1998, community public water systems were required to furnish a report to customers with information about the water being furnished. Included in this report is the source of water for the local water utility, certain health effects language, information concerning contaminants detected, and information on violations that may have occurred during the previous calendar year. There is also information on the time and location of any board meetings to promote public participation in the decision making process of the water utility.

All systems serving 10,000 or more persons are required to furnish a copy of the report to each customer. Systems serving less than 10,000 persons are given the option to notify their customers that the report will be published in a newspaper serving the local area. Even though the report is published in the paper, the water utility is required to furnish an individual copy of the report to any person requesting a copy.

RADIONUCLIDE VIOLATIONS

Public water systems are required to monitor for certain naturally occurring and manmade radionuclides to insure the water being provided to their customers meet standards. Radionuclide samples are collected every quarter with the results being the average of all the quarterly samples.

GROUND WATER RULE

The Ground Water Rule is part of the "Microbial-Disinfectants/Disinfection Byproducts Cluster" (M-DBP Cluster), intended to improve control of microbial pathogens while minimizing public health risks of disinfectants and disinfection byproducts (DBPs). The GWR builds upon the Total Coliform Rule by addressing the health risks of fecal contamination in community and non-community water systems that use ground water. Key provisions of the rule include; compliance monitoring to ensure that treatment technologies installed to treat drinking water reliably achieves at least 99.99 percent (4-log) inactivation or removal of viruses; triggered source water monitoring to test for the presence of fecal indicators; and, requirements to correct significant deficiencies and eliminate fecal contamination through specified actions.

DIVISION OF WATER RESOURCES ENFORCEMENT ACTION SUMMARY

The Department of Environment and Conservation and the Division of Water Resources are both granted authority by the Tennessee Safe Drinking Water Act, to initiate enforcement action and issue administrative orders regarding violations of the Tennessee Safe Drinking Water Act.

In order to address non-compliance issues the Division of Water Resources utilizes a number of enforcement mechanisms which include: Notices of Violation (NOVs) and/or Notices of Non- Compliance (NONCs); technical assistance and training; Compliance Review (CRM) and/or Show Cause meetings (SCM); and issuance of administrative orders and assessments which contain monetary civil penalties.

The Division initially attempts to assist water systems with violations achieve compliance through a system of official notifications, technical assistance and training, on-site inspections and compliance review meetings. Under certain circumstances, water systems are provided the opportunity to execute a Letter of Agreement (LOA) indicating an understanding of noncompliance issues and conveying an agreement to undertake the necessary actions to prevent a recurrence of non-compliance. In situations where the division has issued notifications, conducted technical assistance and/or on-site inspections or conducted compliance assessment meetings and violations are not addressed by the water utility or are not addressed in a timely manner, enforcement action in the form of an Administrative Order (AO) is customarily recommended and/or initiated. Such Administrative Orders contain monetary civil penalties assessed for violations and mandate that compliance be achieved.

The majority of violations incurred by water utilities are addressed and corrected prior to the necessity for issuance of an Administrative Order. With technical assistance and training provided by the division, most water systems are able to return to compliance. However, there are water systems that incurred violations that were not adequately addressed or corrected making an Administrative Order warranted. The Administrative Orders encompassed a variety of violations including those contained in this Annual Report of Violations.

State of Tennessee
2016 Annual Compliance Report
Violations Summary
Appendix A

State of Tennessee 2016 Annual Compliance Report Violations Summary

	MCL Vi	olations	Treatment Tech	nnique Violations	Significant Monitor	ing Violations	
	Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems 1.	Individual Systems in Violation ¹
Volatile Organics	1	1			63	2	3
Synthetic Organics	0	0			10	4	4
Inorganics	1	1			10	9	10
Radionuclides	0	0			0	0	0
Total Coliform Rule	2	2			7	7	9
Revised Total Coliform Rule	0	0	1	1	62	54	47
Surface Water Treatment Rules			15	7	40	18	25
D/DBP Rules (Stages 1 & 2)	53	20	0	0	14	6	25
Filter Backwash Recycle Rule			0	0	0	0	0
Lead and Copper Rule			0	0	1	1	1
Consumer Confidence Reports					0	0	0
Public Notification Rule					26	10	10
Ground Water Rule			0	0	23	20	20
Violations in 2016	57		16		249		
Number of Individual Systems in Violation per Violation Type		24		8		111	
Number of Individual Systems in Violation for All Rules				133			

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Total Coliform Rules (TCR and RTCR) Violations Summary

			MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations			
SDWIS Codes		MCL	Number of Violations	Number of Systems ¹	Number of Violations	Number of Systems	Number of Violations	Number of Systems ¹			
Total Coliforn	n Rule										
21	MCL, Acute	Presence	0	0							
22	MCL, Non-Acute	Presence	2	2							
23, 25	Routine or Major Repeat Monitoring						7	7			
Revised Tota	l Coliform Rule ²										
1A	E.Coli MCL	Presence	0	0							
2A, 2B, 2C, 2D	Treatment Techniques				1	1					
3A, 3B, 3C, 3D	Monitoring						52	44			
4A, 4B, 4C, 4D, 4E, 4F	Reporting						0	0			
5A, 5B	Record Keeping						3	3			
	Total Number of Violations		2		1		62				
	Number of Individual Systems With Violations ¹			2		1		53			
	Total Number of TCR/rTCR Violations			65							
	Total Number of Individual Syste With TCR /rTCR Violations 1	56									

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

^{2.} Revised Total Coliform Rule effective as of April 1, 2016.

State of Tennessee 2016 Annual Compliance Report Surface Water Treatment Rules (SWTR / IESWTR / LT2ESWTR) Violations Summary

SDWIS Codes	Violation	MCL	MCL Vi	olations	Treatment Techi Health	nique Violations / Based	Significant Moni	toring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ¹		
Surface Water	Treatment Rule (SWTR)									
36	SWTR Monitoring						0	0		
41	Treatment Technique				1	1				
42	Failure to Filter				1	1				
Interim Enhan	ced SWTR (IESWTR)									
09	Record Keeping for Individual Filter						32	17		
29	Filter Exceedance Follow-Up Reports						8	1		
38	Routine Monitoring						0	0		
43	Single Combined Filter Effluent				6	5				
44	Monthly Combined Filter Effluent				7	2				
LT2 Enhanced	I SWTR (LT2EWSTR)									
32	Source Water Monitoring						0	0		
33	BIN Report (Health Based)				0	0				
	Total Number of Violations				15		40			
	Number of Individual Systems With Violations					9		18		
	Total Number of SWTR Violations			55						
	Total Number of Individual Systems With SWTR Violations	25								

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Inorganic Contaminants (IOCs) Violations Summary

SDWIS Codes	Inorganic Contaminants	MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ²		
1074	Antimony	0.006	0	0			0	0		
1005	Arsenic	0.05	0	0			0	0		
1094	Asbestos	7 million fibers/liter	0	0			0	0		
1010	Barium	2	0	0			0	0		
1075	Berylium	0.004	0	0			0	0		
1015	Cadmium	0.005	0	0			0	0		
1020	Chromium	0.1	0	0			0	0		
1024	Cyanide (as free Cyanide)	0.2	0	0			0	0		
1025	Fluoride	4.0	0	0			0	0		
1035	Mercury	0.002	0	0			0	0		
1036	Nickel	0.1	0	0			0	0		
1040	Nitrate	10 (as nitrogen)	0	0			11	10		
1038	Total Nitrate, Nitrite	10 (as nitrogen)	0	0			0	0		
1041	Nitrite	10 (as nitrogen)	0	0			0	0		
1045	Selenium	0.05	0	0			0	0		
1085	Thallium	0.002	0	0			0	0		
_	Total Number of Violati	ons	0				11			
N	Number of Individual Systems in Violation			0				10		
	Total Number of Individual Systems With Inorganic Violations			10						

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Values are in Milligrams per Liter (mg.L), unless otherwise specified.

Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once.
 Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Synthetic Organic Contaminants (SOCs) Violations Summary

SDWIS Codes	Synthetic Organic Chemicals	MCL 1.	MCL V	iolations	Treatment Tech	nnique Violations	Significant Monitoring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ^{2.}	
2931	1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0	0			0	0	
2063	2,3,7,8-TCDD (Dioxin)	3x10 ⁻⁶	0	0			0	0	
2110	2,4,5-TP	0.05	0	0			0	0	
2105	2,4-D	0.07	0	0			2	2	
2265	Acrymalide				0	0			
2051	Alachlor	0.002	0	0			1	1	
2050	Atrazine	0.003	0	0			4	4	
2306	Benzo(A)pyrene	0.0002	0	0			0	0	
2046	Carbofuran	0.04	0	0			0	0	
2959	Chlordane	0.002	0	0			0	0	
2031	Dalapon	0.2	0	0			0	0	
2035	Di(2-ethylhexyl)adipate	0.4	0	0			0	0	
2039	Di(2-ethylhexyl)phthalate	0.006	0	0			0	0	
2041	Dinoseb	0.007	0	0			0	0	
2032	Diquat	0.02	0	0			0	0	
2033	Endothall	0.1	0	0			0	0	
2005	Endrin	0.002	0	0			0	0	
2257	Epichlorohydrin				0	0			
2946	Ethylene dibromide (EDB)	0.00005	0	0			0	0	
2034	Glyphosate	0.7	0	0			0	0	

(Continued on next page)

State of Tennessee 2016 Annual Compliance Report Synthetic Organic Contaminants (SOCs) Violations Summary

SDWIS Codes	Synthetic Organic Chemicals	MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ² .		
2065	Heptachlor	0.0004	0	0			0	0		
2067	Heptachlor epoxide	0.0002	0	0			0	0		
2274	Hexachlorobenzene	0.001	0	0			0	0		
2042	Hexachlorocyclopentadiene	0.05	0	0			0	0		
2010	Lindane	0.0002	0	0			0	0		
2015	Methoxychlor	0.04	0	0			0	0		
2036	Oxamyl (Vydate)	0.2	0	0			0	0		
2326	Pentachlorphenol	0.001	0	0			0	0		
2040	Picloram	0.5	0	0			2	2		
2383	Polychlorinated biphenyls	0.0005	0	0			0	0		
2037	Simazine	0.004	0	0			1	1		
2020	Tozaphene	0.003	0	0			0	0		
	Number of Violations		0		0		10			
N	Number of Individual Systems in Violation			0		0		0		
	Total Number of Violations			10						
Total N	Total Number of Individual Systems In Violation			4						

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Values are in Milligrams per Liter (mg.L), unless otherwise specified.

^{2.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Volatile Organic Contaminants (VOCs) Violations Summary

SDWIS Codes	Volatile Organic Chemicals	MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems 2.
2977	1,1-Dichloroethylene	0.007	0	0			3	2
2981	1,1,1-trichloroethane	0.2	0	0			3	2
2985	1,1,2-trichloroethane	0.005	0	0			3	2
2980	1,2-dichloroethane	0.005	0	0			3	2
2983	1,2-dichloropropane	0.005	0	0			3	2
2378	1,2,4-trichlorobenzene	0.07	0	0			3	2
2990	Benzene	0.005	0	0			3	2
2982	Carbon Tetrachloride	0.005	0	0			3	2
2380	Cis-1,2-Dichloroethylene	0.07	0	0			3	2
2964	Dichloromethane	0.005	0	0			3	2
2992	Ethylbenzene	0.7	0	0			3	2
2989	Monochlorobenzene	0.1	0	0			3	2
2968	o-Dichlorobenzene	0.6	0	0			3	2
2969	Para-dichlorobenzene	0.075	0	0			3	2
2996	Styrene	0.1	0	0			3	2
2987	Tetrachloroethylene	0.005	1	1			3	2
2991	Toluene	1	0	0			3	2
2979	Trans-1,2-Dichloroethylene	0.1	0	0			3	2
2984	Trichloroethylene	0.005	0	0			3	2
2976	Vinyl chloride	0.002	0	0			3	2
2955	Xylenes (total)	10	0	0			3	2
	Number of Violatio	ns	1				63	
	Number of Individual Systems in Violati	on		1				2
	Total Number of Violatio	ns			6	64		
Total N	umber of Individual Systems In Violation	on				3		

Shaded Area Indicates Violation Type Not Applicable to Rule

- 1. Values are in Milligrams per Liter (mg.L), unless otherwise specified.
- Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once.
 Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Disinfectants and Disinfection Byproducts Rules (D/DBP) Violations Summary

		MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations		
SDWIS Codes			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ^{2.}		
Stage 1 (D/DE	BP)									
0400	Disinfection Byproduct Monitoring				0	0				
0999	Chlorine (MRDL)		0	0			0	0		
1009	Chlorite		0	0			0	0		
2920	Total Organic Carbon				0	0	0	0		
Stage 2 (D/DE	BP)									
2456	Total Haloacetic Acids	0.060	44	18			6	6		
2950	Total Trihalomethanes	0.080	9	6			6	6		
	Number of Violations		53		0		12			
1	Number of Individual Systems in Violation			20		0		6		
	Total Number of Violations			67						
Total N	Number of Individual Systems In Violation		26							

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Values are in Milligrams per Liter (mg.L), unless otherwise specified.

