# **Triennial Capacity Development Report**



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

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### **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. 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 2 includes Tennessee's 2019 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 4) and the Capacity Development - Business Plan, Financial Self-Assessment Manual (Appendix 5) 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 3, "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 FY2018, FY2019 and FY2020) period indicates that capacity development has been successful in reducing the number of violations.

For the period ending June 30, 2018, there were twelve 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 June 30, 2019, there were seven 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 June 30, 2020, there were three (3) water systems with an ETT score of 11 or higher (See Appendix 1).

#### **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). The State has also developed a contract with TAUD through the Public Water System Supervision (PWSS) Set Aside with the State Revolving Fund Program (SRF). The goal is to provide targeted

technical assistance to distressed or disadvantaged community public water systems to develop and improve managerial, financial and technical capacities and reduce occurrence of health based drinking water violations. This would include workshops including, but not limited to: Asset Management/Water Loss, Water Treatment /Distribution Optimization, Source Water Protection /Emergency Response/Resiliency and assistance as requested by TDEC or the PWS.

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 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. For example, the UMRB met on July 23, 2020. A highlight of the meeting included the removal of all commissioners on the Chanute Pall Mall Utility District board for failure to receive the required training.

Further, examination of a system's water loss and its 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 self-appointing 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. Enacted as Public Chapter 0627 effective March 20, 2020, adds the following powers to the UMRB and WWFB: 1) Makes the training and continuing education requirements and the process for approval of training for natural gas utility districts the same as for other utility districts (water and sewer); 2) Provides that the UMRB's authority under TCA 7-82-709(a) to investigate utility districts to see whether they comply with federal and state law applies to all utility districts and not just to water utility districts; 3) Provides that WWFB's authority under TCA 68-221-1009(a)(6) to investigate municipal, county and utility authority systems for compliance with federal and state law applies to water and sewer systems and not just water systems; 4) Permits the WWFB to investigate municipal, county and utility authority water and sewer systems even when the system is not financially distressed or does not have excessive water loss; and 5) Clarifies that all utility districts are under the jurisdiction of the UMRB and all municipal, county and utility authority systems are under the jurisdiction of the WWFB.

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. TAUD also offers hands-on, technical training that prepares the utility operator for his/her everyday operations. It is worth noting that TAUD was named the 2019 Association of the Year by the National Rural Water Association (NWRA) at the National WaterPro Conference held September 9-11, 2019. However, 2020 has not been a typical year and Covid-19 severely limited the ability to conduct conferences since February of 2020. As a result, the Operator Expo was not conducted in May but has been postponed until September 2020 and the Annual Meeting, normally conducted in June was delayed until July and the training component was cancelled.

TAUD had been planning a shift to incorporate virtual training into its curriculum but the move was hastened by Covid-19. Training since February of 2020 has shifted so that classroom attendance has been reduced and those participating through Webinars has increased. Overall, training numbers for FY 2019-2020 are less than previous years.

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, with the exception of during the pandemic, to elected officials called Elected Official Academy. The Level I classes cover the essentials of municipal government in Tennessee and covers topics such as:

- Strategic Planning
- Charter and Codes and Open Records
- Municipal Finance
- Council at Work
- Ethics and Open Meetings

Level II Elected Official Academy includes topics such as:

- Fire Review
- Human Resources

- Police Review
- Public Works
- Municipal Risk Management

Municipal Management Academy is offered throughout the year in several locations to train municipal staff and officials in the knowledge and self-awareness required for successful management.

Specialty Classes for municipal utility managers and operators are held in various locations throughout the state covering several topics in the technical areas. Other programs include: Administrative Hearing Officer, Certified Municipal Finance Officer, Continuing Municipal Education, Custom Training, Municipal Court Clerk and MTAS Online.

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).

However, MTAS spring 2020 utility training classes were cancelled due to COVID-19. They have tentatively scheduled fall classes and are in the process of identifying virtual training opportunities should COVID-19 continue to persist. The classes on the report are approved by the State Comptroller/ Water & Wastewater Financing Board for utility credit.

#### **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. AWOP is also an important component of efforts to assist systems build capacity and provide enhanced levels of public health protection. The AWOP approach includes performing Comprehensive Performance Evaluations (CPE), Performance Based Trainings (PBT), Distribution System Optimization (DSO) Training, Data Integrity Workshops, and Targeted Technical Assistance (TTA). AWOP is a voluntary program whose primary goal is to maximize public health protection without major capital expenditure, through optimization of existing water treatment and distribution facilities. Optimization of the water system is achieved through enhanced process monitoring and control using existing staff and facilities.

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 February 2019
- 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)

To aid in consistency of inspections across the State, a Sanitary Survey Workshop was held February 5 - 7, 2019. Thirty-five division staff from across the State involved with the Drinking Water Program attended a 3 day workshop provided by the division's Drinking Water Fellow and Drinking Water Unit Manager. All in attendance voiced how beneficial it was to gather and discuss the actions involved with sanitary surveys and receiving updates on the regulation changes, etc. The group visited the Murfreesboro Water Treatment Plant for hands on experience.

Additionally, in December 2019, EPA staff representing drinking water programs traveled to TN to provide Sanitary Survey Training to aid in inspection consistency across the state and with Region 4 EPA. In addition to approximately 20 TDEC staff participating, drinking water staff from Alabama, Kentucky, North Carolina and South Carolina were in attendance. This 4 day workshop included discussions regarding source water, process control monitoring, water system infrastructure, chemical and operational monitoring and more. Further, the group visited the Consolidated Utility District Systems for hands on experience.

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 (<a href="https://www.tn.gov/environment/program-areas/wr-water-resources/fleming-training-center.html">https://www.tn.gov/environment/program-areas/wr-water-resources/fleming-training-center.html</a>). 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 on-site 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 drinking water state revolving fund (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.

In October 2019, a news release from EPA Region 4 announced that Tennessee was the first recipient of funding through the Assistance for Small and Disadvantaged Communities Drinking Water Grant from the Water Infrastructure Improvements for the Nation Act (WIIN). Grants totaling \$736,000 were received in the City of Clifton in Wayne County and the City of Spencer in Van Buren County for water infrastructure improvements. Tennessee provides \$602,181 in matching funds (45%), making the total amount of the award \$1,338,181.

#### **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.

## **New System Compliance**

In 2018, one (1) new community water system was established which was Hickory Corner MHP, (deactivated in August 2018). Also, there were three (3) new transient non-community water systems established including: Dyson Grove Church, Climbworks Zipline and River Drifters.

In 2019, there were four (4) new transient non-community water systems established including: Lone Oaks Farm, Moonshine Ridge Country Store, Dollar General – Whitwell, and Miracle Lake Christian Training Center.

In 2020, there was one (1) new transient non-community water systems established including: Dollar General 21269 in Sullivan County.

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 responses to the statewide drought event of 2007 and 2016 along with the 2010 thousand year flood event and the 2019 tornadoes 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, Legionella and per- and polyfluoroalkyl substances 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. The Division also anticipates continuing work alongside the Department through the recommendations developed by subject matter experts and stakeholders to ensure Tennessee has abundant water resources for the future as developed in the 2018 TNH2O water plan.

## **Appendices:**

- 1 ETT Systems List 2018, 2019, 2020
- 2– 2019 Annual Compliance Report for Safe Drinking Water Act Separate Document
- 3 Systems with Significant Noncompliance in 1997 2007
- 4 Capacity Development Plan Guidance Document
- 5 Capacity Development Business Plan, Financial Self Assessment Manual
- 6 DWSRF FY2020 Priority Ranking List Separate Document
- 7 Training Activities 2019-2020 (July 1, 2019-June 30, 2020) 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.

<u>Non-community water systems (NCWSs)</u> 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 2018/2019/2020 Scores 11 or more

# ETT 2018 (through June 30, 2018)

PWSID	MA_NAME	ETT Score	
TN0000088	BYRDSTOWN WATER DEPT	Δ/	DBP Standards (MCLs) and Chemical Monitoring violations
TN0002907	VALLEY VIEW CAMP	35	SWTR Turbidity Standards and monitoring violations
TN0000195	NORTH STEWART UTILITY DISTRICT	l /h	DBP Standards (MCLs) and Chemical Monitoring violations
TN0000875	CHANUTE-PALL MALL UTILITY DISTRICT	26	DBP Standards (MCLs) violations
TN0003779	CHEMOURS-NEW JOHNSONVILLE PLAN	21	DBP Standards (MCLs) violations
TN0000543	PERRYVILLE UTILITY DISTRICT	14	DBP Standards (MCLs) violations
TN0000074	HOLSTON UD	11	Total Coliform Rules and Disinfectants monitoring violations
TN0000928	FRIENDSHIP DISTRIBUTION WATER	11	Total Coliform Rule, Disinfectants, and Chemical monitoring violations
TN0004634	USA RAFT		Total Coliform Rule and Chemical monitoring violations
TN0005169	SHADY VALLEY COUNTRY STORE	11	Total Coliform Rule and Ground Water Rule monitoring violations

# ETT 2019 (through June 30, 2019)

PWSID	MA_NAME	ETT Score	
TN0000875	CHANUTE-PALL MALL UTILITY DISTRICT	49	DBP Standards (MCLs) violations
TN0000655	SPENCER WATER SYSTEM	1 14	DBP Standards (MCLs) violations, rTCR monitoring violations
TN0000649	SOUTH GILES UTILITY DISTRICT	21	DBP Standards (MCLs) violations
TN0005172	WOOTEN WOODS RETREAT	17	TCR and rTCR monitoring violations
TN0000706	TRACY CITY WATER SYSTEM	16	DBP Standards (MCLs) violations
TN0000074	HOLSTON UD	14	Total Coliform Rules and Disinfectants monitoring and DBP Standards(MCLs) violations
TN0004910	ACCURATE ENERGETIC SYSTEMS	11	Lead & Copper Rule monitoring violations

# ETT 2020 (through June 30, 2020)

PWSID	MA_NAME	ETT Score	
TN0000655	SPENCER WATER SYSTEM		DBP Standards (MCLs) violations, rTCR monitoring violations
TN0000533	TURNEY CENTER		DBP Standards (MCLs) violations
TN0000617	SEVIERVILLE WATER SYSTEM	13	SWTR Treatment Technique and Reporting violations

# Appendix 2 Annual Compliance Report 2019 Safe Drinking Water Act

Attached as separate document



**Division of Water Resources** 

**2019 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 2019 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 treatment technique, maximum contaminant level and significant monitoring violations that have not returned to compliance (i.e. violations that have not been corrected) occurring within or extending into 2019 are included.