^{2.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Lead and Copper Rule Violations Summary

SDWIS Codes	Lead and Copper Rule	MCL 1.	MCL Vio	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ^{3.}		
51	Initial Lead and Copper Tap M/R ²						0	0		
52	Follow-up or Routine Tap M/R						1	1		
58	Optimal Corrosion Control / Soure Water Treatment				0	0				
65	Public Education				0	0				
	Number of Violations				0		1			
N	umber of Individual Systems in Violation					0		1		
Total Number of Violations			1							
Total N	Total Number of Individual Systems In Violation			1						

Shaded Area Indicates Violation Type Not Applicable to Rule

- 1. Values are in Milligrams per Liter (mg.L), unless otherwise specified.
- 2. Monitoring / Reporting Violation (M/R)
- 3. Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Consumer Confidence Reports (CCR) Violations Summary

SDWIS Codes	Consumer Confidence Report	Number of Violations	Number of Systems
71	Failure to Provide CCR	0	0
72	Inadequate/Incomplete/Late CCR	0	0

^{1.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Radionuclides Violations Summary

SDWIS Codes	Radionuclides	MCL	MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ^{1.}		
4000	Gross Alpha	3 pCi/L	0	0			0	0		
4020	Radium-226	1 pCi/L	0	0			0	0		
4030	Radium-228	1 pCi/L	0	0			0	0		
4006	Combined Uranium	1/10 th MCL	0	0			0	0		
	Number of Violations		0				0			
N	umber of Individual Systems in Violation			0				0		
	Total Number of Violations			0						
Total N	Total Number of Individual Systems In Violation			0						

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee 2016 Annual Compliance Report Public Notification Rule (PN) Violations Summary

SDWIS Codes	Public Notification Violations	Number of Violations	Number of Systems
75	Failure to Provide Public Notice	26	10

State of Tennessee 2016 Annual Compliance Report Ground Water Rule (GWR) Violations Summary

SDWIS Codes	Ground Water Rule Violations	MCL	MCL Vi	olations	Treatment Tech	nique Violations	Significant Moni	toring Violations
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems ^{1.}
31, 34	Monitoring Violation						23	20
41	Treatment Technique				0	0		
Total Number of Violations		23						
Total Number of Individual Systems In Violation		20						

Shaded Area Indicates Violation Type Not Applicable to Rule

^{1.} Although a public water system may be out of compliance with more than one contaminant group or rule, when calculating totals, it's counted no more than once. Consequently, the sum of the number of water systems in violation, over the various contaminant groups or rules, may not add up to the total.

State of Tennessee
2016 Annual Compliance Report
Detailed Violations
Appendix B

2016 Annual Compliance Report Violation Details

Community Water Systems

ANDERSON COUNTY

TN0000514 ANDERSON COUNTY WATER AUTHORIT

Interim Enhanced SWTR

Individual Filter Records

* 10/1/2012 Reco

Record Keeping, Major

12/7/2012 Notice of Violation Issued12/7/2012 Public Notification Requested6/27/2013 Public Notification Received

TN0000513 NORRIS WATER COMMISSION

Interim Enhanced SWTR

Individual Filter Records

* 5/1/2013

Record Keeping, Major

6/2/2014 Notice of Violation Issued 6/2/2014 Public Notification Requested

BEDFORD COUNTY

TN0000517 BEDFORD COUNTY UD

Organics

ATRAZINE

1/1/2016

Routine Monitoring, Major

5/10/2016 Notice of Violation Issued 5/10/2016 Public Notification Requested

6/15/2016 Director's Order

TN0000629 FLAT CREEK CO OP

D/DBP Rule

Haloacetic Acids

10/1/2016

MCL Violation

1/24/2017 Notice of Violation Issued1/24/2017 Public Notification Requested2/13/2017 Public Notification Received

CAMPBELL COUNTY

TN0000912 DEERFIELD RESORT WATER SYSTEM

Public Notification Rule

Public Notice

* 10/29/2011 Reporting Violation, Major

3/15/2012 Director's Order

* 12/1/2011 Reporting Violation, Major

6/11/2013 Notice of Violation Issued

 $^{^{\}ast}$ Violation occurred prior to 2016, but extended into the 2016 calendar year.

CANNON COUNTY

TN0000756 WOODBURY WATER SYSTEM

Interim Enhanced SWTR

Individual Filter Records

* 12/1/2011 Record Keeping, Major

1/31/2012 Notice of Violation Issued1/31/2012 Public Notification Received

4/5/2016 Director's Order

CARTER COUNTY

TN0000282 HAMPTON UTILITY DISTRICT

D/DBP Rule

Haloacetic Acids

7/1/2016 Routine Monitoring, Major

11/2/2016 Notice of Violation Issued

11/2/2016 Public Notification Requested

Trihalomethanes

7/1/2016 Routine Monitoring, Major

11/2/2016 Notice of Violation Issued11/2/2016 Public Notification Requested

CHEATHAM COUNTY

TN0000023 ASHLAND CITY WATER DEPT

Interim Enhanced SWTR

Individual Filter Records

* 12/1/2013 Record Keeping, Major

12/7/2015 Notice of Violation Issued

12/21/2015 Compliance Review Meeting

* 5/1/2014 Record Keeping, Major

12/7/2015 Notice of Violation Issued 12/21/2015 Compliance Review Meeting

CLAIBORNE COUNTY

TN0000290 LINCOLN MEMORIAL UNIVERSITY

Interim Enhanced SWTR

Individual Filter Records

* 1/3/2012 Record Keeping, Major

2/10/2012 Notice of Violation Issued

CLAY COUNTY

TN0000573 NORTHWEST CLAY COUNTY UTILITY

D/DBP Rule

Haloacetic Acids

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued

		7/28/2016	Public Notification Requested
		8/25/2016	Public Notification Received
		10/20/2016	Director's Order
		12/31/2016	Returned to Compliance
7/1/2016	MCL Violation		
		10/31/2016	Notice of Violation Issued
		10/31/2016	Public Notification Requested
		11/18/2016	Public Notification Received
		12/31/2016	Returned to Compliance
Interim Enhanced SWTR			·
Individual Filter Records			
* 9/1/2014	Record Keeping, Major		
	, ,	11/5/2014	Notice of Violation Issued
		11/5/2014	Public Notification Requested
		10/20/2016	Director's Order
* 10/1/2014	Record Keeping, Major		
		12/3/2014	Notice of Violation Issued
		12/3/2014	Public Notification Requested
		10/20/2016	Director's Order
* 11/1/2014	Record Keeping, Major		
		10/20/2016	Director's Order
* 12/1/2014	Record Keeping, Major		
	, ,	10/20/2016	Director's Order
* 1/1/2015	Record Keeping, Major		
	, ,	10/20/2016	Director's Order
* 3/1/2015	Record Keeping, Major		
	, ,	10/20/2016	Director's Order
* 4/1/2015	Record Keeping, Major		
	, ,	10/20/2016	Director's Order
* 5/1/2015	Record Keeping, Major		
	. 5	10/20/2016	Director's Order
* 6/1/2015	Record Keeping, Major		
	. 5	10/20/2016	Director's Order

CROCKETT COUNTY

TN0000928 FRIENDSHIP DISTRIBUTION WATER

Volatile Organics

TETRACHLOROETHYLENE

4/1/2016 MCL Violation

8/18/2016 Notice of Violation Issued 8/18/2016 Public Notification Requested

6/24/2016 Notice of Violation Issued

DECATUR COUNTY

TN0000883 NORTH U.D. OF DECATUR/BENTON C

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

6/24/2016 Public Notification Requested

5/1/2016 Routine Monitoring

7/5/2016 Notice of Violation Issued 7/5/2016 Public Notification Requested

FENTRESS COUNTY

TN0000010 ALLARDT WATER WORKS

Public Notification Rule

Public Notice

* 6/30/2012 Reporting Violation, Major

3/4/2013 Notice of Violation Issued

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

6/13/2016 Notice of Violation Issued 6/13/2016 Public Notification Requested

TN0000875 CHANUTE-PALL MALL UTILITY DIST

D/DBP Rule

Haloacetic Acids

1/1/2016 MCL Violation

4/27/2016 Notice of Violation Issued

4/27/2016 Public Notification Requested

12/12/2016 Director's Order 2/13/2017 Agreed Order

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued7/28/2016 Public Notification Requested

8/29/2016 Public Notification Received

12/12/2016 Director's Order 2/13/2017 Agreed Order

7/1/2016 MCL Violation

MCL Violation

10/31/2016 Notice of Violation Issued

10/31/2016 Public Notification Requested

11/26/2016 Public Notification Received

12/12/2016 Director's Order

2/13/2017 Agreed Order

1/24/2017 Notice of Violation Issued

1/24/2017 Public Notification Requested

2/13/2017 Agreed Order

FRANKLIN COUNTY

TN0000146 COWAN BOARD OF PUBLIC UTILITIE

Interim Enhanced SWTR

Individual Filter Records

10/1/2016

* 6/1/2015 Record Keeping, Major

* 7/1/2015 Record Keeping, Major

7/29/2016 Notice of Violation Issued

7/29/2016 Notice of Violation Issued

GILES COUNTY

TN0000563 FAIRVIEW UTILITY DISTRICT

D/DBP Rule

Haloacetic Acids

	7/1/2016	MCL Violation	8/25/2016	Public Notification Requested Public Notification Received Returned to Compliance Director's Order
	7/1/2010	MCL VIOIATION	10/31/2016	Notice of Violation Issued Public Notification Requested Public Notification Received
			12/31/2016	Returned to Compliance Director's Order
TN0000469	MINOR HILL WATER UTI	L DIST		
	D/DBP Rule			
	Haloacetic Acids 4/1/2016	MCL Violation		
			7/28/2016	Notice of Violation Issued
			7/28/2016	Public Notification Requested
			8/19/2016	Public Notification Received
			4/26/2017	Director's Order
	7/1/2016	MCL Violation		
				Notice of Violation Issued
				Public Notification Requested
				Public Notification Received
				Returned to Compliance
	10/1/2016	MCL Violation	4/26/2017	Director's Order
	10/1/2016	MCL VIOIAUOTI	1/24/2017	Notice of Violation Issued
				Public Notification Requested
			3/31/2017	Returned to Compliance
			4/26/2017	
TN0000649	SOUTH GILES UTILITY D	ISTRICT		
	Haloacetic Acids			
	4/1/2016	MCL Violation		
				Notice of Violation Issued
	- 4.6	1101.15.1.5	7/28/2016	Public Notification Requested
	7/1/2016	MCL Violation	40/04/0040	Notice of Violeties leaved
				Notice of Violation Issued Public Notification Requested
				Public Notification Requested Public Notification Received
	10/1/2016	MCL Violation	12/1/2010	. abile Notification Necested
	10, 1/2010	WOL VIOLATION	1/24/2017	Notice of Violation Issued
				Public Notification Requested
TN0000566	TARPLEY SHOP UTILITY	DISTRICT		
	D/DBP Rule Haloacetic Acids			
	7/1/2016	MCL Violation		
	1/1/2010	WICE VIOLATION	10/31/2016	Notice of Violation Issued
			10/31/2016	Public Notification Requested Public Notification Received
	,			

4/1/2016

MCL Violation

7/28/2016 Notice of Violation Issued

1/24/2017 Notice of Violation Issued1/24/2017 Public Notification Requested

10/1/2016

MCL Violation

GRUNDY COUNTY

TN0000706 TRACY CITY WATER SYSTEM

D/DBP Rule

Haloacetic Acids

7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued10/31/2016 Public Notification Requested

10/1/2016 MCL Violation

1/24/2017 Notice of Violation Issued

1/24/2017 Public Notification Requested2/22/2017 Public Notification Received

Trihalomethanes

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued

7/28/2016 Public Notification Requested

9/7/2016 Public Notification Received

7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued10/31/2016 Public Notification Requested