Most 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. Most of the health-based violations that occurred during 2019 were determined in the disinfection by product rules, where compliance with the standards is 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:

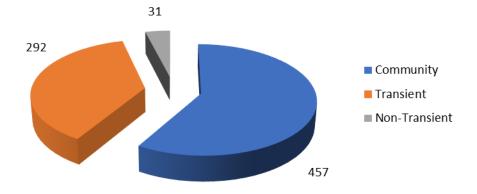
- (i) Any collection, treatment, storage or distribution facility under control of the operator of such system and used primarily in connection with such system; and
- (ii) Any collection or pretreatment storage facility not under such control which is used primarily in connection with such system.

The Division of Water Resources currently possesses regulatory responsibility for approximately 780 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.

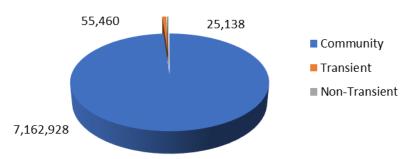
"Non-Community Water System" means a public water system that is not a community water system. This type of water system is further defined as either "Non-Transient", serving the same people each day; and "Transient", which serves a different group of people each day.

#### **Tennessee Public Water Systems**



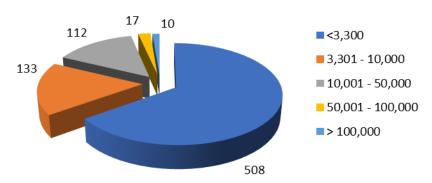
Combined, all of Tennessee public water systems (community, transient and non-transient) serve an estimated population in excess of 7,240,000 individuals.



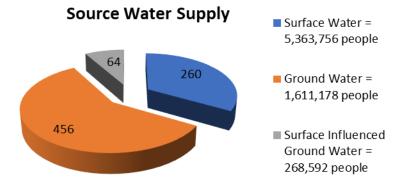


The 10 largest public water systems in Tennessee serve over 2,600,000 people. In contrast, there are 508 water systems, which serve less than 3,300 people each, providing drinking water to an estimated 308,000 people.

## **Population Categories**



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



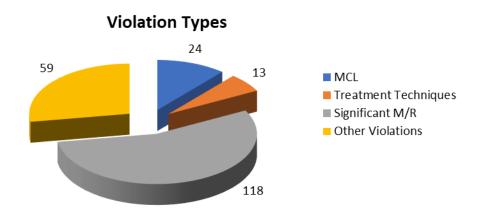
#### **Violation Information**

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 2019 calendar year, or were identified prior to calendar year 2019 and remain uncorrected into 2019. 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 2019, a total of 214 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 1<sup>st</sup> 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.

#### MICROBIOLOGICAL DATA

Microbiological contaminant sampling is conducted by all public water systems in Tennessee 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 rule established Treatment Technique violations based on total coliforms and the presence of E.coli, and an MCL for E.coli. Assessments and corrective actions are 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.coli 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 complete for most public water systems in Tennessee.

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 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 2019, 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, 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 2019, 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 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. Compliance with MCLs is determined at each sampling location individually and is calculated as a running annual average of the results reported for each monitoring period.

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 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, failure to provide public education materials and failure to notify customers of sample results incurred during the calendar year 2019, 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 ensure 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.

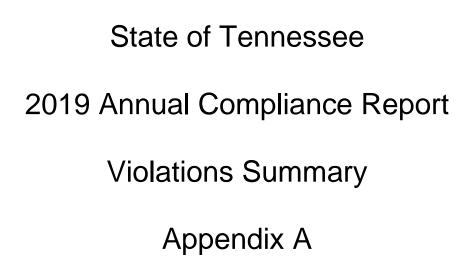
## DIVISION OF WATER RESOURCES ENFORCEMENT ACTION SUMMARY

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: Compliance Status Notifications, 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.

Most 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 can 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 2019 Annual Compliance Report Violations Summary

	MCL Violations		Treatment Technique Violations		Significant Monitoring Violations		
	Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems <sup>1.</sup>	Individual Systems in Violation <sup>1</sup>
Volatile Organics	0	0			21	1	1
Synthetic Organics	0	0			8	3	3
Inorganics	0	0			2	2	2
Radionuclides	0	0			0	0	0
Revised Total Coliform Rule	0	0	2	2	30	27	29
Surface Water Treatment Rules			10	9	37	19	28
D/DBP Rules (Stages 1 & 2)	24	10	1	1	14	9	19
Filter Backwash Recycle Rule			0	0	0	0	0
Lead and Copper Rule			0	0	37	21	21
Consumer Confidence Reports					15	15	15
Public Notification Rule					1	1	1
Ground Water Rule			0	0	12	5	5
Violations in 2019	24		13		177		
Number of Individual Systems in Violation per Violation Type		10		12		85	
Number of Individual Systems in Violation for All Rules	102						

Shaded Area Indicates Violation Type Not Applicable to Rule

For detailed information see Appendix B.

<sup>1.</sup> 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 2019 Annual Compliance Report Total Coliform Rules (TCR and RTCR) Violations Summary

SDWIS Codes		MCL	MCL Violations		Treatment Technique Violations		Significant Monitoring Violations		
			Number of Violations	Number of Systems <sup>1</sup>	Number of Violations	Number of Systems	Number of Violations	Number of Systems <sup>1</sup>	
Revised Tota	Revised Total Coliform Rule <sup>2</sup>								
1A	E.Coli MCL	Presence	0	0					
2A, 2B, 2C, 2D	Treatment Techniques				2	2			
3A, 3B, 3C, 3D	Monitoring						30	27	
4A, 4B, 4C, 4D, 4E, 4F	Reporting						0	0	
5A, 5B	Record Keeping						0	0	
Total Number of Violations			0		2		30		
Number of Individual Systems With Violations 1			0		2		27		
Total Number of TCR/rTCR Violations			32						
Total Number of Individual Systems With TCR /rTCR Violations 1			29						

Shaded Area Indicates Violation Type Not Applicable to Rule

For detailed information see Appendix B

<sup>1.</sup> 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 2019 Annual Compliance Report Surface Water Treatment Rules (SWTR / IESWTR / LT2ESWTR) Violations Summary

SDWIS Codes	Violation	MCL	MCL Vi	olations	Treatment Tech	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 <sup>1</sup>	
Surface Water	Treatment Rule (SWTR)								
36	SWTR Monitoring						3	2	
41	Treatment Technique				0	0			
42	Failure to Filter				0	0			
Interim Enhan	ced SWTR (IESWTR)								
09	Record Keeping for Individual Filter						27	16	
29	Filter Exceedance Follow-Up Reports						0	0	
38	Routine Monitoring						3	2	
43	Single Combined Filter Effluent				2	2			
44	Monthly Combined Filter Effluent				2	1			
LT2 Enhanced	I SWTR (LT2EWSTR)								
32	Source Water Monitoring /Plan						4	1	
33	BIN Report (Health Based)				6	6			
	Total Number of Violations				10		37		
	Number of Individual Systems With Violations					9		19	
	Total Number of SWTR Violations		47						
	Total Number of Individual Systems With SWTR Violations				2	8			

Shaded Area Indicates Violation Type Not Applicable to Rule

<sup>1.</sup> 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 2019 Annual Compliance Report Inorganic Contaminants (IOCs) Violations Summary

SDWIS Codes	Inorganic Contaminants	MCL <sup>1.</sup>	MCL V	olations	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.
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			2	2
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 Violat	ions	0				2	
N	lumber of Individual Systems in Viola	ition		0				2
	Total Number of Individual Systom With Inorganic Violat					2		

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 2019 Annual Compliance Report Synthetic Organic Contaminants (SOCs) Violations Summary

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

(Continued on next page)

# State of Tennessee 2019 Annual Compliance Report Synthetic Organic Contaminants (SOCs) Violations Summary

SDWIS Codes	Synthetic Organic Chemicals	MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Monitoring Violations		
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems <sup>2.</sup>	
2065	Heptachlor	0.0004	0	0					
2067	Heptachlor epoxide	0.0002	0	0					
2274	Hexachlorobenzene	0.001	0	0					
2042	Hexachlorocyclopentadiene	0.05	0	0					
2010	Lindane	0.0002	0	0					
2015	Methoxychlor	0.04	0	0					
2036	Oxamyl (Vydate)	0.2	0	0					
2326	Pentachlorphenol	0.001	0	0					
2040	Picloram	0.5	0	0			1	1	
2383	Polychlorinated biphenyls	0.0005	0	0					
2037	Simazine	0.004	0	0			2	2	
2020	Tozaphene	0.003	0	0					
	Number of Violations		0		0		6		
N	lumber of Individual Systems in Violation			0		0		2	
	Total Number of Violations		6						
Total N	umber of Individual Systems In Violation				2	2			

Shaded Area Indicates Violation Type Not Applicable to Rule

<sup>1.</sup> Values are in Milligrams per Liter (mg.L), unless otherwise specified.