HAMBLEN COUNTY

TN0000474 MORRISTOWN WATER SYSTEM

Interim Enhanced SWTR

Individual Filter Records

* 3/1/2012 Record Keeping, Major

3/13/2013 Notice of Violation Issued

3/13/2013 Public Notification Requested

6/15/2013 Public Notification Received

* 11/1/2014 Record Keeping, Major

6/15/2015 Public Notification Received

* 12/1/2014 Record Keeping, Major

2/20/2015 Notice of Violation Issued2/20/2015 Public Notification Requested

6/15/2015 Public Notification Received

TN0000650 WITT UTILITY DISTRICT

D/DBP Rule

Haloacetic Acids

1/1/2016 Routine Monitoring, Major

4/29/2016 Notice of Violation Issued 4/29/2016 Public Notification Requested

6/30/2016 Public Notification Received 7/1/2016 Public Notification Received

8/10/2016 Returned to Compliance

4/1/2016 Routine Monitoring, Major

MCL Violation

7/28/2016 Notice of Violation Issued

7/28/2016 Public Notification Requested

1/24/2017 Notice of Violation Issued

1/24/2017 Public Notification Requested

10/1/2016

Trihalomethanes

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

1/1/2016	Routine Monitoring, Major		
		4/29/2016	Notice of Violation Issued
		4/29/2016	Public Notification Requested
		6/30/2016	Public Notification Received
		7/1/2016	Public Notification Received
		8/10/2016	Returned to Compliance
4/1/2016	Routine Monitoring, Major		
		7/28/2016	Notice of Violation Issued
		7/28/2016	Public Notification Requested
Revised Total Coliform Rule			
Total Coliforms			
8/1/2016	Routine Monitoring		
		9/30/2016	Notice of Violation Issued
		9/30/2016	Public Notification Requested

HARDIN COUNTY

AQUA UTILITIES CO, INC TN0000948

> Revised Total Coliform Rule **Total Coliforms**

> > 7/1/2016

Routine Monitoring

9/8/2016 Notice of Violation Issued 9/8/2016 Public Notification Requested

HAWKINS COUNTY

TN0000472 MOORESBURG UTILITY DISTRICT

> Revised Total Coliform Rule **Total Coliforms**

> > 9/1/2016

Routine Monitoring

11/8/2016 Notice of Violation Issued 11/8/2016 Public Notification Requested

TN0000593 **ROGERSVILLE WATER SYSTEM**

D/DBP Rule

Haloacetic Acids

1/1/2016 MCL Violation

> 4/27/2016 Notice of Violation Issued 4/27/2016 Public Notification Requested

> > 6/14/2016 Director's Order

4/1/2016 MCL Violation

6/14/2016 Director's Order

7/28/2016 Notice of Violation Issued 7/28/2016 Public Notification Requested 8/25/2016 Public Notification Received

12/31/2016 Returned to Compliance

10/31/2016 Notice of Violation Issued 10/31/2016 Public Notification Requested 11/21/2016 Public Notification Received 12/31/2016 Returned to Compliance

MCL Violation

Trihalomethanes

7/1/2016

7/1/2016 MCL Violation

> 10/31/2016 Notice of Violation Issued 10/31/2016 Public Notification Requested

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

TN0000682 SURGOINSVILLE UTILITY DISTRICT

Public Notification Rule
Public Notice

* 3/14/2013 Reporting Violation, Major

8/15/2014 Notice of Violation Issued

9/5/2014 Enforcement, Other

9/9/2014 Compliance Review Meeting

2/29/2016 Director's Order

HOUSTON COUNTY

TN0000230 ERIN WATER DEPARTMENT

D/DBP Rule

Haloacetic Acids

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued
7/28/2016 Public Notification Requested
8/3/2016 Public Notification Received

5/8/2017 Director's Order

7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued10/31/2016 Public Notification Requested11/21/2016 Public Notification Received

5/8/2017 Director's Order

10/1/2016 MCL Violation

1/24/2017 Notice of Violation Issued1/24/2017 Public Notification Requested2/8/2017 Public Notification Received

5/8/2017 Director's Order

HUMPHREYS COUNTY

TN0000958 BLUEBIRD HILLS SMALL COMMUNITY

Ground Water Rule E. Coli

8/1/2016

Follow-Up Monitoring

9/8/2016 Notice of Violation Issued9/8/2016 Public Notification Requested

JACKSON COUNTY

TN0000845 JACKSON COUNTY UD #3

D/DBP Rule

Haloacetic Acids

1/1/2016 MCL Violation

4/27/2016 Notice of Violation Issued4/27/2016 Public Notification Requested5/13/2016 Public Notification Received

7/19/2016 Director's Order

12/31/2016 Returned to Compliance

 $^{^{\}ast}$ Violation occurred prior to 2016, but extended into the 2016 calendar year.

4/1/2016 MCL Violation

7/19/2016 Director's Order
7/28/2016 Notice of Violation Issued
7/28/2016 Public Notification Requested
8/10/2016 Public Notification Received
12/31/2016 Returned to Compliance

7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued
10/31/2016 Public Notification Requested
11/25/2016 Public Notification Received
12/31/2016 Returned to Compliance

KNOX COUNTY

TN0000369 FIRST UTIL DIST OF KNOX COUNTY

Interim Enhanced SWTR

Individual Filter Records

7/1/2016 Record Keeping, Major

9/26/2016 Notice of Violation Issued9/26/2016 Public Notification Requested

TN0000280 HALLSDALE-POWELL UTILITY DISTR

D/DBP Rule

Haloacetic Acids

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued
7/28/2016 Public Notification Requested
8/26/2016 Public Notification Received
9/30/2016 Returned to Compliance

TN0000371 WEST KNOX UTILITY DISTRICT

Interim Enhanced SWTR

Individual Filter Records

7/1/2016 Record Keeping, Major

9/26/2016 Notice of Violation Issued 9/26/2016 Public Notification Requested

LAWRENCE COUNTY

TN0000408 LORETTO WATER DEPARTMENT

Interim Enhanced SWTR

Individual Filter Records

* 2/1/2011 Record Keeping, Major

9/6/2012 Notice of Non-Compliance 9/6/2012 Public Notification Requested 2/13/2013 Public Notification Received

Organics

2,4-D

1/1/2016 Routine Monitoring, Major

8/12/2016 Notice of Violation Issued 8/12/2016 Public Notification Requested 1/12/2017 Compliance Review Meeting

ALACHLOR (LASSO)

1/1/2016 Routine Monitoring, Major

		8/12/2016	Notice of Violation Issued
		8/12/2016	Public Notification Requested
		1/12/2017	Compliance Review Meeting
		17 12/2011	Compilation Notice in Medicing
/2016	Routine Monitoring Major		
72010	reduite Monitoring, Major	8/12/2016	Notice of Violation Issued
			Public Notification Requested
		1/12/2017	Compliance Review Meeting
/2016	Routine Monitoring, Major		
		8/12/2016	Notice of Violation Issued
		8/12/2016	Public Notification Requested
		1/12/2017	Compliance Review Meeting
/2016	Routine Monitoring, Major		
		8/12/2016	Notice of Violation Issued
		8/12/2016	Public Notification Requested
		1/12/2017	Compliance Review Meeting
/	/2016	2016 Routine Monitoring, Major	8/12/2016 8/12/2016 1/12/2017 /2016 Routine Monitoring, Major 8/12/2016 8/12/2016 1/12/2017 /2016 Routine Monitoring, Major 8/12/2016 8/12/2016

TN0000740 WEST POINT U.D.

D/DBP Rule

Haloacetic Acids

7/1/2016

/2016 Routine Monitoring, Major

11/2/2016 Notice of Violation Issued11/2/2016 Public Notification Requested

Trihalomethanes

7/1/2016 Routine Monitoring, Major

11/2/2016 Notice of Violation Issued11/2/2016 Public Notification Requested

LINCOLN COUNTY

TN0000764 LINCOLN CO BD OF P.U. #1

Interim Enhanced SWTR

Individual Filter Records

* 12/31/2012 Record Keeping, Major

10/14/2013 Notice of Violation Issued

MARION COUNTY

TN0000924 RIVER LANDING CONDOMINIUM ASSO

Interim Enhanced SWTR

Combined Filter Turbidity

1/1/2016 Treatment Technique, Single Value

3/4/2016 Notice of Violation Issued3/4/2016 Public Notification Requested

2/1/2016 Treatment Technique, Single Value

11/30/1996 Notice of Violation Issued
11/30/1996 Public Notification Requested
2/26/1997 Public Notification Received
4/5/2016 Notice of Violation Issued
4/5/2016 Public Notification Requested

6/1/2016 Director's Order

3/1/2016 Treatment Technique, Monthly Average

5/6/2016 Notice of Violation Issued

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

		5/6/2016	Public Notification Requested
8/1/2016	Treatment Technique, Monthly Average		
		9/2/2016	Public Notification Received
		10/19/2016	Agreed Order
12/1/2016	Treatment Technique, Monthly Average		
		10/19/2016	Agreed Order
		2/9/2017	Notice of Violation Issued
		2/9/2017	Public Notification Requested
Public Notification Rule			
Public Notice			
* 12/1/2014	Reporting Violation, Major		
		6/1/2016	Director's Order
* 1/1/2015	Reporting Violation, Major		
		6/1/2016	Director's Order
* 2/1/2015	Reporting Violation, Major		
		6/1/2016	Director's Order
* 3/1/2015	Reporting Violation, Major		
		6/1/2016	Director's Order
1/1/2016	Reporting Violation, Major		
		10/19/2016	Agreed Order
2/1/2016	Reporting Violation, Major		
		10/19/2016	Agreed Order
3/1/2016	Reporting Violation, Major		
		10/19/2016	Agreed Order
4/1/2016	Reporting Violation, Major		
		10/19/2016	Agreed Order
5/1/2016	Reporting Violation, Major		
		10/19/2016	Agreed Order

MAURY COUNTY

TN0000488 M	OUNT PLEASA	ANT WAT SYS # [,]	1
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Interim Enhanced SWTR

Individual Filter Records

* 9/1/2015

* 9/1/2012 Record Keeping, Major

2/28/2013 Compliance Review Meeting
2/28/2013 Letter of Agreement

* 12/1/2012 Record Keeping, Major

2/28/2013 Compliance Review Meeting
2/28/2013 Letter of Agreement

* 6/1/2015 Record Keeping, Major

4/15/2016 Notice of Violation Issued
4/15/2016 Public Notification Requested

4/15/2016 Notice of Violation Issued
4/15/2016 Public Notification Requested

MCMINN COUNTY

TN0000224 ENGLEWOOD WATER DEPT

D/DBP Rule

Haloacetic Acids

1/1/2016 Routine Monitoring, Major

Record Keeping, Major

4/29/2016 Notice of Violation Issued4/29/2016 Public Notification Requested6/30/2016 Returned to Compliance

Trihalomethanes

1/1/2016 Routine Monitoring, Major

4/29/2016	Notice of Violation Issued
4/29/2016	Public Notification Requested
6/30/2016	Returned to Compliance
3/1/2017	Public Notification Received

MONROE COUNTY

TN0008280	GREASIE'S TRAILER PARK
1140000200	GILAGIL S INAILLIN FAIN

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

Total Coliform Rule

Total Coliforms

1/1/2016 Non-Acute MCL Violation

3/4/2016 Notice of Violation Issued3/4/2016 Public Notification Requested

Volatile Organics

1,1,1-TRICHLOROETHANE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

1,1,2-TRICHLOROETHANE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

1,1-DICHLOROETHYLENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

1,2,4-TRICHLOROBENZENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

1,2-DICHLOROETHANE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

1,2-DICHLOROPROPANE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

BENZENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

CARBON TETRACHLORIDE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

CHLOROBENZENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

CIS-1,2-DICHL	OROETHYL	.ENE
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1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued 5/9/2017 Public Notification Requested

DICHLOROMETHANE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued 5/9/2017 Public Notification Requested

ETHYLBENZENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued

Public Notification Requested

5/9/2017

O-DICHLOROBENZENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

P-DICHLOROBENZENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

STYRENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

TETRACHLOROETHYLENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued 5/9/2017 Public Notification Requested

TOLUENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

TRANS-1,2-DICHLOROETHYLENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

TRICHLOROETHYLENE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued 5/9/2017 Public Notification Requested

VINYL CHLORIDE

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

XYLENES(TOTAL)

1/1/2016 Routine Monitoring, Major

5/9/2017 Notice of Violation Issued5/9/2017 Public Notification Requested

TN0000426 HIWASSEE COLLEGE WATER SYSTEM

D/DBP Rule

Haloacetic Acids

7/1/2016 Routine Monitoring, Major

11/2/2016 Notice of Violation Issued11/2/2016 Public Notification Requested

Trihalomethanes

7/1/2016 Routine Monitoring, Major

11/2/2016 Notice of Violation Issued11/2/2016 Public Notification Requested

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

rga	

1/1/2016 Routine Monitoring, Major

8/12/2016 Notice of Violation Issued 8/12/2016 Public Notification Requested

ATRAZINE

1/1/2016 Routine Monitoring, Major

8/12/2016 Notice of Violation Issued

8/12/2016 Public Notification Requested

PICLORAM

1/1/2016

Routine Monitoring, Major

8/12/2016 Notice of Violation Issued8/12/2016 Public Notification Requested

TN0000687 SWEETWATER UTILITY BOARD

Interim Enhanced SWTR

Combined Filter Turbidity

4/1/2016 Treatment Technique, Single Value

4/28/2016 Public Notification Received
5/31/2016 Returned to Compliance
6/13/2016 Notice of Violation Issued
6/13/2016 Public Notification Requested

TN0000693 TELLICO PLAINS WATER DEPT

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued 5/6/2017 Public Notification Requested

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

6/13/2016 Notice of Violation Issued 6/13/2016 Public Notification Requested

Volatile Organics

1,1,1-TRICHLOROETHANE

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued5/6/2017 Public Notification Requested

1,1,2-TRICHLOROETHANE

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued5/6/2017 Public Notification Requested

1,1-DICHLOROETHYLENE

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued5/6/2017 Public Notification Requested

1,2,4-TRICHLOROBENZENE

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued5/6/2017 Public Notification Requested

1,2-DICHLOROETHANE

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued 5/6/2017 Public Notification Requested

1,2-DICHLOROPROPANE

1/1/2016 Routine Monitoring, Major

5/6/2017 Notice of Violation Issued

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

		5/6/2017	Public Notification Requested
BENZENE			
1/1/2016	Routine Monitoring, Major		
		5/6/2017	
		5/6/2017	Public Notification Requested
CARBON TETRACHLO	RIDE		
1/1/2016	Routine Monitoring, Major		
		5/6/2017	
		5/6/2017	Public Notification Requested
CHLOROBENZENE			
1/1/2016	Routine Monitoring, Major		
		5/6/2017	
010 4 0 0101 11 000571	N.4 ENE	5/6/2017	Public Notification Requested
CIS-1,2-DICHLOROETH			
1/1/2016	Routine Monitoring, Major	E/C/2017	Notice of Violation Issued
		5/6/2017	Notice of Violation Issued
DICHLOROMETHANE		3/6/2017	Public Notification Requested
1/1/2016	Routine Monitoring, Major		
1/1/2010	Roduite Monitoring, Major	5/6/2017	Notice of Violation Issued
		5/6/2017	
ETHYLBENZENE		0/0/2017	T ubile Notification Requested
1/1/2016	Routine Monitoring, Major		
., ., _ 5 . 5	. realine mennenng, majer	5/6/2017	Notice of Violation Issued
		5/6/2017	Public Notification Requested
O-DICHLOROBENZENE	<u> </u>		
1/1/2016	Routine Monitoring, Major		
	• ,	5/6/2017	Notice of Violation Issued
		5/6/2017	Public Notification Requested
P-DICHLOROBENZENE			
1/1/2016	Routine Monitoring, Major		
		5/6/2017	Notice of Violation Issued
		5/6/2017	Public Notification Requested
STYRENE			
1/1/2016	Routine Monitoring, Major		
		5/6/2017	Notice of Violation Issued
		5/6/2017	Public Notification Requested
TETRACHLOROETHYL			
1/1/2016	Routine Monitoring, Major		
		5/6/2017	
TOLLIENE		5/6/2017	Public Notification Requested
TOLUENE	Daytina Manitarina Maian		
1/1/2016	Routine Monitoring, Major	5/6/2017	Notice of Violation Issued
		5/6/2017	
TRANS-1,2-DICHLORO	ETHYLENE	3/0/2017	Tublic Notification Requested
1/1/2016	Routine Monitoring, Major		
1/1/2010	Roduite Monitoring, Major	5/6/2017	Notice of Violation Issued
		5/6/2017	
TRICHLOROETHYLEN	<u> </u>	3,0,2011	
1/1/2016	- Routine Monitoring, Major		
	- ··· 3, ···-y- ·	5/6/2017	Notice of Violation Issued
		5/6/2017	Public Notification Requested
VINYL CHLORIDE			•
1/1/2016	Routine Monitoring, Major		
	-· ·	5/6/2017	Notice of Violation Issued
		5/6/2017	Public Notification Requested
XYLENES(TOTAL)			
1/1/2016	Routine Monitoring, Major		
		5/6/2017	Notice of Violation Issued

OBION COUNTY

TN0000311 HORNBEAK UTILITY DISTRICT

Revised Total Coliform Rule Total Coliforms

5/1/2016 Routine Monitoring

6/30/2016 Returned to Compliance
7/5/2016 Notice of Violation Issued
7/5/2016 Public Notification Requested
2/23/2017 Public Notification Received

OVERTON COUNTY

TN0000405 LIVINGSTON WATER DEPT

D/DBP Rule

Haloacetic Acids

7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued
10/31/2016 Public Notification Requested
11/8/2016 Public Notification Received
3/31/2017 Returned to Compliance

10/1/2016 MCL Violation

1/24/2017 Notice of Violation Issued
1/24/2017 Public Notification Requested
1/31/2017 Public Notification Received
3/31/2017 Returned to Compliance

TN0000013 NORTH OVERTON UTILITY DISTRICT

Revised Total Coliform Rule Total Coliforms

11/1/2016 Routine Monitoring

1/19/2017 Notice of Violation Issued1/19/2017 Public Notification Requested

PICKETT COUNTY

TN0000088 BYRDSTOWN WATER DEPT

D/DBP Rule

Haloacetic Acids

4/1/2016

1/1/2016 MCL Violation

MCL Violation

4/27/2016 Notice of Violation Issued4/27/2016 Public Notification Requested

7/1/2016 Director's Order

7/13/2016 Public Notification Received

7/1/2016 Director's Order

7/28/2016 Notice of Violation Issued

7/28/2016 Public Notification Requested 7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued 10/31/2016 Public Notification Requested

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

10/1/2016 MCL Violation

1/24/2017 Notice of Violation Issued1/24/2017 Public Notification Requested

Revised Total Coliform Rule Total Coliforms

12/1/2016

Monitoring, Lab Cert/Method Error

2/9/2017 Notice of Violation Issued2/9/2017 Public Notification Requested

POLK COUNTY

TN0000136 COPPERHILL WATER DEPT.

Revised Total Coliform Rule Total Coliforms

4/1/2016

Routine Monitoring

6/13/2016 Notice of Violation Issued 6/13/2016 Public Notification Requested

PUTNAM COUNTY

TN0000009 ALGOOD WATER SYSTEM

Revised Total Coliform Rule

Total Coliforms 4/1/2016

016 Routine Monitoring

6/13/2016 Notice of Violation Issued 6/13/2016 Public Notification Requested

5/1/2016 Routine Monitoring

7/8/2016 Notice of Violation Issued 7/8/2016 Public Notification Requested

TN0000134 COOKEVILLE BOAT DOCK ROAD UD

Revised Total Coliform Rule Total Coliforms

7/1/2016

Routine Monitoring

9/8/2016 Notice of Violation Issued9/8/2016 Public Notification Requested

TN0000133 COOKEVILLE WATER DEPT

Interim Enhanced SWTR

Individual Filter Records

* 10/1/2014

Record Keeping, Major

12/3/2014 Notice of Violation Issued12/3/2014 Public Notification Requested

RHEA COUNTY

TN0000174 DAYTON WATER DEPT

D/DBP Rule

Haloacetic Acids

1/1/2016 MCL Violation

4/27/2016 Notice of Violation Issued4/27/2016 Public Notification Requested

		9/23/2016	Director's Order
4/1/2016	MCL Violation		
		7/28/2016	Notice of Violation Issued
		7/28/2016	Public Notification Requested
		9/23/2016	Director's Order
Trihalomethanes			
1/1/2016	MCL Violation		
		4/27/2016	Notice of Violation Issued
		4/27/2016	Public Notification Requested
		9/23/2016	Director's Order
4/1/2016	MCL Violation		
		7/28/2016	Notice of Violation Issued
		7/28/2016	Public Notification Requested
		9/23/2016	Director's Order

TN0000657 NEWPORT RESORT WATER SYSTEM

Public Notification Rule

Public Notice

* 12/4/2010 Reporting Violation, Major

* 7/1/2011 Reporting Violation, Major

8/25/2011 Director's Order 2/16/2017 Director's Order

8/25/2011 Director's Order

ROANE COUNTY

TN0000523 OLIVER SPRINGS WATER BOARD

Revised Total Coliform Rule Total Coliforms

12/1/2016 Routine Monitoring

2/13/2017 Notice of Violation Issued2/13/2017 Public Notification Requested

ROBERTSON COUNTY

TN0000001 ADAMS-CEDAR HILL WATER SYSTEM

Revised Total Coliform Rule Total Coliforms

4/1/2016

Sample Siting Plan Errors

8/25/2016 Notice of Violation Issued

RUTHERFORD COUNTY

TN0000791 CONSOLIDATED U D OF RUTHERFORD

Interim Enhanced SWTR

Combined Filter T

Combined Filter Turbidity

8/1/2016 Treatment Technique, Single Value

8/9/2016 Notice of Violation Issued 8/9/2016 Public Notification Requested 8/17/2016 Public Notification Received 9/30/2016 Returned to Compliance

SCOTT COUNTY

TN0000532	ONEIDA W&S COMM

D/DBP Rule

Haloacetic Acids

1/1/2016 MCL Violation

4/27/2016 Notice of Violation Issued4/27/2016 Public Notification Requested5/9/2016 Public Notification Received

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued
7/28/2016 Public Notification Requested
9/19/2016 Public Notification Received

7/1/2016 MCL Violation

MCL Violation

10/31/2016 Notice of Violation Issued

10/31/2016 Public Notification Requested

1/24/2017 Notice of Violation Issued1/24/2017 Public Notification Requested

Trihalomethanes

10/1/2016

1/1/2016 MCL Violation

4/27/2016 Notice of Violation Issued

4/27/2016 Public Notification Requested 5/9/2016 Public Notification Received

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued7/28/2016 Public Notification Requested

9/19/2016 Public Notification Received

SHELBY COUNTY

TN0000262 GERMANTOWN WATER DEPT

D/DBP Rule

Haloacetic Acids

4/1/2016 Routine Monitoring, Major

8/1/2016 Notice of Violation Issued

8/1/2016 Public Notification Requested

Trihalomethanes

4/1/2016 Routine Monitoring, Major

8/1/2016 Notice of Violation Issued8/1/2016 Public Notification Requested

SULLIVAN COUNTY

TN0000061 BLUFF CITY WATER DEPARTMENT

Revised Total Coliform Rule

Total Coliforms

5/1/2016

Routine Monitoring

7/8/2016 Notice of Violation Issued7/8/2016 Public Notification Requested

TN0000319 INTERMONT UTILITY DISTRICT

Revised Total Coliform Rule

Total Coliforms

5/1/2016

Routine Monitoring

7/8/2016 Notice of Violation Issued7/8/2016 Public Notification Requested

TN0000078 JACOBS CREEK JOB CORPS CENTER

Long Term 1 SWTR

Disinfectants

2/1/2016 Treatment Technique

4/8/2016 Notice of Violation Issued4/8/2016 Public Notification Requested

Revised Total Coliform Rule

Total Coliforms

7/1/2016 Routine Monitoring

9/15/2016 Notice of Violation Issued9/15/2016 Public Notification Requested

TIPTON COUNTY

TN0000703 FIRST U D OF TIPTON CO

Total Coliform Rule

Total Coliforms

2/1/2016

Non-Acute MCL Violation

3/31/2016 Returned to Compliance
4/4/2016 Public Notification Received
4/8/2016 Notice of Violation Issued
4/8/2016 Public Notification Requested

UNION COUNTY

TN0000415 LUTTRELL-BLAINE-CORRYTON U.D.