<sup>2.</sup> 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 2019 Annual Compliance Report Volatile Organic Contaminants (VOCs) Violations Summary

SDWIS Codes	Volatile Organic Chemicals	MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Monitoring 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			1	1	
2981	1,1,1-trichloroethane	0.2	0	0			1	1	
2985	1,1,2-trichloroethane	0.005	0	0			1	1	
2980	1,2-dichloroethane	0.005	0	0			1	1	
2983	1,2-dichloropropane	0.005	0	0			1	1	
2378	1,2,4-trichlorobenzene	0.07	0	0			1	1	
2990	Benzene	0.005	0	0			1	1	
2982	Carbon Tetrachloride	0.005	0	0			1	1	
2380	Cis-1,2-Dichloroethylene	0.07	0	0			1	1	
2964	Dichloromethane	0.005	0	0			1	1	
2992	Ethylbenzene	0.7	0	0			1	1	
2989	Monochlorobenzene	0.1	0	0			1	1	
2968	o-Dichlorobenzene	0.6	0	0			1	1	
2969	Para-dichlorobenzene	0.075	0	0			1	1	
2996	Styrene	0.1	0	0			1	1	
2987	Tetrachloroethylene	0.005	0	0			1	1	
2991	Toluene	1	0	0			1	1	
2979	Trans-1,2-Dichloroethylene	0.1	0	0			1	1	
2984	Trichloroethylene	0.005	0	0			1	1	
2976	Vinyl chloride	0.002	0	0			1	1	
2955	Xylenes (total)	10	0	0			1	1	
	Number of Violation	ons	0				21		
	Number of Individual Systems in Violat	ion		0				1	
	Total Number of Violation	ons	21						
Total N	umber of Individual Systems In Violati	on			•	I			

Shaded Area Indicates Violation Type Not Applicable to Rule

- 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 2019 Annual Compliance Report Disinfectants and Disinfection Byproducts Rules (D/DBP) Violations Summary

		MCL 1.	MCL Vi	olations	Treatment Tech	nique Violations	Significant Mon	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				1	1			
0999	Chlorine (MRDL)	4	0	0			0	0	
1009	Chlorite	1	0	0			0	0	
2920	Total Organic Carbon				0	0	2	2	
Stage 2 (D/DE	Stage 2 (D/DBP)								
2456	Total Haloacetic Acids	0.060	13	5			7	7	
2950	Total Trihalomethanes	0.080	11	7			5	5	
	Number of Violations		24		1		14		
١	Number of Individual Systems in Violation			10		1		9	
	Total Number of Violations		39						
Total Number of Individual Systems In Violation		19							

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 2019 Annual Compliance Report Lead and Copper Rule Violations Summary

SDWIS Codes	Lead and Copper Rule	MCL <sup>1.</sup>	MCL Violations		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 <sup>3.</sup>		
51	Initial Lead and Copper Tap M/R 2						7	5		
52	Follow-up or Routine Tap M/R						2	2		
53	Water Quality Parameters						11	7		
57	Optimal Corrosion Control / Source Water Treatment Study						2	2		
58	Optimal Corrosion Control / Source Water Treatment Demonstration				0	0				
65	Public Education						0	0		
66	Consumer Notice						15	15		
	Number of Violations				0		37			
N	umber of Individual Systems in Violation					0		21		
	Total Number of Violations			37						
Total N	Total Number of Individual Systems In Violation			21						

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 2019 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	15	15

<sup>1.</sup> 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 2019 Annual Compliance Report Radionuclides Violations Summary

SDWIS Codes	Radionuclides	MCL	MCL Violations		Treatment Tech	inique Violations	Significant Monitoring Violations			
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems <sup>1.</sup>		
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 <sup>th</sup> MCL	0	0			0	0		
Number of Violations			0				0			
N	Number 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

<sup>1.</sup> 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 2019 Annual Compliance Report Public Notification Rule (PN) Violations Summary

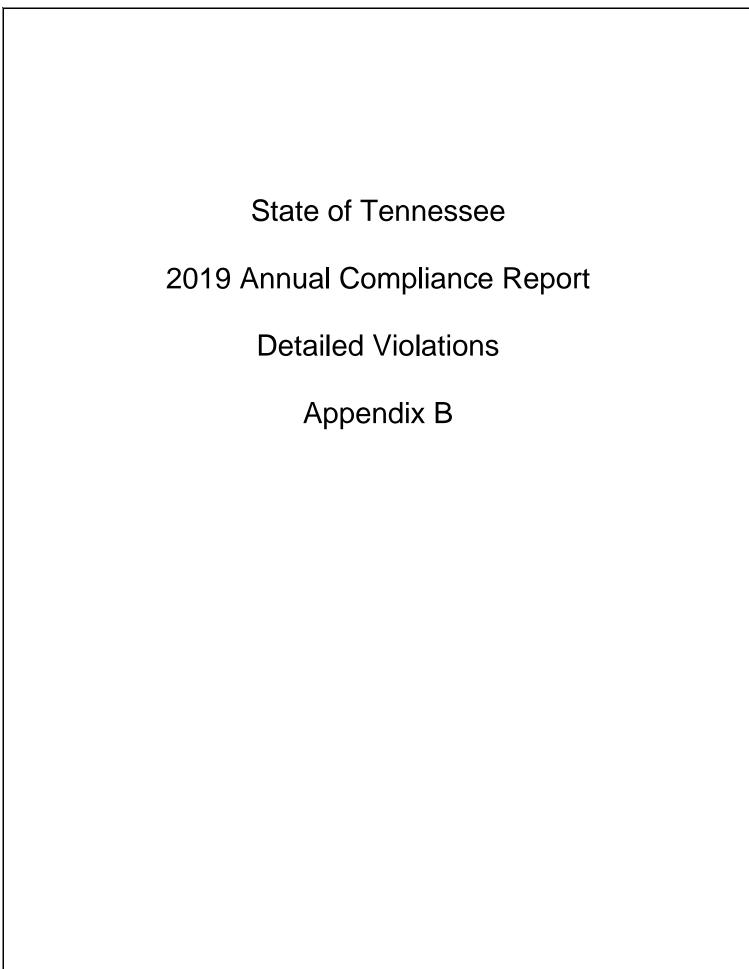
SDWIS Codes	Public Notification Violations	Number of Violations	Number of Systems
75	Failure to Provide Public Notice	1	1

# State of Tennessee 2019 Annual Compliance Report Ground Water Rule (GWR) Violations Summary

SDWIS Codes	Ground Water Rule Violations	MCL	MCL Violations		Treatment Technique Violations		Significant Monitoring Violations	
			Number of Violations	Number of Systems	Number of Violations	Number of Systems	Number of Violations	Number of Systems <sup>1.</sup>
31, 34	Monitoring Violation						12	5
41	Treatment Technique				0	0		
	Total Number of Violations				1	2		
Total N	umber of Individual Systems In Violation				5	5		

Shaded Area Indicates Violation Type Not Applicable to Rule

<sup>1.</sup> 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.



# 2019 Annual Compliance Report Violation Details

# **Community Water Systems**

**ANDERSON COUNTY** 

TN0000514 ANDERSON COUNTY WATER AUTHORIT

Popul Group: Medium

Long Term 2 SWTR

BIN Reports

4/1/2019 Failure to submit BIN report

4/11/2019 Notice of Violation Issued

4/11/2019 Public Notification Requested

TN0000513 NORRIS WATER COMMISSION

Popul Group: Very Small

D/DBP Rule

Haloacetic Acids

4/1/2019 Routine Monitoring, Major

4/15/2020 Public Notification Performed

TN0000522 OAK RIDGE DEPT OF PUBLIC WORKS

Popul Group: Me

Medium

Long Term 2 SWTR BIN Reports

4/1/2019

Failure to submit BIN report

4/11/2019 Notice of Violation Issued

4/11/2019 Public Notification Requested

**BLOUNT COUNTY** 

TN0008285 BLACKBERRY MOUNTAIN L.L.C.

Popul Group:

Very Small

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

11/15/2018 Notice of Violation Issued

11/15/2018 Public Notification Requested

**CAMPBELL COUNTY** 

TN0000912 DEERFIELD RESORT WATER SYSTEM

Popul Group: Very Small

Consumer Confidence Report Rule

Consumer Confidence Report

7/1/2019 Reporting Violation, Major

11/13/2019 Returned to Compliance

**Ground Water Rule** 

Disinfection

2/1/2019 Continuous or Grab Monitoring

4/18/2019 Director's Order

4/18/2019 Notice of Violation Issued4/18/2019 Public Notification Requested

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

3/1/2019 Continuous or Grab Monitoring  4/18/2019 Director's Order 5/14/2019 Notice of Violation Issued 5/14/2019 Public Notification Requested  4/18/2019 Director's Order 6/11/2019 Director's Order 6/11/2019 Notice of Violation Issued 6/11/2019 Public Notification Requested	
5/14/2019 Notice of Violation Issued 5/14/2019 Public Notification Requested  4/1/2019 Continuous or Grab Monitoring  4/18/2019 Director's Order 6/11/2019 Notice of Violation Issued 6/11/2019 Public Notification Requested	
5/14/2019 Continuous or Grab Monitoring  4/18/2019 Director's Order 6/11/2019 Notice of Violation Issued 6/11/2019 Public Notification Requested	
4/1/2019 Continuous or Grab Monitoring  4/18/2019 Director's Order  6/11/2019 Notice of Violation Issued  6/11/2019 Public Notification Requested	
4/18/2019 Director's Order 6/11/2019 Notice of Violation Issued 6/11/2019 Public Notification Requested	
6/11/2019 Notice of Violation Issued 6/11/2019 Public Notification Requested	
6/11/2019 Public Notification Requested	
·	
E/4/0040 0 1 1 0 1 M 1/4 1	
5/1/2019 Continuous or Grab Monitoring	
4/18/2019 Director's Order	
7/1/2019 Continuous or Grab Monitoring	
4/18/2019 Director's Order	
9/19/2019 Notice of Violation Issued	
9/19/2019 Public Notification Requested	
Lead /Copper Rule	
Lead / Copper	
1/1/2019 Consumer Notification	
4/18/2019 Director's Order	
9/5/2019 Notice of Violation Issued	
9/5/2019 Public Notification Requested	
1/1/2019 Followup Monitoring	
4/18/2019 Director's Order	
9/5/2019 Notice of Violation Issued	
9/5/2019 Public Notification Requested	
1/1/2019 Water Quality Parameters	
4/18/2019 Director's Order	
9/5/2019 Notice of Violation Issued	
9/5/2019 Public Notification Requested	