D/DBP Rule

Trihalomethanes

7/1/2016 MCL Violation

10/31/2016 Notice of Violation Issued
10/31/2016 Public Notification Requested
11/1/2016 Public Notification Received
12/31/2016 Returned to Compliance

WARREN COUNTY

TN0000818 WARREN COUNTY UTILITY DISTRICT

D/DBP Rule

Trihalomethanes

1/1/2016 MCL Violation

4/27/2016 Notice of Violation Issued4/27/2016 Public Notification Requested

WASHINGTON COUNTY

TN0000338 JONESBOROUGH WATER DEPT

D/DBP Rule

Haloacetic Acids

4/1/2016 MCL Violation

7/28/2016 Notice of Violation Issued
7/28/2016 Public Notification Requested
9/30/2016 Returned to Compliance
10/7/2016 Public Notification Received

10/1/2016 MCL Violation

1/24/2017 Notice of Violation Issued1/24/2017 Public Notification Requested

WAYNE COUNTY

TN0000736 WAYNESBORO WATER SYSTEM

Interim Enhanced SWTR
Individual Filter Records

* 10/1/2015 Record Keeping, Major

12/4/2015 Notice of Violation Issued12/4/2015 Public Notification Requested

WHITE COUNTY

TN0000652 SPARTA WATER SYSTEM

Interim Enhanced SWTR
Individual Filter Records

* 10/1/2013 Record Keeping, Major

12/2/2013 Notice of Violation Issued
12/2/2013 Public Notification Requested
4/1/2014 Enforcement, Other
6/15/2014 Public Notification Received

9/5/2014 Enforcement, Other 11/7/2014 Director's Order

WILLIAMSON COUNTY

TN0000246 FRANKLIN WATER DEPT

Interim Enhanced SWTR
Individual Filter Records

* 4/1/2015 Record Keeping, Major

6/3/2015 Notice of Violation Issued 6/3/2015 Public Notification Requested 6/15/2015 Public Notification Received

Non-Community Water Systems

BENTON COUNTY

TN0000950 DRY BRANCH WATER SYSTEM #1

Ground Water Rule E. Coli

* 9/1/2015 Follow-Up Monitoring

10/9/2015 Notice of Violation Issued
10/9/2015 Public Notification Requested
11/2/2015 Public Notification Received

TN0004738 HARMON CREEK BOAT DOCK

Revised Total Coliform Rule Total Coliforms

7/1/2016 Routine Monitoring

11/8/2016 Notice of Violation Issued11/8/2016 Public Notification Requested

BLOUNT COUNTY

TN0005134 U. S. 129 DRAGON STORE

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

4/6/2017 Notice of Violation Issued4/6/2017 Public Notification Requested

BRADLEY COUNTY

TN0002427 NEW FRIENDSHIP BAPTIST CHURCH

Revised Total Coliform Rule Total Coliforms

4/1/2016 Routine Monitoring

7/7/2016 Returned to Compliance 8/8/2016 Notice of Violation Issued 8/8/2016 Public Notification Requested 8/24/2016 Public Notification Received

CARTER COUNTY

TN0005051 COVE CREEK CAMPGROUND #1

Revised Total Coliform Rule Total Coliforms

6/1/2016 Routine Monitoring

8/8/2016 Notice of Violation Issued 8/8/2016 Public Notification Requested 8/13/2016 Public Notification Received 8/31/2016 Returned to Compliance TN0004205 WATAUGA DAM RESERVATION PUA

Revised Total Coliform Rule Total Coliforms

7/1/2016

Routine Monitoring

11/8/2016 Notice of Violation Issued11/8/2016 Public Notification Requested

TN0004719 WHITEWAY GRILL

Revised Total Coliform Rule
Total Coliforms

4/1/2016

Routine Monitoring

7/12/2016 Returned to Compliance
8/8/2016 Notice of Violation Issued
8/8/2016 Public Notification Requested
8/13/2016 Public Notification Received

CLAIBORNE COUNTY

TN0005183 BUNCH HOLLOW CAMPGROUND & RESO

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

4/6/2017 Notice of Violation Issued4/6/2017 Public Notification Requested

Revised Total Coliform Rule
Total Coliforms

10/1/2016

Routine Monitoring

2/13/2017 Notice of Violation Issued2/13/2017 Public Notification Requested

TN0004570 STRAIGHT CREEK BOAT DOCK

Inorganics

Nitrates

1/1/2016

Routine Monitoring, Major

4/6/2017 Notice of Violation Issued4/6/2017 Public Notification Requested

COCKE COUNTY

TN0002614 IMIGINATION MOUNTAIN CAMPING

Revised Total Coliform Rule Total Coliforms

7/1/2016

Routine Monitoring

11/29/2016 Notice of Violation Issued11/29/2016 Public Notification Requested

CUMBERLAND COUNTY

TN0004788 CUMBERLAND MTN RETREAT CMPGD

Public Notification Rule
Public Notice

* 9/1/2014 Reporting Violation, Major

3/31/2015 Notice of Violation Issued

10/20/2016 Director's Order

* 10/1/2014 Reporting Violation, Major

3/31/2015 Notice of Violation Issued

10/20/2016 Director's Order

Revised Total Coliform Rule
Total Coliforms

4/1/2016

Routine Monitoring

8/15/2016 Notice of Violation Issued 8/15/2016 Public Notification Requested

10/20/2016 Director's Order

DECATUR COUNTY

TN0005092 PONDEROSA CLUB HOUSE

Revised Total Coliform Rule Total Coliforms

4/1/2016

Routine Monitoring

7/5/2016 Returned to Compliance 8/22/2016 Notice of Violation Issued 8/22/2016 Public Notification Requested 10/17/2016 Public Notification Received

TN0009448 PONDEROSA HOUSE AREA

Revised Total Coliform Rule
Total Coliforms

4/1/2016

Routine Monitoring

8/22/2016 Notice of Violation Issued 8/22/2016 Public Notification Requested

TN0004678 PONDEROSA TRAILER AREA

Revised Total Coliform Rule Total Coliforms

4/1/2016

Routine Monitoring

7/5/2016 Returned to Compliance 8/22/2016 Notice of Violation Issued 8/22/2016 Public Notification Requested 10/17/2016 Public Notification Received

FAYETTE COUNTY

TN0002120 THE COUNTRY PLACE MINISTRIES

Ground Water Rule

E. Coli

8/1/2014 Follow-Up Monitoring

10/1/2014 Notice of Violation Issued10/1/2014 Public Notification Requested

4/13/2016 Director's Order

* 11/1/2014 Follow-Up Monitoring

1/5/2015 Notice of Violation Issued1/5/2015 Public Notification Requested

4/13/2016 Director's Order

GRAINGER COUNTY

TN0004030 CLINCH MOUNTAIN LOOKOUT REST.

Revised Total Coliform Rule Total Coliforms

4/1/2016 Sample Siting Plan Errors

Errors

6/27/2016 Notice of Violation Issued

TN0002506 GREENLEE CG, RV & MARINE, LLC

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

4/6/2017 Notice of Violation Issued 4/6/2017 Public Notification Requested 4/11/2017 Public Notification Received

TN0004204 GREENLEE OF MAY SPRINGS

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

4/6/2017 Notice of Violation Issued 4/6/2017 Public Notification Requested 4/11/2017 Public Notification Received

HARDEMAN COUNTY

TN0004024 CHICKASAW ST PARK LAKE LAJOIE

Revised Total Coliform Rule

Total Coliforms

7/1/2016 Routine Monitoring

9/8/2016 Notice of Violation Issued9/8/2016 Public Notification Requested

8/1/2016 Routine Monitoring

10/3/2016 Notice of Violation Issued10/3/2016 Public Notification Requested

TN0001847 KAMP KIWANI GIRL SCOUT CAMP

Revised Total Coliform Rule Total Coliforms

6/1/2016

Routine Monitoring

8/22/2016 Notice of Violation Issued8/22/2016 Public Notification Requested

HAWKINS COUNTY

TN0002020 CAMP DAVY CROCKETT

Ground Water Rule E. Coli

* 10/1/2010

Follow-Up Monitoring

12/2/2010 Notice of Violation Issued12/2/2010 Public Notification Requested

HAYWOOD COUNTY

TN0001255 ZION BAPTIST CHURCH

Revised Total Coliform Rule Total Coliforms

4/1/2016

Routine Monitoring

7/5/2016 Returned to Compliance 8/22/2016 Notice of Violation Issued 8/22/2016 Public Notification Requested 9/11/2016 Public Notification Received

HENRY COUNTY

TN0009668 BUCHANAN RESORT #1

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

6/24/2016 Notice of Violation Issued

6/24/2016 Public Notification Requested

5/1/2016 Routine Monitoring

7/5/2016 Notice of Violation Issued7/5/2016 Public Notification Requested

TN0004967 BUCHANAN RESORT #2

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

6/24/2016 Notice of Violation Issued 6/24/2016 Public Notification Requested

5/1/2016 Routine Monitoring

7/5/2016 Notice of Violation Issued7/5/2016 Public Notification Requested

TN0000933 COUNTRY JUNCTION RESORT

Revised Total Coliform Rule
Total Coliforms

10/1/2016 Routine Monitoring

ring

2/13/2017 Notice of Violation Issued
2/13/2017 Public Notification Requested
2/17/2017 Public Notification Received
3/31/2017 Returned to Compliance

TN0001889 CYPRESS BAY RESORT

Revised Total Coliform Rule Total Coliforms

10/1/2016

Routine Monitoring

2/13/2017 Notice of Violation Issued2/13/2017 Public Notification Requested2/20/2017 Public Notification Received

TN0005119 RUSSELL'S ONE-STOP Date Inactivated: 4/28/2016

Ground Water Rule E. Coli

1/1/2016 Follow-Up Monitoring

2/5/2016 Notice of Violation Issued
2/5/2016 Public Notification Requested

Total Coliform Rule

Total Coliforms

1/1/2016 Routine Monitoring, Major

3/4/2016 Notice of Violation Issued 3/4/2016 Public Notification Requested

HICKMAN COUNTY

TN0004763 HIDDEN VALLEY LAKES #5

Ground Water Rule

E. Coli

* 9/1/2015 Follow-Up Monitoring

10/9/2015 Notice of Violation Issued10/9/2015 Public Notification Requested10/19/2015 Public Notification Received

HUMPHREYS COUNTY

TN0004936 EAGLE BAY MARINA

Ground Water Rule

E. Coli

* 12/1/2010 Follow-Up Monitoring

2/4/2011 Notice of Violation Issued2/4/2011 Public Notification Requested

4/1/2014 Enforcement, Other

9/5/2014 Director's Order

* 10/1/2013 Follow-Up Monitoring

11/6/2013 Letter of Agreement11/6/2013 Notice of Non-Compliance4/1/2014 Enforcement, Other

9/5/2014 Director's Order

TN0004943 HAIR OF THE DOG BAR Date Inactivated: 9/29/2016

Public Notification Rule

Public Notice

* 1/1/2011

* 2/10/2012

Reporting Violation, Major

Reporting Violation, Major

2/10/2012 Notice of Violation Issued

7/31/2012 Enforcement, Other

10/16/2012 Director's Order

2/10/2012 Notice of Violation Issued

7/31/2012 Enforcement, Other 10/16/2012 Director's Order

TN0005032 PINE HILL CH OF THE NAZARENE

Ground Water Rule E. Coli

E. C0

 $^{^{\}star}$ Violation occurred prior to 2016, but extended into the 2016 calendar year.