CARTER	COUNTY

TN0000282 HAMPTON UTILITY DISTRICT Popul Group:

Ground Water Rule
Disinfection

9/1/2019 Continuous or Grab Monitoring

11/12/2019 Notice of Violation Issued11/12/2019 Public Notification Requested

Small

Small

TN0000646 SOUTH ELIZABETHTON UTILITY DIS

Popul Group:

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

12/4/2018 Notice of Violation Issued12/4/2018 Public Notification Requested

TN0008278 WATAUGA RIVER REGIONAL WATER A Popul Group: Very Small

Consumer Confidence Report Rule

Consumer Confidence Report

7/1/2019 Reporting Violation, Major

11/12/2019 Notice of Violation Issued

## **CLAIBORNE COUNTY**

TN0000826 **CLEARFORK UTILITY DISTRICT** 

> Revised Total Coliform Rule **Total Coliforms**

> > 10/1/2019

**Routine Monitoring** 

Popul Group: Very Small

12/20/2019 Notice of Violation Issued 12/20/2019 Public Notification Requested

Very Small

TN0000161 **CUMBERLAND GAP WATER SERVICES** 

> Consumer Confidence Report Rule Consumer Confidence Report

> > 7/1/2019

Reporting Violation, Major

11/12/2019 Notice of Violation Issued

**CLAY COUNTY** 

TN0000573 NORTHWEST CLAY COUNTY UTILITY

Popul Group:

Small

Interim Enhanced SWTR

Individual Filter Records

\* 1/1/2015

\* 3/1/2015

\* 4/1/2015

Record Keeping, Major

Record Keeping, Major

Record Keeping, Major

\* 5/1/2015 Record Keeping, Major

\* 6/1/2015

Record Keeping, Major

Popul Group:

10/20/2016 Director's Order

**DAVIDSON COUNTY** 

TN0000286 HARPETH VALLEY U D Popul Group: Large

Interim Enhanced SWTR

Individual Filter Records

\* 9/1/2017

Record Keeping, Major

10/3/2017 Notice of Violation Issued 10/3/2017 Public Notification Requested

Large

Popul Group: TN0000424 **MADISON SUBURBAN UD** 

> Consumer Confidence Report Rule Consumer Confidence Report

> > 7/1/2019

Reporting Violation, Major

11/12/2019 Notice of Violation Issued

**DE KALB COUNTY** 

TN0000637 **SMITHVILLE WATER SYSTEM**  Popul Group:

Small

Consumer Confidence Report Rule

Consumer Confidence Report

7/1/2019 Reporting Violation, Major

D/DBP Rule

**Total Organic Carbon** 

10/1/2019 Routine Monitoring, Major

12/20/2019 Notice of Violation Issued12/20/2019 Public Notification Requested

11/12/2019 Notice of Violation Issued

Interim Enhanced SWTR

Combined Filter Turbidity

10/1/2019 Routine Monitoring, Major

12/20/2019 Notice of Violation Issued12/20/2019 Public Notification Requested

Long Term 1 SWTR

Disinfectants

10/1/2019 Monitoring, Major

12/20/2019 Notice of Violation Issued12/20/2019 Public Notification Requested

### **DECATUR COUNTY**

TN0000543 PERRYVILLE UTILITY DISTRICT

D/DBP Rule

Trihalomethanes

1/1/2019 MCL Violation

Popul Group: Very Small

6/30/2018 Returned to Compliance 4/24/2019 Notice of Violation Issued 4/24/2019 Public Notification Requested 5/2/2019 Public Notification Performed

## **DICKSON COUNTY**

TN0000724 VANLEER WATER DEPARTMENT Popul Group: Very Small

Interim Enhanced SWTR

Individual Filter Records

\* 2/1/2018 Record Keeping, Major

3/1/2019 Notice of Violation Issued3/1/2019 Public Notification Reques

3/1/2019 Public Notification Requested 4/26/2019 Public Notification Performed

\* 3/1/2018 Record Keeping, Major

3/1/2019 Notice of Violation Issued 3/1/2019 Public Notification Requested 4/26/2019 Public Notification Performed

### **DYER COUNTY**

TN0000211 DYERSBURG WATER DEPT Popul Group: Medium

D/DBP Rule

Haloacetic Acids

10/1/2019 Routine Monitoring, Major

5/15/2019 Public Notification Performed 1/21/2020 Notice of Violation Issued 1/21/2020 Public Notification Requested

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

Trihalomethanes

10/1/2019 Routine Monitoring, Major

5/15/2019 Public Notification Performed 1/21/2020 Notice of Violation Issued 1/21/2020 Public Notification Requested 3/31/2020 Returned to Compliance

FFN	JTR	<b>ESS</b>	CO	IIN	ITV
	4 I I				

TN0000875 CHANUTE-PALL MALL UTILITY DIST

Popul Group: Very Small

D/DBP Rule

Haloacetic Acids

1/1/2019 MCL Violation

4/24/2019 Notice of Violation Issued4/24/2019 Public Notification Requested6/30/2019 Returned to Compliance

10/30/2019 Director's Order

Lead /Copper Rule

Lead / Copper

1/1/2019 Initial Monitoring

11/13/2018 Notice of Violation Issued11/13/2018 Public Notification Requested

10/30/2019 Director's Order

7/1/2019 Water Quality Parameters

1/30/2020 Notice of Violation Issued1/30/2020 Public Notification Requested

Revised Total Coliform Rule
Total Coliforms

2/1/2019

Routine Monitoring

4/18/2019 Notice of Violation Issued
4/18/2019 Public Notification Requested

10/30/2019 Director's Order

#### FRANKLIN COUNTY

TN0000046 BELVIDERE RURAL UTILITY DISTRI Popul Group: Very Small

D/DBP Rule

Total Organic Carbon

1/1/2019

Routine Monitoring, Major

5/13/2019 Notice of Violation Issued5/13/2019 Public Notification Requested

TN0000146 COWAN BOARD OF PUBLIC UTILITIE Popul Group: Very Small

Interim Enhanced SWTR

Individual Filter Records

\* 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

# **GIBSON COUNTY**

TN0008132	COUNTY LINE TRAILER PAR	RK	Popul Group:	Very Small
	Ground Water Rule			
	E. Coli			
	11/1/2019	Follow-Up Monitoring		
		,	11/30/2019	Returned to Compliance
			12/11/2019	Notice of Violation Issued
			12/11/2019	Public Notification Requested
	Revised Total Coliform Rule			·
	Total Coliforms			
	9/1/2019	Routine Monitoring		
		•	11/12/2019	Notice of Violation Issued
			11/12/2019	Public Notification Requested
			11/30/2019	Returned to Compliance
			12/10/2019	Public Notification Performed
	GIBSON WATER DEPT		Popul Group:	Very Small
	Lead /Copper Rule			
	Lead / Copper			
	* 1/1/2017	Consumer Notification		
			12/4/2018	Notice of Violation Issued
			12/4/2018	Public Notification Requested

TN0000018	ARDMORE WATER SYST	ЕМ	Popul Group:	Very Small
	Organics			
	ALACHLOR (LASS	SO)		
	* 1/1/2017	Routine Monitoring, Major		
			9/10/2019	Notice of Violation Issued
			9/10/2019	Public Notification Requested
	ATRAZINE			
	* 1/1/2017	Routine Monitoring, Major		
			9/10/2019	Notice of Violation Issued
			9/10/2019	Public Notification Requested
	PICLORAM			
	* 1/1/2017	Routine Monitoring, Major	0/40/0040	Nathana AMaladan Isanad
			9/10/2019	Notice of Violation Issued
	SIMAZINE		9/10/2019	Public Notification Requested
	* 1/1/2017	Routine Monitoring, Major		
	1/1/2017	Notine Monitoring, Major	9/10/2019	Notice of Violation Issued
				Public Notification Requested
			Donal Crount	Von Cmall
ΓN0000649	SOUTH GILES UTILITY DI	STRICT	Popul Group:	Very Small
	D/DBP Rule			
	Haloacetic Acids			
	1/1/2019	MCL Violation		
				Notice of Violation Issued
				Public Notification Requested
				Public Notification Performed
	4/4/0040	MCI Violetian	12/31/2019	Returned to Compliance
	4/1/2019	MCL Violation	7/26/2040	Notice of Violation Issued
			1/20/2019	Notice of violation issued

9/3/2019	Public Notification Requested Public Notification Performed Returned to Compliance
10/24/2019	Notice of Violation Issued
10/24/2019	Public Notification Requested
11/4/2019	Public Notification Performed
12/31/2019	Returned to Compliance

# **GRUNDY COUNTY**

TN0000706	TRACY CITY WATER SYSTE	EM	Popul Group:	Small
	D/DBP Rule			
	Haloacetic Acids			
	1/1/2019	MCL Violation		
			4/24/2019	Notice of Violation Issued
			4/24/2019	Public Notification Requested
			5/20/2019	Public Notification Performed
			9/10/2019	Director's Order
			9/30/2019	Returned to Compliance
	4/1/2019	MCL Violation		
			7/26/2019	Notice of Violation Issued
			7/26/2019	Public Notification Requested
			8/22/2019	Public Notification Performed
			9/10/2019	Director's Order
			9/30/2019	Returned to Compliance
	Trihalomethanes			
	4/1/2019	MCL Violation		
			7/26/2019	Notice of Violation Issued
			7/26/2019	Public Notification Requested
			8/22/2019	Public Notification Performed
			9/10/2019	Director's Order
			9/30/2019	Returned to Compliance

7/1/2019

MCL Violation

# **HARDEMAN COUNTY**

TN0000748	WHITEVILLE WATER DEPT		Popul Group:	Very Small
	Lead /Copper Rule			
	Lead / Copper			
	1/1/2019	Followup Monitoring		
			9/5/2019	Notice of Violation Issued
			9/5/2019	Public Notification Requested
	1/1/2019	Water Quality Parameters		
			9/5/2019	Notice of Violation Issued
			9/5/2019	Public Notification Requested
	7/1/2019	Water Quality Parameters		
			1/30/2020	Notice of Violation Issued
			1/30/2020	Public Notification Requested