12/4/2013 Notice of Violation Issued12/4/2013 Public Notification Requested

7/31/2014 Director's Order

TN0005172 WOOTEN WOODS RETREAT WATER SYS

Ground Water Rule

E. Coli

* 6/1/2015 Follow-Up Monitoring

7/7/2015 Notice of Violation Issued7/7/2015 Public Notification Requested

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Sample Siting Plan Errors

9/1/2016 Notice of Violation Issued

5/1/2016 Routine Monitoring

7/8/2016 Notice of Violation Issued7/8/2016 Public Notification Requested

JOHNSON COUNTY

TN0004905 RACEWAY RESTAURANT

Revised Total Coliform Rule Total Coliforms

7/1/2016 Routine Monitoring

11/8/2016 Notice of Violation Issued11/8/2016 Public Notification Requested

TN0005169 SHADY VALLEY COUNTRY STORE

Ground Water Rule

E. Coli

* 4/1/2014 Follow-Up Monitoring

5/1/2014 Notice of Violation Issued 5/1/2014 Public Notification Requested

MADISON COUNTY

TN0004326 ANTIOCH BAPTIST CH - HUMBOLDT

Ground Water Rule E. Coli

* 10/1/2015

Follow-Up Monitoring

11/2/2015 Notice of Violation Issued11/2/2015 Public Notification Requested

8/31/2016 Director's Order

TN0002464 FRIENDSHIP BAPTIST ST CHURCH

Ground Water Rule

E. Coli

* 1/1/2012 Follow-Up Monitoring

1/31/2012 Notice of Violation Issued1/31/2012 Public Notification Requested

TN0002245 MAPLE SPRINGS BAPTIST CHURCH

Total Coliform Rule

Total Coliforms

2/1/2016 Routine Monitoring, Major

4/12/2016 Notice of Violation Issued4/12/2016 Public Notification Requested4/25/2016 Public Notification Received

11/4/2016 Director's Order

TN0003287 PARKBURG BAPTIST CHURCH

Revised Total Coliform Rule Total Coliforms

10/1/2016 Routine Monitoring

2/13/2017 Notice of Violation Issued2/13/2017 Public Notification Requested

TN0004059 WARDS GROVE BAPTIST CHURCH

Ground Water Rule

E. Coli

8/1/2016 Follow-Up Monitoring

11/8/2016 Notice of Violation Issued11/8/2016 Public Notification Requested

Total Coliform Rule

Total Coliforms

1/1/2016 Routine Monitoring, Major

5/9/2016 Notice of Violation Issued 5/9/2016 Public Notification Requested 5/19/2016 Public Notification Received 6/30/2016 Returned to Compliance

MARION COUNTY

TN0002697 BATTLE CREEK MARKET

Interim Enhanced SWTR

Combined Filter Turbidity

3/1/2016 Treatment Technique, Monthly Average

5/6/2016 Notice of Violation Issued

5/6/2016 Public Notification Requested

12/16/2016 Director's Order

4/1/2016 Treatment Technique, Monthly Average

6/13/2016 Notice of Violation Issued

6/13/2016 Public Notification Requested

12/16/2016 Director's Order

5/1/2016 Treatment Technique, Monthly Average

7/8/2016 Notice of Violation Issued

7/8/2016 Public Notification Requested

12/16/2016 Director's Order

8/1/2016 Treatment Technique, Single Value

9/3/2016 Public Notification Received

12/16/2016 Director's Order

12/1/2016 Treatment Technique, Monthly Average

12/16/2016 Director's Order

2/9/2017 Notice of Violation Issued 2/9/2017 Public Notification Requested 2/27/2017 Public Notification Received

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

MCMINN COUNTY

TN0005041 CAMP LIVING STONES

Total Coliform Rule

Total Coliforms

1/1/2016

Routine Monitoring, Major

5/6/2016 Notice of Violation Issued 5/6/2016 Public Notification Requested

MEIGS COUNTY

TN0004171 ARMSTRONG FERRY CAMPGROUND

Ground Water Rule

E. Coli

* 7/1/2010

Follow-Up Monitoring

11/10/2010 Notice of Violation Issued11/10/2010 Public Notification Requested

MONROE COUNTY

TN0004532 BROKEN ARROW TRAVEL CAMP

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

4/6/2017 Notice of Violation Issued4/6/2017 Public Notification Requested

TN0004397 GREEN COVE TRAILER CAMP

Inorganics

Nitrates

1/1/2016 Routine Monitoring, Major

4/6/2017 Notice of Violation Issued4/6/2017 Public Notification Requested

POLK COUNTY

TN0005081 FLIP FLOP BURGERS Date Inactivated: 11/21/201

Revised Total Coliform Rule Total Coliforms

9/1/2016

Routine Monitoring

11/8/2016 Notice of Violation Issued
11/8/2016 Public Notification Requested
11/22/2016 Public Notification Received
12/31/2016 Returned to Compliance

SEVIER COUNTY

TN0004640 WILD PLUM TEA ROOM

1/1/2016

Routine Monitoring, Major

5/10/2016 Notice of Violation Issued 5/10/2016 Public Notification Requested

STEWART COUNTY

TN0004707 P J'S RESORT

Revised Total Coliform Rule
Total Coliforms

6/1/2016

Routine Monitoring

8/8/2016 Notice of Violation Issued8/8/2016 Public Notification Requested

SULLIVAN COUNTY

TN0002618 BAYS MTN PARK WATER SYSTEM

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

8/8/2016 Notice of Violation Issued

8/8/2016 Public Notification Requested

7/1/2016 Routine Monitoring

11/8/2016 Notice of Violation Issued11/8/2016 Public Notification Requested

Date Inactivated: 9/1/2016

TN0004932 WATERS EDGE R V PARK

Revised Total Coliform Rule

Total Coliforms

4/1/2016 Routine Monitoring

7/25/2016 Returned to Compliance
8/8/2016 Notice of Violation Issued
8/8/2016 Public Notification Requested
8/17/2016 Public Notification Received

TIPTON COUNTY

TN0003407 COVINGTON MUNICIPAL AIRPORT

Ground Water Rule

E. Co

* 12/1/2010 Follow-Up Monitoring

1/7/2011 Notice of Violation Issued

1/7/2011 Public Notification Requested

* 9/1/2015 Follow-Up Monitoring

10/9/2015 Notice of Violation Issued10/9/2015 Public Notification Requested

UNICOI COUNTY

TN0001714 COFFEE RIDGE MISS BAPTIST CHUR

1/1/2016

Routine Monitoring, Major

5/6/2016	Notice of Violation Issued
5/6/2016	Public Notification Requested
5/15/2016	Public Notification Received
6/30/2016	Returned to Compliance

TN0004634 USA RAFT

Revised Total Coliform Rule Total Coliforms

7/1/2016

Routine Monitoring

11/8/2016 Notice of Violation Issued
11/8/2016 Public Notification Requested
11/21/2016 Public Notification Received
12/31/2016 Returned to Compliance

WAYNE COUNTY

TN0001276	SCOTTS CHAP	Date Inactivated: 1/17/2017			
	Revised Total Colife	orm Rule			
	Total Co	oliforms			
		4/1/2016	Routine Monitoring		
			-	8/8/2016	Notice of Violation Issued
				8/8/2016	Public Notification Requested
		7/1/2016	Routine Monitoring		
				11/29/2016	Notice of Violation Issued
				11/29/2016	Public Notification Requested
		12/1/2016	Routine Monitoring		
				2/13/2017	Notice of Violation Issued
				2/13/2017	Public Notification Requested
	Total Coliform Rule				
	Total Co	oliforms			
		1/1/2016	Routine Monitoring, Major		
				5/9/2016	Notice of Violation Issued
				5/9/2016	Public Notification Requested

Non-Transient Non-Community Water Systems

FAYETTE COUNTY

TN0002109 KELLOGG'S CONVENIENCE FOODS

Public Notification Rule

Public Notice

* 11/1/2012 Reporting Violation, Major

Reporting Violation, Major

4/5/2016 Director's Order
4/5/2016 Director's Order

* 11/1/2014

* 2/1/2014

Reporting Violation, Major

4/5/2016 Director's Order

FRANKLIN COUNTY

TN0005124 LHOIST NORTH AMERICA

Ground Water Rule E. Coli

* 1/1/2015

Follow-Up Monitoring

1/30/2015 Notice of Violation Issued1/30/2015 Public Notification Requested

3/23/2017 Director's Order

HICKMAN COUNTY

TN0004910 ACCURATE ENERGETIC SYSTEMS

Ground Water Rule

E. Coli

* 7/1/2010 Follow-Up Monitoring

10/30/2010 Notice of Violation Issued10/30/2010 Public Notification Requested

HUMPHREYS COUNTY

TN0003779 CHEMOURS-NEW JOHNSONVILLE PLAN

Interim Enhanced SWTR

Combined Filter Turbidity

1/1/2016 Treatment Technique, Single Value

1/6/2016 Public Notification Received 2/16/2016 Notice of Violation Issued 2/16/2016 Public Notification Requested

2/6/2017 Director's Order

Public Notification Rule

Public Notice

* 6/30/2014 Reporting Violation, Major

5/12/2016 Notice of Violation Issued

2/6/2017 Director's Order

* 7/31/2014 Reporting Violation, Major

2/6/2017 Director's Order

6/30/2016 Reporting Violation, Major

2/6/2017 Director's Order

^{*} Violation occurred prior to 2016, but extended into the 2016 calendar year.

TN0003416 SCEPTER INGOT CASTING, INC.

Revised Total Coliform Rule Total Coliforms

7/1/2016 Routine Monitoring

3/30/2016 Director's Order
8/31/2016 Returned to Compliance
10/17/2016 Public Notification Received
11/29/2016 Notice of Violation Issued
11/29/2016 Public Notification Requested

JOHNSON COUNTY

TN0003906 SHADY VALLEY SCHOOL

Organics

ATRAZINE

1/1/2016 Routine Monitoring, Major

8/12/2016 Notice of Violation Issued 8/12/2016 Public Notification Requested 9/27/2016 Public Notification Received 11/30/2016 Returned to Compliance



DRINKING WATER STATE REVOLVING FUND

FY 2017 Priority Ranking List

COMPREHENSIVE LIST

Total DWSRF

\$ 41,513,500

\$ 5,375,000

Total Green Requested

*]	Includes 5 p	oints fo	or having an a	approved Growth Plan		Total DWSKF	\$ 41,313,300		\$ 3,373,000	Requesteu
Rank	Priority Points*		Population	Local Government	County	Project Description	Total Project Amount	Running Total of Total Project Amount Requested (\$)	Green Component Amount	Green Component Running Total (\$)
				Row left blank intentionally						
1	65	20	782	Saint Joseph	Lawrence	Water Treatment Plant Improvements (Replace existing sand filters with membrane filtration system)	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -
2	65	40	2,355	Jellico	Campbell	GREEN - Distribution System Improvements (Replace aging waterlines and improvements to the Water Treatment Plant and booster pump station) Green Business Case Required	\$ 2,000,000	\$ 3,500,000	\$ 400,000	\$ 400,000
3	45	20	500	Bell Buckle	Bedford	Waterline Replacement (Replace waterlines in the residential Downtown Area)	\$ 200,000	\$ 3,700,000	\$ -	\$ 400,000
4	45	30	1,371	Troy	Obion	Waterline Replacement (Replace approximately 12,800 LF of waterlines along Pine Street, Main Street, Mary Kay Drive, Virginia Drive, Polk Street, and Wynlink-John Road)	\$ 525,000	\$ 4,225,000	\$ -	\$ 400,000
5	45	40	1,714	Loretto	Lawrence	Waterline Replacement (Replacing approximately 13,200 LF of waterlines)	\$ 2,325,000	\$ 6,550,000	\$ -	\$ 400,000
6	45	40	19,166	Smith Utility District	Smith	New Water Storage Tank (Replace existing Grant Water Storage Tank with a new 200,000 gallon WST)	\$ 933,000	\$ 7,483,000	\$ -	\$ 400,000
7	45	40	25,841	Quebeck-Walling Utility District	White	New Water Storage Tank and Pump Station Improvements (Replace existing 50,000 gallon Water Storage Tank and upgrade the Lost Creek booster pump station)	\$ 365,000	\$ 7,848,000	\$ -	\$ 400,000
8	45	50	982	Collinwood	Wayne	Distribution System Improvements (Construction of a new water storage tank and replace undersized waterlines)	\$ 1,078,000	\$ 8,926,000	\$ -	\$ 400,000
9	45	50	63,831	Old Knoxville Highway Water Utility District	Greene	Waterline Replacement (Replacing approximately 16,000 LF of waterlines along Hwy 11-E)	\$ 2,500,000	\$ 11,426,000	\$ -	\$ 400,000
10	45	60	6,097	Erwin	Unicoi	New Water Storage Tank (Construction of a new .5 MG water storage tank)	\$ 750,000	\$ 12,176,000	\$ -	\$ 400,000
11	45	60	10,156	Paris	Henry	Water Treatment Plant Improvements (Phase 2, Equipment purchase)	\$ 2,250,000	\$ 14,426,000	\$ -	\$ 400,000
12	45	60	10,156		Henry	Water Treatment Plant Improvements (Phase 2, Construction)	\$ 3,750,000	\$ 18,176,000	\$ -	\$ 400,000
13	45	60	11,100	Lewisburg	Marshall	GREEN - Water Treatment Plant Improvements (Replace existing raw water pumps and updating the electrical controls) Green Business Case Required	\$ 750,000	\$ 18,926,000	\$ 350,000	\$ 750,000
14	45	60	98,963	Ocoee Utility District	Bradley/Polk	New Water Treatment Plant (Construction of a new WTP to replace the existing Wildwood Spring WTP to include a new filtration process, high service pumps, a clearwell, and backwash disposal system)	\$ 4,000,000	\$ 22,926,000	\$ -	\$ 750,000

DRINKING WATER STATE REVOLVING FUND

FY 2017 Priority Ranking List

COMPREHENSIVE LIST

Total DWSRF \$ 41,513,500 \$ 5,375,000 Requested

*Includes 5 points for having an approved Growth Plan

Rank	Priority Points*	ATPI		Local Government	County	Project Description	Total Project Amount	Running Total of Total Project Amount Requested (\$)	Green Component Amount	Green Component Running Total (\$)
15	45	60	98,963	Ocoee Utility District	Bradley/Polk	Water Treatment Plant Improvements (Construction of a new 200,000 gallon clearwell for the Carpenter Springs WTP)	\$ 500,000	\$ 23,426,000	\$ -	\$ 750,000
16	45	60	98,963	Ocoee Utility District	Bradley/Polk	Waterline Replacement (Replacing approximately 32,000 LF in of 6-inch diameter waterlines in the Keith Valley Area)	\$ 1,200,000	\$ 24,626,000	\$ -	\$ 750,000
17	45	70	2,306	Carthage	Smith	Waterline Replacement (Replace waterlines in the Downtown Area)	\$ 412,500	\$ 25,038,500	\$ -	\$ 750,000
18	45	80	26,190	Lebanon	Wilson	New Water Storage Tank (South Industrial)	\$ 2,600,000	\$ 27,638,500	\$ -	\$ 750,000
19	45	80	26,190	Lebanon	Wilson	Distribution System Improvements (Upgrade the Williams Street Water Booster Station and install approximately 8,000 LF of 16-inch diameter water transmission main)	\$ 2,100,000	\$ 29,738,500	\$ -	\$ 750,000
20	25	50	8,387	Atoka	Tipton	New Water Treatment Plant	\$ 3,500,000	\$ 33,238,500	\$ -	\$ 750,000
21	25	60	10,428	Lawrenceburg	Lawrence	Water System Improvements (Construction of a new 300,000 gallon WST, upgrading the Crockett PS, and replacing approximately 7,500 LF of 2-inch diameter waterlines in the Hood Hills Area)		\$ 36,088,500	\$ -	\$ 750,000
22	25	60	98,963	Ocoee Utility District	Bradley/Polk	New Water Storage Tank (Construction of a new 500,000 gallon Valley View water storage tank)	\$ 800,000	\$ 36,888,500	\$ -	\$ 750,000
23	25	70	65,211	Jackson Energy Authority	Madison	GREEN - Water Meter Replacement (Replacing approximately 37,000 water meters with AMR meters) Categorically Green	\$ 4,625,000	\$ 41,513,500	\$ 4,625,000	\$ 5,375,000

Class	Date	City	# of Attendees
TN Association of Utility Districts (TAUD)	Dute	City	" of Attendees
Cross Connection Renewal	7/5/16	Murfreesboro	12
Cross Connection Basic	7/6/16	Murfreesboro	20
Emergency Operations	7/6/16	Jackson	3
Emergency Operations	7/7/16	Clarksville	6
Fundamentals of Water Treatment	7/11/16	Knoxville	12
Cross Connection Renewal	7/12/16	Chattanooga	5
Cross Connection Basic	7/13/16	Chattanooga	8
Bacteriological Sampling	7/19/16	Jackson	17
Practical Math for Wastewater Operators	7/19/16	Murfreesboro	0
Bacteriological Monitoring and Reporting	7/20/16	Jackson	5
Fundamentals of Collection Systems	7/25/16	Murfreesboro	7
Fundamentals of Water Distribution	7/25/16	Murfreesboro	18
TOSHA Safety Training	7/27/16	Knoxville	19
Fundamentals of Wastewater Treatment Systems	8/1/16	Murfreesboro	5
TAUD Business of Running a Utility Conference	8/11/16	Gatlinburg	374
Practical Math for Distribution Operators	8/16/16	Jackson	0
Fundamentals of Water Distribution	8/22/16	Knoxville	8
Emergency Operations	8/23/16	Chattanooga	8
Introduction to Pumps and Motors	8/23/16	Murfreesboro	17
Pumps and Motors, Advanced (3 day Class)	8/23/16	Murfreesboro	17
Chemical Feed Pumps and Motors	8/24/16	Murfreesboro	8
Emergency Operations	8/24/16	Knoxville	17
Emergency Operations	8/25/16	Gray	15
Emergency Pumps and Motors	8/25/16	Murfreesboro	3
Fundamentals of Water Distribution	8/29/16	Jackson	8
Fundamentals of Water Treatment	8/29/16	Jackson	8
Cross Connection Renewal	8/30/16	Knoxville	14
Cross Connection Basic	8/31/16	Knoxville	19
TOSHA Safety Training	9/7/16	Jackson	21
Wastewater and Water NPDES Lab Quality Control	9/7/16	Murfreesboro	10
Collection Systems Issues and Update	9/8/16	Murfreesboro	19
Practical Math for Water Treatment Plant Operators	9/9/16	Murfreesboro	8
Cross Connection Renewal	9/13/16	Murfreesboro	7
Cross Connection Basic	9/14/16	Murfreesboro	13
Fundamentals of Water Treatment	9/19/16	Murfreesboro	11
Trench Excavation Competent Person	9/19/16	Murfreesboro	13
Confined Space	9/20/16	Murfreesboro	18

TOSHA Bloodborne Pathogens	9/21/16	Murfreesboro	7
TOSHA Safety Training	9/22/16	Murfreesboro	10
Water Quality After the Meter and Customer Complaints	9/26/16	Murfreesboro	10
Cross Connection Renewal	9/27/16	Jackson	17
Water Loss 2 day Class	9/27/16	Murfreesboro	0
Confined Space	9/28/16	Gray	0
Cross Connection Basic	9/28/16	Jackson	11
Trench Excavation Competent Person	9/29/16	Gray	0
Bacteriological Sampling	10/4/16	Norris	8
Bacteriological Monitoring and Reporting	10/5/16	Norris	10
Cross Connection Renewal	10/11/16	Kingsport	10
Practical Math for Distribution Operators	10/11/16	Murfreesboro	10
Cross Connection Basic	10/12/16	Kingsport	15
Cross Connection Renewal	10/25/16	Memphis	0
Cross Connection Basic	10/26/16	Memphis	0
Knoxville Collection Cram	10/31/16	Knoxville	12
Knoxville Distribution Cram	10/31/16	Maryville	26
Knoxville Wastewater Cram	10/31/16	Knoxville	9
Knoxville Water Treatment Cram	10/31/16	Maryville	21
Murfreesboro Collection Cram	10/31/16	Murfreesboro	44
Murfreesboro Distribution Cram	10/31/16	Murfreesboro	54
Murfreesboro Wastewater Cram	10/31/16	Murfreesboro	35
Murfreesboro Water Treatment Cram	10/31/16	Murfreesboro	45
Cross Connection Renewal	11/15/16	Murfreesboro	6
Cross Connection Basic	11/16/16	Murfreesboro	20
Bacteriological Sampling	12/6/16	Chattanooga	9
Bacteriological Monitoring and Reporting	12/7/16	Chattanooga	0
Basic Math for Utility Operators	1/3/17	Murfreesboro	37
Fundamentals of Water Treatment	1/9/17	Murfreesboro	0
Cross Connection Renewal	1/10/17	Murfreesboro	10
Cross Connection Basic	1/11/17	Murfreesboro	5
Fundamentals of Water Treatment	1/23/17	Gray	0
Cross Connection Renewal	1/24/17	Clarksville	12
Cross Connection Basic	1/25/17	Clarksville	0
Basic Math for Utility Operators	1/30/17	Jackson	25
Basic Math for Utility Operators	2/6/17	Alcoa	29
Fundamentals of Collection Systems	2/6/17	Murfreesboro	10
Cross Connection Renewal	2/7/17	Jackson	19
Practical Math for Wastewater Operators	2/7/17	Murfreesboro	4

Cross Connection Basic	2/8/17	Jackson	9
Fundamentals of Water Distribution	2/13/17	Murfreesboro	17
Wastewater Issues and Regulation Update	2/15/17	Jackson	29
Collection Systems Issues and Update	2/16/17	Jackson	23
Cross Connection Renewal	2/21/17	Chattanooga	25
Cross Connection Basic	2/22/17	Chattanooga	14
Introduction to GPS Data Collection	2/22/17	Knoxville	12
CPR/AED/Basic First Aid Class	2/23/17	Knoxville	16
Fundamentals of Wastewater Treatment Systems	2/27/17	Murfreesboro	14
Fundamentals of Water Distribution	2/27/17	Gray	6
Safe Drinking Water Act Update	3/2/17	Gray	12
Bacteriological Compliance	6/13/17	Jackson	0
Bacteriological Sampling	6/13/17	Jackson	27
Backflow Troubleshooting & Advanced Testing	3/8/17	Jackson	7
Bacteriological Monitoring and Reporting	6/14/17	Jackson	0
TAUD Technology Conference	3/8/17	Pigeon Forge	130
Basic Math for Utility Operators	3/13/17	Gray	23
Backflow Troubleshooting & Advanced Testing	3/14/17	Knoxville	6
CPR/AED/Basic First Aid Class	3/21/17	Murfreesboro	8
Cross Connection Renewal	3/14/17	Kingsport	20
Cross Connection Basic	3/15/17	Kingsport	7
Safe Drinking Water Act Update	3/15/17	Clarksville	14
Water Loss: Assessment and Solutions	2/15/17	Murfreesboro	6
Backflow Troubleshooting & Advanced Testing	3/16/17	Chattanooga	0
Safe Drinking Water Act Update	3/22/17	Alcoa	15
Wastewater Issues and Regulation Update	3/22/17	Knoxville	12
Collection Systems Issues and Update	3/23/17	Knoxville	0
Safe Drinking Water Act Update	3/23/17	Chattanooga	16
Fundamentals of Water Distribution	3/27/17	Jackson	4
Fundamentals of Water Treatment	3/27/17	Jackson	11
Safe Drinking Water Act Update	3/28/17	Cookeville	15
Confined Space Advanced (MOST) Class	3/29/17	Murfreesboro	18
Cross Connection Basic	4/3/17	Murfreesboro	7
Bacteriological Compliance	4/4/17	Gray	0
Bacteriological Sampling	4/4/17	Gray	10
Bacteriological Monitoring and Reporting	4/5/17	Gray	9
Cross Connection Renewal	4/7/17	Murfreesboro	34
CPR/AED/Basic First Aid Class	4/18/17	Jackson	0
Cross Connection Renewal	4/18/17	Knoxville	21

Cross Connection Basic	4/19/17	Knoxville	26
Flagger Certification Course	4/19/17	Jackson	0
Safe Drinking Water Act Update	4/25/17	Lawrenceburg	9
Knoxville Collection Cram	5/1/17	Alcoa	10
Knoxville Distribution Cram	5/1/17	Knoxville	13
Knoxville Wastewater Cram	5/1/17	Maryville	22
Knoxville Water Treatment Cram	5/1/17	Knoxville	20
Murfreesboro Collection Cram	5/1/17	Murfreesboro	33
Murfreesboro Distribution Cram	5/1/17	Murfreesboro	62
Murfreesboro Wastewater Cram	5/1/17	Murfreesboro	42
Murfreesboro Water Treatment Cram	5/1/17	Murfreesboro	41
Bacteriological Compliance	5/9/17	Cookeville	4
Bacteriological Sampling	5/9/17	Cookeville	3
Safe Drinking Water Act Update	5/9/17	Jackson	19
Bacteriological Monitoring and Reporting	5/10/17	Cookeville	2
Water Loss: Assessment and Solutions	5/10/17	Knoxville	0
TAUD Operator Expo	5/18/17	Lebanon	1336
Water Loss: Assessment and Solutions	5/23/17	Jackson	6
Trench Excavation Competent Person	5/24/17	Jackson	12
Confined Space	5/25/17	Jackson	17
Confined Space	5/30/17	Knoxville	18
Introduction to GPS Data Collection	5/31/17	Murfreesboro	9
Trench Excavation Competent Person	5/31/17	Knoxville	10
Trench Excavation Competent Person	6/22/17	Murfreesboro	33
Emergency Operations	6/1/17	Murfreesboro	14
Flagger Certification Course	6/1/17	Knoxville	0
Flagger Certification Course	6/8/17	Murfreesboro	8
Fundamentals of Water Distribution	6/12/17	Murfreesboro	3
Cross Connection Renewal	6/13/17	Memphis	6
Hire Hard, Manage Easy - Creating an Effective Selection Process & Developin		Murfreesboro	5
Cross Connection Basic	6/14/17	Memphis	9
Harassment in the Workplace: What Supervisors Must Know	6/14/17	Murfreesboro	9
Substance Abuse in the Workplace: What Supervisors Need To Know & Four		Murfreesboro	10
Crane Safety/Qualified Rigger & Signal Person	6/19/17	Murfreesboro	0
Confined Space	6/21/17	Murfreesboro	14
Chlorine Gas Safety	6/23/17	Murfreesboro	0
Cross Connection Renewal	6/27/17	Murfreesboro	9
Cross Connection Basic	6/28/17	Murfreesboro	5
Cross Connection Busic	0/20/1/	141011111111111111111111111111111111111	