# **HICKMAN COUNTY**

TN0000533 TURNEY CENTER Popul Group: Very Small

D/DBP Rule

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

Trihalomethanes			
7/1/2019	MCL Violation		
		10/24/2019	Notice of Violation Issued
		10/24/2019	Public Notification Requested
		11/13/2019	Public Notification Performed

MCL Violation

1/21/2020 Notice of Violation Issued
1/21/2020 Public Notification Requested
2/5/2020 Public Notification Performed

# **JACKSON COUNTY**

TN0000845 JACKSON COUNTY UD #3 Popul Group: Small

D/DBP Rule

Trihalomethanes

10/1/2019

1/1/2019 MCL Violation

4/24/2019 Notice of Violation Issued
4/24/2019 Public Notification Requested
5/6/2019 Public Notification Performed
6/30/2019 Returned to Compliance
8/2/2019 Director's Order

# **JOHNSON COUNTY**

TN0000480	BROWNLOW UTILITY DISTRI	СТ	Popul Group:	Very Small
	Lead /Copper Rule			
	Lead / Copper			
	1/1/2019	Initial Monitoring		
			7/9/2019	Notice of Violation Issued
			7/9/2019	Public Notification Requested
	1/1/2019	Water Quality Parameters		
			7/9/2019	Notice of Violation Issued
			7/9/2019	Public Notification Requested
	1/17/2019	Corrosion Treatment Recommendation		
			9/10/2019	Notice of Violation Issued
			9/10/2019	Public Notification Requested
	7/1/2019	Initial Monitoring		
			1/30/2020	Notice of Violation Issued
			1/30/2020	Public Notification Requested
	7/1/2019	Water Quality Parameters		
			1/30/2020	Notice of Violation Issued
			1/30/2020	Public Notification Requested

## **KNOX COUNTY**

TN0000369 FIRST UTIL DIST OF KNOX COUNTY Popul Group: Large

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 6/15/2017 Public Notification Performed

\* 9/1/2018 Record Keeping, Major

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

Very Large

### TN0000366 KNOXVILLE UTILITIES BOARD-KUB

Interim Enhanced SWTR

Individual Filter Records

\* 12/1/2018

Record Keeping, Major

Large

2/11/2019 Notice of Violation Issued

Popul Group:

Popul Group:

Popul Group:

Popul Group:

Popul Group:

Popul Group:

2/11/2019 Public Notification Requested4/1/2019 Public Notification Performed

#### 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

TN0008267 LEXINGTON WAT DEPT RASCALTOWN

Lead /Copper Rule

Lead / Copper

7/1/2019

Initial Monitoring

2/5/2020 Notice of Violation Issued2/5/2020 Public Notification Requested

Small

Very Small

#### TN0000408 LORETTO WATER DEPARTMENT

Interim Enhanced SWTR

Combined Filter Turbidity

10/1/2019

Treatment Technique, Single Value

12/11/2019 Notice of Violation Issued
12/11/2019 Public Notification Requested
1/13/2020 Public Notification Performed
1/13/2020 Returned to Compliance

Very Small

## TN0000604 ST JOSEPH WATER SYSTEM

Interim Enhanced SWTR

Individual Filter Records

1/1/2019

Record Keeping, Major

#### 3/26/2019 Notice of Violation Issued

Small

#### TN0000676 SUMMERTOWN WATER SYSTEM

Lead /Copper Rule

Lead / Copper

1/1/2019 Water Quality Parameters

3/16/2020 Notice of Violation Issued 3/16/2020 Public Notification Requested

7/1/2019 Water Quality Parameters

3/16/2020 Notice of Violation Issued 3/16/2020 Public Notification Requested

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

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TN0000396 LENOIR CITY UTILITY BOARD

Popul Group: Medium

Long Term 2 SWTR
BIN Reports

4/1/2019 Failure to submit BIN report

4/11/2019 Notice of Violation Issued
4/11/2019 Public Notification Requested
4/25/2019 Public Notification Performed
4/25/2019 Returned to Compliance
6/27/2019 Public Notification Performed

## **MARION COUNTY**

TN0000278	GRIFFITH CREEK UTILITY DIST	Popul Group:	Very Small
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D/DBP Rule

Haloacetic Acids

4/1/2019 Routine Monitoring, Major

7/26/2019 Notice of Violation Issued
7/26/2019 Public Notification Requested
9/30/2019 Returned to Compliance
4/2/2020 Public Notification Performed

Trihalomethanes

4/1/2019 Routine Monitoring, Major

7/26/2019 Notice of Violation Issued
7/26/2019 Public Notification Requested
9/30/2019 Returned to Compliance
4/2/2020 Public Notification Performed

Very Small

Popul Group:

Popul Group:

#### TN0008286 JASPER HIGHLANDS WATER SYSTEM

D/DBP Rule

Haloacetic Acids

7/1/2019 Routine Monitoring, Major

2/6/2020 Notice of Violation Issued2/6/2020 Public Notification Requested

Trihalomethanes

7/1/2019 Routine Monitoring, Major

2/6/2020 Notice of Violation Issued 2/6/2020 Public Notification Requested

Very Small

#### TN0000924 RIVER LANDING CONDOMINIUM ASSO

Interim Enhanced SWTR

Combined Filter Turbidity

2/1/2019 Treatment Technique, Single Value

6/1/2016 Director's Order 10/19/2016 Director's Order

3/5/2019 Public Notification Performed 3/31/2019 Returned to Compliance 4/8/2019 Notice of Violation Issued

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

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ш	$^{\prime\prime}$	v	JN	- 1		u	u	IV		

TN0000488 MOUNT PLEASANT WAT SYS #1

Popul Group: Small

Interim Enhanced SWTR

Individual Filter Records

\* 6/1/2015

015 Record Keeping, Major

4/15/2016 Notice of Violation Issued

4/15/2016 Public Notification Requested

\* 9/1/2015 Record Keeping, Major

4/15/2016 Notice of Violation Issued4/15/2016 Public Notification Requested

#### **MCMINN COUNTY**

TN0000224 ENGLEWOOD WATER DEPT

Popul Group: Small

Consumer Confidence Report Rule

Consumer Confidence Report

7/1/2019 Reporting Violation, Major

11/12/2019 Notice of Violation Issued

## MONROE COUNTY

TN0008280 MOUNTAIN SIDE ESTATES

Popul Group:

Very Small

Revised Total Coliform Rule Total Coliforms

4/1/2019

Routine Monitoring

5/31/2019 Returned to Compliance
6/21/2019 Notice of Violation Issued
6/21/2019 Public Notification Requested
6/28/2019 Public Notification Performed
9/30/2019 Returned to Compliance

## **OBION COUNTY**

TN0000347 KENTON WATER DEPT

Popul Group: Very Small

Popul Group:

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

12/4/2018 Notice of Violation Issued12/4/2018 Public Notification Requested

Very Small

TN0000607 SAMBURG UTILITY DIST

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

11/15/2018 Notice of Violation Issued11/15/2018 Public Notification Requested

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PIC	'n		L	, U	λU	ш	ΙTΙ	r

TN0000088	BYRDSTOWN WATER DEPT		Popul Group:	Small
	Long Term 2 SWTR E. Coli			
	1/1/2019	Initial Round 1 Monitoring		
	1, 1, 25 16	miliar reading 1 Mornitoring	1/28/2020	Notice of Violation Issued
			1/28/2020	Public Notification Requested
	2/1/2019	Initial Round 1 Monitoring		
			1/28/2020	Notice of Violation Issued
			1/28/2020	Public Notification Requested
	3/1/2019	Initial Round 1 Monitoring		
			1/28/2020	Notice of Violation Issued
			1/28/2020	Public Notification Requested
	4/1/2019	Initial Round 1 Monitoring		
			1/28/2020	Notice of Violation Issued
			1/28/2020	Public Notification Requested

# **POLK COUNTY**

TN0000136	COPPERHILL WATER DEPT.		Popul Group:	Very Small
	Consumer Confidence Report Rule			
	Consumer Confidence	Report		
	7/1/2019	Reporting Violation, Major		
			11/12/2019	Notice of Violation Issued
	D/DBP Rule			
	Haloacetic Acids			
	7/1/2019	Routine Monitoring, Major		
			10/24/2019	Notice of Violation Issued
			10/24/2019	Public Notification Requested
	Trihalomethanes			
	7/1/2019	Routine Monitoring, Major		
			10/24/2019	Notice of Violation Issued
			10/24/2019	Public Notification Requested

# **RHEA COUNTY**

TN0000657	NEWPORT RESORT WATER SYSTEM		Popul Group:	Very Small
	Consumer Confidence Report Rul	e		
	Consumer Confidence	Report		
	7/1/2019	Reporting Violation, Major		
			11/12/2019	Notice of Violation Issued
	Lead /Copper Rule			
	Lead / Copper			
	* 1/1/2017	Consumer Notification		
			12/4/2018	Notice of Violation Issued
			12/4/2018	Public Notification Requested