Total **3749**

Municipal Technical Advisory Service (MTAS)				
Drinking Water from a Fire Hydrant: Overview of Municipal WS	3/28/17	Memphis	5	
Drinking Water from a Fire Hydrant: Overview of Municipal WS	3/29/17	Jackson	9	
Drinking Water from a Fire Hydrant: Overview of Municipal WS	4/4/17	Kingsport	6	
Drinking Water from a Fire Hydrant: Overview of Municipal WS	4/5/17	Knoxville	10	
Drinking Water from a Fire Hydrant: Overview of Municipal WS	4/6/17	Collegedale	8	
Drinking Water from a Fire Hydrant: Overview of Municipal WS	4/7/17	Nashville	10	
EOA08 Water and Wastewater	6/9/17	Murfreesboro	23	
			Total	71
Communities Unlimited				
Distribution and Storage Tanks: The Whole Picture of Do's and Don'ts		Lenoir City	12	
3 R's	8/24/16	Lenoir City	10	
3 R's	9/20/16	Spring Hill	4	
Distribution and Storage Tanks: The Whole Picture of Do's and Don'ts	9/21/16	Spring Hill	5	
3 R's	3/7/17	Mountain City	17	
Distribution and Storage Tanks: The Whole Picture of Do's and Don'ts	3/8/17	Mountain City	17	
Lab Results	4/18/17	Clarksville	18	
Distribution and Infrastructure	4/19/17	Clarksville	15	
Lab Results	4/26/17	Hohenwald	8	
Distribution and Infrastructure	4/27/17	Hohenwald	10	
3 R's	5/9/17	Lenoir City	6 7	
Lab results - Do You Really Know What it Means	5/10/17	Lenoir City		
Distribution Infrastructure and Flushing	5/11/17	Lenoir City	2 2	
SWS - Repair of Chemical Feeder Pumps	5/26/17 5/26/17	Johnson City Elizabethton	2 25	
Distribution Systems 3 R's	6/13/17	Jackson	25 7	
Lab Results	6/13/17	Jackson	, 13	
RTCR L1 and L2 Assessments	6/14/17	Knoxville	21	
RTCR LT and LZ Assessments	0/19/17		Total	199
			Total	133
TDEC DWR				
Regulatory update-	7/6/16	Columbia	10	
Regularoy update	7/18/16	Knoxville	50	
Lead and Copper Rule	7/20/16	Knoxville	50	
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Lead and Copper Rule Seminar	8/5/16	Murfreesboro	100
Reg update/LCR/RTCR	8/25/16	Murfreesboro	100
Lead and Copper Seminar	9/15/16	Nashville	50
RTCR	9/19/16	Murfreesboro	22
AWOP CPE Scottsboro AL	9/20/16	Scottsboro AL	1
Regional Water Resource Development	1/13/17	Spencer	40
Regulatory update	2/9/17	Fayetteville	10
TAUD Safe Drinking Water Act Update	3/2/17	Gray	12
TAUD Technology Conference- SDWA updates	3/9/17	Pigeon Forge	130
TAUD Safe Drinking Water Act Update	3/15/17	Clarksville	14
TAUD Safe Drinking Water Act Update	3/22/17	Alcoa	15
TAUD Safe Drinking Water Act Update	3/23/17	Chattanooga	16
AWOP Spring meeting /Data Integrity Workshop	3/28/17	Nashville	10
TAUD Safe Drinking Water Act Update	4/25/17	Lawrenceburg	9
TAUD Safe Drinking Water Act Update	5/9/17	Jackson	19
TAUD- Region 11 meeting. Regulatoy update	5/10/17	jackson	25
ESOS-2016 Drought / Drought Prepardness	5/18/17	Chattanooga	20
FTC- SDWA update/ LCR/RTCR	5/25/17	Elizabethton	8
TAUD annaul conference- Drought/ Drought Prepardness	6/5/17	Chattanooga	50
AWOP KY DSO MOD	6/21/17	Moorehead/ Hazard	1
AWOP TN DSO MOD - Giles County	6/27/17	Pulaski	10
·		Total	772
Fleming Training Center			
4202 - Water Treatment CE Seminar - Day 2	6/14/17	Jackson	13
2101 - Grade 1 and 2 Water Treatment	7/11/16	Murfreesboro	1
3102 - Cross Connection Renewal Workshop	7/12/16	Chattanooga	1
2103 - Cross Connection Control Basic Workshop	7/13/16	Chattanooga	4
3102 - Cross Connection Renewal Workshop	7/27/16	Kingsport	8
3101 - Grade 3 & 4 Water Treatment	7/11/16	Murfreesboro	20
3102 - Cross Connection Renewal Workshop	7/29/16	Murfreesboro	11
1103 - Grade 1 and 2 Distribution Systems	8/1/16	Murfreesboro	13
4210 - Water Treatment CE Seminar - Lead Rule	8/5/16	Murfreesboro	49
4201 - Water Treatment CE Seminar - Day 1	8/9/16	Knoxville	13
4202 - Water Treatment CE Seminar - Day 2	8/10/16	Knoxville	9
4203 - Distribution Systems CE Seminar	8/11/16	Knoxville	18
3110 - Advanced Water Treatment	8/8/16	Murfreesboro	7

8/12/16 Knoxville

14

4200 - Small Water Systems CE Seminar

3102 - Cross Connection Renewal Workshop	8/16/16	Murfreesboro	15
1009 - Basic Algebra for Operators-in-Training	8/16/16	Murfreesboro	13
2103 - Cross Connection Control Basic Workshop	8/17/16	Murfreesboro	11
1213 - Collection Systems Grade 1 & 2	8/22/16	Murfreesboro	25
3102 - Cross Connection Renewal Workshop	8/30/16	Alcoa	7
2112 - Water Treatment Lab - Week 1	8/29/16	Murfreesboro	9
2103 - Cross Connection Control Basic Workshop	8/31/16	Alcoa	11
4230 - Small Water Systems CE Seminar @ Chattanooga	9/8/16	Murfreesboro	4
3103 - Coagulation / Flocculation Workshop	9/7/16	Murfreesboro	8
4203 - Distribution Systems CE Seminar	9/9/16	Murfreesboro	12
3102 - Cross Connection Renewal Workshop	9/13/16	Murfreesboro	7
4200 - Small Water Systems CE Seminar	9/14/16	Murfreesboro	4
2103 - Cross Connection Control Basic Workshop	9/14/16	Murfreesboro	9
4204 - Water Treatment/Distribution Systems CE Seminar	9/19/16	Murfreesboro	22
4201 - Water Treatment CE Seminar - Day 1	9/20/16	Murfreesboro	17
2103 - Cross Connection Control Basic Workshop	9/20/16	Murfreesboro	8
2122 - Water Treatment Lab - Week 2	9/19/16	Murfreesboro	10
3300 - Backflow Repair Class	9/23/16	Murfreesboro	28
1014 - Basic Math for All Certifications	9/27/16	Murfreesboro	33
3102 - Cross Connection Renewal Workshop	10/4/16	Murfreesboro	15
2103 - Cross Connection Control Basic Workshop	10/5/16	Murfreesboro	4
1202 - Applied Math for Collection Systems Operators	10/10/16	Murfreesboro	22
1102 - Applied Math for Distribution System Operators	10/10/16	Murfreesboro	23
1101 - Applied Math for Water Treatment	10/17/16	Murfreesboro	28
1201 - Applied Math for Wastewater Treatment Operators	10/17/16	Murfreesboro	9
3102 - Cross Connection Renewal Workshop	11/15/16	Murfreesboro	9
2103 - Cross Connection Control Basic Workshop	11/16/16	Murfreesboro	10
3102 - Cross Connection Renewal Workshop	12/6/16	Murfreesboro	0
2103 - Cross Connection Control Basic Workshop	12/7/16	Murfreesboro	16
2101 - Grade 1 and 2 Water Treatment	1/9/17	Murfreesboro	2
3102 - Cross Connection Renewal Workshop	1/17/17	Murfreesboro	15
2103 - Cross Connection Control Basic Workshop	1/18/17	Murfreesboro	8
1205 - Grade 1 & 2 Wastewater Treatment	1/23/17	Murfreesboro	4
1203 - Grade 1 and 2 Collection Systems	1/30/17	Murfreesboro	13
1103 - Grade 1 and 2 Distribution Systems	1/30/17	Murfreesboro	22
3102 - Cross Connection Renewal Workshop	2/7/17	Murfreesboro	23
2201 - Grade 3 & 4 Wastewater Treatment	1/23/17	Murfreesboro	21
2103 - Cross Connection Control Basic Workshop	2/8/17	Murfreesboro	16
3110 - Advanced Water Treatment	2/13/17	Murfreesboro	13

1009 - Basic Algebra for Operators-in-Training	2/21/17	Murfreesboro	12
2990 - Math Practice for Operators	2/21/17	Murfreesboro	1
3300 - Backflow Repair Class	2/24/17	Murfreesboro	5
3101 - Grade 3 & 4 Water Treatment	1/9/17	Murfreesboro	23
2112 - Water Treatment Lab - Week 1	2/27/17	Murfreesboro	18
3102 - Cross Connection Renewal Workshop	3/14/17	Murfreesboro	18
2122 - Water Treatment Lab - Week 2	3/13/17	Murfreesboro	16
2103 - Cross Connection Control Basic Workshop	3/15/17	Murfreesboro	11
1204 - Biological / Natural Systems	3/20/17	Murfreesboro	4
3102 - Cross Connection Renewal Workshop	4/4/17	Murfreesboro	16
1014 - Basic Math for All Certifications	4/3/17	Murfreesboro	25
2103 - Cross Connection Control Basic Workshop	4/5/17	Murfreesboro	8
1202 - Applied Math for Collection Systems Operators	4/10/17	Murfreesboro	14
3103 - Coagulation / Flocculation Workshop	4/11/17	Murfreesboro	12
3102 - Cross Connection Renewal Workshop	4/18/17	Alcoa	19
1102 - Applied Math for Distribution System Operators	4/17/17	Murfreesboro	20
2103 - Cross Connection Control Basic Workshop	4/19/17	Alcoa	5
1101 - Applied Math for Water Treatment	4/24/17	Murfreesboro	16
1201 - Applied Math for Wastewater Treatment Operators	4/24/17	Murfreesboro	13
3102 - Cross Connection Renewal Workshop	5/9/17	Murfreesboro	23
2103 - Cross Connection Control Basic Workshop	5/10/17	Murfreesboro	19
4201 - Water Treatment CE Seminar - Day 1	5/24/17	Elizabethton	7
4202 - Water Treatment CE Seminar - Day 2	5/25/17	Elizabethton	7
3102 - Cross Connection Renewal Workshop	5/25/17	Murfreesboro	4
3300 - Backflow Repair Class	5/26/17	Murfreesboro	22
4200 - Small Water Systems CE Seminar	5/26/17	Johnson City	2
4203 - Distribution Systems CE Seminar	5/26/17	Elizabethton	13
Introduction to Activated Sludge	5/31/17	Murfreesboro	11
3102 - Cross Connection Renewal Workshop	6/13/17	Murfreesboro	5
4201 - Water Treatment CE Seminar - Day 1	6/13/17	Jackson	7
2103 - Cross Connection Control Basic Workshop	6/14/17	Murfreesboro	18
4201 - Water Treatment CE Seminar - Day 1	6/19/17	Knoxville	14
4200 - Small Water Systems CE Seminar	6/20/17	Johnson City	0
4203 - Distribution Systems CE Seminar	6/20/17	Jackson	0
4203 - Distribution Systems CE Seminar	6/21/17	Knoxville	15
4200 - Small Water Systems CE Seminar	6/22/17	Knoxville	0
3102 - Cross Connection Renewal Workshop	6/27/17	Kingsport	12
2103 - Cross Connection Control Basic Workshop	6/28/17	Kingsport	9
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Total