# **ROANE COUNTY**

TN0000531	CUMBERLAND UTILITY DISTR	RICT	Popul Group:	Medium
	Long Term 2 SWTR BIN Reports 4/1/2019	Failure to submit BIN report		
		·	4/11/2019	
				Public Notification Requested Returned to Compliance
				Public Notification Performed
	Revised Total Coliform Rule Total Coliforms			
	11/1/2019	Routine Monitoring		
			12/31/2019	Returned to Compliance
			1/16/2020	Notice of Violation Issued
			1/16/2020 3/31/2020	Public Notification Requested Public Notification Performed
N0000287	HARRIMAN UTILITY BOARD		Popul Group:	Medium
	Long Term 2 SWTR BIN Reports 4/1/2019	Failure to submit BIN report		
	4/1/2013	Tailure to Submit Bitt report	4/11/2019	Notice of Violation Issued
				Public Notification Requested
FNIOOOOFOO	OLIVER CRRINGS WATER RO	ADD	Popul Group:	Small
ΓN0000523	OLIVER SPRINGS WATER BO	ARD	.,,	
	Interim Enhanced SWTR Individual Filter Records  * 4/1/2017	Record Keeping, Major		
	4/1/2017	record recoping, major	9/20/2018	Notice of Violation Issued
			9/20/2018	Public Notification Requested
	* E/A/0047	December 2010 Malan	4/18/2019	Director's Order
	* 5/1/2017	Record Keeping, Major	0/20/2019	Notice of Violation Issued
				Public Notification Requested
				Director's Order
	* 6/1/2017	Record Keeping, Major	1, 10,2010	Director o Gradi
		1 0, -y	9/20/2018	Notice of Violation Issued
			9/20/2018	
			4/18/2019	Director's Order
	* 5/1/2018	Record Keeping, Major		
			9/20/2018	Notice of Violation Issued
			9/20/2018	<b>'</b>
			4/18/2019	Director's Order
	Long Term 1 SWTR			
	Disinfectants	Monitoring Maior		
	11/1/2019	Monitoring, Major	1/6/2020	Notice of Violation Issued
			1/6/2020	Public Notification Requested
	12/1/2019	Monitoring, Major	1/0/2020	. abile Healifeation Nequested
	12, 112010		1/6/2020	Notice of Violation Issued
			1/6/2020	
TN0000457	ROANE CENTRAL UTILITY DIS	STRICT	Popul Group:	Small
110000437		JIMOI		
	Lead /Copper Rule			
	Lead / Copper			

\* Violation occurred prior to 2019, but extended into the 2019 calendar year.

1/1/2019	Initial Monitoring		
		7/26/2019	Notice of Violation Issued
		7/26/2019	Public Notification Requested
1/1/2019	Water Quality Parameters		
		7/26/2019	Notice of Violation Issued
		7/26/2019	Public Notification Requested
7/1/2019	Initial Monitoring		
		1/30/2020	Notice of Violation Issued
		1/30/2020	Public Notification Requested
7/1/2019	Water Quality Parameters		
		1/30/2020	Notice of Violation Issued
		1/30/2020	Public Notification Requested

### **RUTHERFORD COUNTY**

TN0000491 MURFREESBORO WATER DEPARTMENT

Popul Group: Very Large

Interim Enhanced SWTR

Individual Filter Records

\* 10/1/2017

Record Keeping, Major

10/31/2017 Notice of Violation Issued10/31/2017 Public Notification Requested

## **SEQUATCHIE COUNTY**

TN0008228 LONE OAK UTILITY DISTRICT

Popul Group: Very Small

Consumer Confidence Report Rule

Consumer Confidence Report

7/1/2019 Reporting Violation, Major

11/12/2019 Notice of Violation Issued

## **SEVIER COUNTY**

TN0000617 SEVIERVILLE WATER SYSTEM

Popul Group: Medium

Interim Enhanced SWTR

Individual Filter Records

7/1/2019

Record Keeping, Major

8/12/2019 Notice of Violation Issued8/12/2019 Public Notification Requested

## **SMITH COUNTY**

TN0000095 CARTHAGE WATER SYSTEM Popul Group: Small

D/DBP Rule

Trihalomethanes

4/1/2019 MCL Violation

7/26/2019 Notice of Violation Issued7/26/2019 Public Notification Requested

TN0000096 CORDELL HULL UTILITY DISTRICT Popul Group: Very Small

11/12/2019 Notice of Violation Issued

STEWART CO	UNTY				
TN0000960	HIDDEN HOLLOW WATER SYSTEM			Popul Group:	Very Small
	Organics A	ATRAZINE			
		* 1/1/2017	Routine Monitoring, Major	9/10/2019	Notice of Violation Issued
					Public Notification Requested
	S	SIMAZINE	Davida a Manitarian Maian		
		* 1/1/2017	Routine Monitoring, Major	9/10/2019	Notice of Violation Issued
				9/10/2019	Public Notification Requested
SULLIVAN CO	UNTY				
TN0000056	BLOOMING	DALE UTILITY DIS	TRICT	Popul Group:	Medium
	Long Term 2	SWTR			
	В	BIN Reports	Fallows to subsect DIM seement		
		4/1/2019	Failure to submit BIN report	4/11/2019	Notice of Violation Issued
					Public Notification Requested
TN0000061	BLUFF CITY WATER DEPARTMENT			Popul Group:	Very Small
	Consumer Confidence Report Rule				
	C	Consumer Confidence R			
		7/1/2019	Reporting Violation, Major	11/12/2019	Notice of Violation Issued
					Public Notification Performed
	D/DBP Rule			_, , _, _,	
	F	Haloacetic Acids			
		10/1/2019	Routine Monitoring, Major		
					Notice of Violation Issued
					Public Notification Requested Public Notification Performed
	т	rihalomethanes		2/12/2020	rubiic Notification renoffied
		maiomounanoo			
	,	10/1/2019	Routine Monitoring, Major		
	·	10/1/2019	Routine Monitoring, Major	1/21/2020	Notice of Violation Issued
	·	10/1/2019	Routine Monitoring, Major		Notice of Violation Issued Public Notification Requested
			Routine Monitoring, Major	1/21/2020	
	Interim Enha	nced SWTR		1/21/2020	Public Notification Requested
	Interim Enha	nced SWTR Combined Filter Turbidity	,	1/21/2020	Public Notification Requested
	Interim Enha	nced SWTR		1/21/2020 2/12/2020	Public Notification Requested Public Notification Performed
	Interim Enha	nced SWTR Combined Filter Turbidity	,	1/21/2020 2/12/2020 5/31/2019	Public Notification Requested Public Notification Performed  Returned to Compliance
	Interim Enha	nced SWTR Combined Filter Turbidity	,	1/21/2020 2/12/2020 5/31/2019 6/11/2019	Public Notification Requested Public Notification Performed  Returned to Compliance Notice of Violation Issued
	Interim Enha	nced SWTR Combined Filter Turbidity	,	1/21/2020 2/12/2020 5/31/2019 6/11/2019 6/11/2019	Public Notification Requested Public Notification Performed  Returned to Compliance Notice of Violation Issued Public Notification Requested
	Interim Enha	nced SWTR Combined Filter Turbidity	, Routine Monitoring, Major	1/21/2020 2/12/2020 5/31/2019 6/11/2019 6/11/2019	Public Notification Requested Public Notification Performed  Returned to Compliance Notice of Violation Issued
	Interim Enha	nced SWTR Combined Filter Turbidity 4/1/2019	,	1/21/2020 2/12/2020 5/31/2019 6/11/2019 6/11/2019 2/12/2020	Public Notification Requested Public Notification Performed  Returned to Compliance Notice of Violation Issued Public Notification Requested

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

			Public Notification Requested
Walatila Organica		2/12/2020	Public Notification Performed
Volatile Organics 1,1,1-TRICHLOROETHA	ME		
* 1/1/2017	Routine Monitoring, Major		
7,72311	rtouine montening, major	2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
1,1,2-TRICHLOROETHA	ANE		
* 1/1/2017	Routine Monitoring, Major		
			Notice of Violation Issued
			Public Notification Requested
1 1 DICHI ODOETHVI E	NE	2/12/2020	Public Notification Performed
1,1-DICHLOROETHYLE * 1/1/2017	Routine Monitoring, Major		
1/1/2017	Troduite Monitoring, Major	2/3/2020	Notice of Violation Issued
			Public Notification Requested
			Public Notification Performed
1,2,4-TRICHLOROBENZ	ZENE		
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
			Public Notification Requested
		2/12/2020	Public Notification Performed
1,2-DICHLOROETHANE			
* 1/1/2017	Routine Monitoring, Major	0/0/0000	Notice of Violetica leaved
			Notice of Violation Issued Public Notification Requested
			Public Notification Performed
1,2-DICHLOROPROPAN	NE	2,12,2020	T done itemication i enemied
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
BENZENE			
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
			Public Notification Requested  Public Notification Performed
CARBON TETRACHLO	DIDE	2/12/2020	Public Notification Performed
* 1/1/2017	Routine Monitoring, Major		
7,72311	rtoutine Montering, Major	2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
CHLOROBENZENE			
* 1/1/2017	Routine Monitoring, Major		
			Notice of Violation Issued
			Public Notification Requested
CIS 4.2 DICHI ODOFTI	IVI ENE	2/12/2020	Public Notification Performed
CIS-1,2-DICHLOROETH * 1/1/2017	Routine Monitoring, Major		
1/1/2017	Rodulio Monttoning, Major	2/3/2020	Notice of Violation Issued
			Public Notification Requested
			Public Notification Performed
DICHLOROMETHANE			
* 1/1/2017	Routine Monitoring, Major		
			Notice of Violation Issued
			Public Notification Requested
		2/12/2020	Public Notification Performed
ETHYLBENZENE	Davids - Many 1 - M. 1		
* 1/1/2017	Routine Monitoring, Major		

			Notice of Violation Issued Public Notification Requested Public Notification Performed
O-DICHLOROBENZENE			
* 1/1/2017	Routine Monitoring, Major	2/3/2020 2/3/2020 2/12/2020	Notice of Violation Issued Public Notification Requested Public Notification Performed
P-DICHLOROBENZENE			
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
STYRENE		2/12/2020	Public Notification Performed
* 1/1/2017	Routine Monitoring, Major		
	<b>5</b> , ,	2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
TETRACHLOROETHYLE			
* 1/1/2017	Routine Monitoring, Major	0/0/0000	Nation of Violation Laured
		2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested Public Notification Performed
TOLUENE		2,12,2020	r abilio recilibation i cironina
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
TRANS-1,2-DICHLOROE			
* 1/1/2017	Routine Monitoring, Major	2/2/2020	Notice of Violation Issued
		2/3/2020 2/3/2020	Notice of Violation Issued Public Notification Requested
			Public Notification Performed
TRICHLOROETHYLENE		_,,	
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
VINYL CHLORIDE	Deutles Mackette Males		
* 1/1/2017	Routine Monitoring, Major	2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
			Public Notification Performed
XYLENES(TOTAL)			
* 1/1/2017	Routine Monitoring, Major		
		2/3/2020	Notice of Violation Issued
		2/3/2020	Public Notification Requested
		2/12/2020	Public Notification Performed
HOLSTON U D		Popul Group:	Very Small
Concumor Confidence Beneat Bull-			
Consumer Confidence Report Rule  Consumer Confidence Report Rule	enort		
7/1/2019	Reporting Violation, Major		
., ., _ 5 . 5	.,	11/12/2019	Notice of Violation Issued
D/DBP Rule			
Haloacetic Acids			
1/1/2019	MCL Violation		
		4/24/2019	Notice of Violation Issued
		4/24/2019	Public Notification Requested

TN0000074

			5/3/2019	Public Notification Performed
			9/25/2019	Director's Order
	4/1/2019	MCL Violation		
			7/26/2019	Notice of Violation Issued
			7/26/2019	Public Notification Requested
			9/25/2019	Director's Order
	7/1/2019	MCL Violation		
			9/25/2019	Director's Order
			10/24/2019	Notice of Violation Issued
			10/24/2019	Public Notification Requested
			10/31/2019	Public Notification Performed
	10/1/2019	MCL Violation		
			9/25/2019	Director's Order
			1/21/2020	Notice of Violation Issued
			1/21/2020	Public Notification Requested
	Public Notification Rule			
	Public Notice			
	8/27/2019	Reporting Violation, Major		
			10/22/2019	Notice of Violation Issued
N0000644	SOUTH BRISTOL-WEAVER PIKE U D		Popul Group:	Small
	Consumer Confidence Report	Rule		
	Consumer Confidence Report  Consumer Confide			
	Consumer Confidence Report Consumer Confide 7/1/2019			
	Consumer Confide	nce Report	11/12/2019	Notice of Violation Issued
	Consumer Confide	nce Report	11/12/2019	Notice of Violation Issued
IMNER COL	Consumer Confide 7/1/2019	nce Report	11/12/2019	Notice of Violation Issued
UMNER COL	Consumer Confide 7/1/2019	nce Report	11/12/2019	Notice of Violation Issued
UMNER COL	Consumer Confide 7/1/2019	nce Report Reporting Violation, Major	11/12/2019 Popul Group:	Notice of Violation Issued  Medium
	Consumer Confide 7/1/2019  JNTY	nce Report Reporting Violation, Major		
	Consumer Confide 7/1/2019  JNTY  PORTLAND WATER SYST	Reporting Violation, Major		
	JNTY  PORTLAND WATER SYST  Interim Enhanced SWTR	Reporting Violation, Major		

8/19/2019 Notice of Violation Issued

Popul Group:

# **TIPTON COUNTY**

TN0000070 BRIGHTON WATER SYSTEM

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

**Consumer Notification** 

12/4/2018 Notice of Violation Issued12/4/2018 Public Notification Requested

Small

TN0000440 MASON WATER DEPT Popul Group: Very Small

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

12/4/2018 Notice of Violation Issued12/4/2018 Public Notification Requested

# **UNION COUNTY**

TN0008220 LEADMINE BEND WATER ASSOC.

Popul Group: Very Small

Consumer Confidence Report Rule

Consumer Confidence Report

7/1/2019 Reporting Violation, Major

11/12/2019 Notice of Violation Issued

TN0000899 OLD HICKORY WATER COMPANY-UNIO

Popul Group: Very Small

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

12/4/2018 Notice of Violation Issued12/4/2018 Public Notification Requested

# **VAN BUREN COUNTY**

ΓN0000655	SPENCER WATER SYSTEM		Popul Group:	Small
	D/DBP Rule			
	Haloacetic Acids			
	1/1/2019	MCL Violation		
			4/23/2018	Director's Order
			4/24/2019	Notice of Violation Issued
			4/24/2019	Public Notification Requested
			12/31/2019	Returned to Compliance
	4/1/2019	MCL Violation		
			7/26/2019	Notice of Violation Issued
			7/26/2019	Public Notification Requested
			8/12/2019	Public Notification Performed
			12/31/2019	Returned to Compliance
	7/1/2019	MCL Violation		
			10/24/2019	Notice of Violation Issued
			10/24/2019	Public Notification Requested
			12/31/2019	Returned to Compliance
	Trihalomethanes			
	1/1/2019	MCL Violation		
			4/23/2018	Director's Order
			4/24/2019	Notice of Violation Issued
				Public Notification Requested
			12/31/2019	Returned to Compliance
	4/1/2019	MCL Violation		
			7/26/2019	Notice of Violation Issued
				Public Notification Requested
				Public Notification Performed
			12/31/2019	Returned to Compliance
	7/1/2019	MCL Violation		
			10/24/2019	Notice of Violation Issued
				Public Notification Requested
			12/31/2019	Returned to Compliance
	Interim Enhanced SWTR			
	Individual Filter Records			
	8/1/2019	Record Keeping, Major		
			10/10/2019	Notice of Violation Issued

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

### **WAYNE COUNTY**

TN0000119 **CLIFTON WATER DEPT**  Popul Group: Small

Interim Enhanced SWTR

Combined Filter Turbidity

1/1/2019

Treatment Technique, Monthly Average

2/28/2019 Returned to Compliance 3/14/2019 Notice of Violation Issued 3/14/2019 Public Notification Requested

4/4/2019 Public Notification Performed

3/1/2019 Treatment Technique, Monthly Average

> 4/30/2019 Returned to Compliance 5/13/2019 Notice of Violation Issued 5/13/2019 Public Notification Requested 5/22/2019 Public Notification Performed

Popul Group: Very Small TN0008276 WAYNE CO. B. P. UTIL. #2

Lead /Copper Rule

Lead / Copper

\* 1/1/2017 Consumer Notification

> 9/5/2019 Notice of Violation Issued 9/5/2019 Public Notification Requested

Popul Group: Small TN0000736 **WAYNESBORO WATER SYSTEM** 

Interim Enhanced SWTR

Individual Filter Records

\* 10/1/2015 Record Keeping, Major

> 12/4/2015 Notice of Violation Issued 12/4/2015 Public Notification Requested

#### WHITE COUNTY

TN0000569 **QUEBECK WALLING UTILITY DIST**  Popul Group: Small

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

12/4/2018 Notice of Violation Issued 12/4/2018 Public Notification Requested

### **WILLIAMSON COUNTY**

TN0000246 FRANKLIN WATER DEPT Popul Group: Large

Consumer Confidence Report Rule Consumer Confidence Report

7/1/2019 Reporting Violation, Major

11/12/2019 Notice of Violation Issued

D/DBP Rule

Trihalomethanes

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

7/1/2019	MCL Violation	
	10/24/2	019 Notice of Violation Issued
	10/24/2	019 Public Notification Requested
10/1/2019	MCL Violation	
	1/21/2	020 Notice of Violation Issued
	1/21/2	20 Public Notification Requested
	2/10/2	20 Public Notification Performed
Interim Enhanced SWTR		
Individual Filter Records		
* 4/1/2015	Record Keeping, Major	
	6/3/:	015 Notice of Violation Issued
	6/3/:	015 Public Notification Requested
	6/15/2	015 Public Notification Performed
	3/31/2	20 Returned to Compliance

WILSON COUNTY							
TN0000732	WATERTOWN WATER SYST	EM	Popul Group:	Very Small			
	Certified Operator						
	Operations						
	11/1/2019	Treatment Technique					
			11/21/2019	Notice of Violation Issued			

# **Non-Community Water Systems**

# **CARROLL COUNTY**

**ENON MISSIONARY BAPTIST CHURCH** TN0003110

Very Small Popul Group:

Revised Total Coliform Rule **Total Coliforms** 

7/1/2019

**Routine Monitoring** 

11/12/2019 Notice of Violation Issued 11/12/2019 Public Notification Requested

### **CLAIBORNE COUNTY**

TN0004570 STRAIGHT CREEK BOAT DOCK

Popul Group: Very Small

Revised Total Coliform Rule **Total Coliforms** 

1/1/2019

**Routine Monitoring** 

5/14/2019 Notice of Violation Issued 5/14/2019 Public Notification Requested

### **COFFEE COUNTY**

TN0004354 **MANCHESTER KOA**  Popul Group:

Very Small

Revised Total Coliform Rule **Total Coliforms** 

5/1/2019

**Routine Monitoring** 

7/11/2019 Notice of Violation Issued 7/11/2019 Public Notification Requested 7/24/2019 Public Notification Performed 9/30/2019 Returned to Compliance

## **CUMBERLAND COUNTY**

TN0004788	CUMBERI AND MTN RETREAT CMPGD	Popul Gro

8/1/2019

12/1/2019

Group: Very Small

6/11/2019

**Ground Water Rule** 

Disinfection

4/1/2019 Continuous or Grab Monitoring

> Notice of Violation Issued 6/11/2019

7/1/2019 Continuous or Grab Monitoring

**Public Notification Requested** 

9/19/2019 Notice of Violation Issued

9/19/2019 Public Notification Requested

10/10/2019 Notice of Violation Issued

10/10/2019 Public Notification Requested

Notice of Violation Issued 2/13/2020

2/13/2020 Public Notification Requested

Revised Total Coliform Rule

Continuous or Grab Monitoring

Continuous or Grab Monitoring

**Total Coliforms** 

E KALB COL	JNTY			
TN0004520	INDIAN CREEK YOUTH CAMP		Popul Group:	Very Small
	Daylor of Total California Bula			
	Revised Total Coliform Rule Total Coliforms			
	2/1/2019	Routine Monitoring		
				Returned to Compliance
				Notice of Violation Issued
			4/18/2019 4/29/2019	Public Notification Requested Public Notification Performed
				Director's Order
RAINGER CO	OUNTY			
TN0004429	BOGGS SUBDIVISION		Popul Group:	Very Small
	Revised Total Coliform Rule			
	Total Coliforms			
	7/1/2019	Routine Monitoring	44/0/0040	Dublic Notification Desferred
				Public Notification Performed  Notice of Violation Issued
				Public Notification Requested
			12/31/2019	Returned to Compliance
			Popul Group	Vary Small
TN0002524	GILMORE DOCK		Popul Group:	Very Small
	Revised Total Coliform Rule			
	Total Coliforms			
	2/1/2019	Routine Monitoring	0/00/00/0	D
				Returned to Compliance
				Notice of Violation Issued Public Notification Requested
				Public Notification Performed
	7/1/2019	Routine Monitoring	1,20,2010	
		3	11/9/2019	Public Notification Performed
			11/21/2019	Notice of Violation Issued
			11/21/2019	Public Notification Requested
			12/31/2019	Returned to Compliance
TN0004691	HONEY CREEK SUBDIVISION		Popul Group:	Very Small
	Revised Total Coliform Rule Total Coliforms			
	7/1/2019	Routine Monitoring		
			11/9/2019	Public Notification Performed
			11/21/2019	Notice of Violation Issued
			11/21/2019	•
			12/31/2019	Returned to Compliance
-			Popul Group:	Very Small

Routine Monitoring

8/23/2019 Notice of Violation Issued 8/23/2019 Public Notification Requested

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п	А	IV	IIL	ш	UI	N .	S	U	וט	V	1 1

TN0004918 SHADY GROVE HARBOR MARINA

Popul Group: Very Small

Inorganics

**Nitrates** 

1/1/2019 Routine Monitoring, Major

2/3/2020 Notice of Violation Issued2/3/2020 Public Notification Requested2/4/2020 Public Notification Performed

#### **HENRY COUNTY**

TN0004775 BRITTON FORD CAMPGROUND

Popul Group: Very Small

Revised Total Coliform Rule
Total Coliforms

4/1/2019

Routine Monitoring

8/15/2019 Notice of Violation Issued
8/15/2019 Public Notification Requested
8/18/2019 Public Notification Performed
9/30/2019 Returned to Compliance

Popul Group:

#### TN0000933 COUNTRY JUNCTION RESORT

Revised Total Coliform Rule Total Coliforms

1/1/2019

Routine Monitoring

5/16/2019 Notice of Violation Issued 5/16/2019 Public Notification Requested

8/8/2019 Public Notification Performed

Very Small

## TN0009670 SUNSET BAY RESORT & MARINA

Revised Total Coliform Rule
Total Coliforms

4/1/2019

**Routine Monitoring** 

Popul Group: Very Small

#### **HUMPHREYS COUNTY**

TN0003718 ELLIS GROVE PRESBYTERIAN CHURC

Popul Group: Very Small

Inorganics

Nitrates

1/1/2019 Routine Monitoring, Major

2/3/2020 Notice of Violation Issued 2/3/2020 Public Notification Requested 2/16/2020 Public Notification Performed

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

#### JEFFERSON COUNTY

TN0004812 LAKE COVE RESORT

Popul Group: Very Small

Revised Total Coliform Rule Total Coliforms

4/1/2019

Routine Monitoring

8/23/2019 Notice of Violation Issued 8/23/2019 Public Notification Requested

#### **JOHNSON COUNTY**

TN0003923 PIONEER LANDING

Popul Group: Very Small

Revised Total Coliform Rule
Total Coliforms

8/1/2019

**Routine Monitoring** 

9/30/2019 Returned to Compliance
10/11/2019 Notice of Violation Issued
10/11/2019 Public Notification Requested
10/17/2019 Public Notification Performed

#### TN0005054 SHARPIE'S RESTAURANT

Popul Group: Very Small

Revised Total Coliform Rule
Total Coliforms

10/1/2019

**Routine Monitoring** 

2/13/2020 Notice of Violation Issued2/13/2020 Public Notification Requested

#### **MADISON COUNTY**

TN0003287 PARKBURG BAPTIST CHURCH

Popul Group:

Very Small

Revised Total Coliform Rule Total Coliforms

1/1/2019

**Routine Monitoring** 

5/16/2019 Notice of Violation Issued 5/16/2019 Public Notification Requested

#### **POLK COUNTY**

TN0004986 HALL'S GROCERY STORE

Popul Group: Very Small

Revised Total Coliform Rule Total Coliforms

10/1/2019

Treatment Technique, Level 1 Assessmen

3/18/2020 Notice of Violation Issued3/18/2020 Public Notification Requested3/19/2020 Public Notification Performed

TN0005163 RAFT ONE WHITEWATER

Popul Group: Very Small

Revised Total Coliform Rule Total Coliforms

9/1/2019 Routine Monitoring

11/12/2019 Notice of Violation Issued11/12/2019 Public Notification Requested

TN0004993 THE OLD COUNTRY PORCH RESTAURA

Revised Total Coliform Rule Total Coliforms

8/1/2019

Routine Monitoring

Popul Group: Very Small

10/10/2019 Notice of Violation Issued10/10/2019 Public Notification Requested

Very Small

#### **UNICOI COUNTY**

TN0005035 NOLICHUCKY GORGE CAMPGROUND

Revised Total Coliform Rule

Total Coliforms

12/1/2019

11/1/2019 Routine Monitoring

1/9/2020 Notice of Violation Issued
1/9/2020 Public Notification Requested
1/14/2020 Public Notification Performed
1/31/2020 Returned to Compliance

1/31/2020 Returned

Popul Group:

1/31/2020 Returned to Compliance
2/13/2020 Notice of Violation Issued
2/13/2020 Public Notification Requested
2/27/2020 Public Notification Performed

#### **WEAKLEY COUNTY**

TN0003673 PERSIMMON HILLS GOLF COURSE

Revised Total Coliform Rule
Total Coliforms

4/1/2019 R

Routine Monitoring

**Routine Monitoring** 

Popul Group: Very Small

8/15/2019 Notice of Violation Issued
8/15/2019 Public Notification Requested
8/20/2019 Public Notification Performed
9/30/2019 Returned to Compliance

#### **Non-Transient Non-Community Water Systems**

#### **CHESTER COUNTY**

TN0001234 JACKS CREEK ELEMENTARY SCHOOL

Popul Group: Very Small

Lead /Copper Rule

Lead / Copper

\* 1/1/2017

Consumer Notification

10/17/2019 Notice of Violation Issued 10/21/2019 Returned to Compliance

#### **HICKMAN COUNTY**

TN0004910 ACCURATE ENERGETIC SYSTEMS Popul Group: Very Small

Lead /Copper Rule

Lead / Copper

3/27/2019 Corrosion Treatment Recommendation

8/19/2019 Notice of Violation Issued 8/19/2019 Public Notification Requested

9/25/2019 Director's Order

7/1/2019 Consumer Notification

8/19/2019 Notice of Violation Issued 8/19/2019 Public Notification Requested

9/25/2019 Director's Order

#### **HUMPHREYS COUNTY**

TN0003416 SCEPTER INGOT CASTING, INC.

Popul Group: Very Small

**Ground Water Rule** 

Disinfection

7/1/2019 Continuous or Grab Monitoring

9/19/2019 Notice of Violation Issued

9/19/2019 Public Notification Requested

Lead /Copper Rule

Lead / Copper

1/1/2019 Initial Monitoring

9/5/2019 Notice of Violation Issued

9/5/2019 Public Notification Requested

1/1/2019 Water Quality Parameters

**Routine Monitoring** 

9/5/2019 Notice of Violation Issued 9/5/2019 Public Notification Requested

Revised Total Coliform Rule

4/1/2019

**Total Coliforms** 

3/1/2019 Routine Monitoring

5/13/2019 Notice of Violation Issued

5/13/2019 Public Notification Requested

7/25/2019 Director's Order

6/11/2019 Notice of Violation Issued

6/11/2019 Public Notification Requested

7/25/2019 Director's Order

<sup>\*</sup> Violation occurred prior to 2019, but extended into the 2019 calendar year.

#### **MCMINN COUNTY**

#### TN0004313 RESOLUTE FOREST PRODUCTS

Revised Total Coliform Rule Total Coliforms

8/1/2019 Routine Monitoring

Popul Group: Very Small

10/10/2019 Notice of Violation Issued
10/10/2019 Public Notification Requested
10/16/2019 Public Notification Performed
11/8/2019 Returned to Compliance



### Appendix 3 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 Aug 02, RTC Sep 02

	1	
0000745	WHITE HOUSE UD	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 CARE CENTER	8 TCR Mon, Apr 98 – Sep 03
0004800	LITTLE PEOPLE UNIVERSITY	CO 97-0116 issued Jul 97, deactivated Aug 97
0004910	ACCURATE ENERGETIC SYSTEMS	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	System Deactivated Mar 06
	CORPORATION	

<sup>\*</sup> 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 4 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 5

## 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)			
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)			
TOTAL <sup>1</sup>	Net Income (or Loss)			
	, ,			

Signature:	Date:	

<sup>&</sup>lt;sup>1</sup> 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 6 DWSRF 2020 Priority Ranking List

Attached as separate document

COMPREHENSIVE LIST

Total DWSRF \$ 328,109,220 44,596,000 Total Green Requested \*Includes 5 points for having an approved Growth Plan + Small System less than 10,000 population **Running Total of** Expected Total Project Amount Loan Award Green Component Expected Running Total PWSID# Priority Population Requested **Green Component** Term Date Const. Const. ATPI Points\* Served **Local Government Project Description Total Project Amount** Rank County TN000. (Years) (mm / yy) Start Completion Row left blank intentionally 85 20 7,060 Byrdstown<sup>+</sup> Pickett Water Treatment Plant Improvements 1,800,000 \$ 1,800,000 \$ TN0000088 20 Jan-20 Jul-20 Dec-21 (Construction of a new sedimentation basin, mixing system, plate settlers, piping, and related appurtenances.) 3,986 Hampton Utility District<sup>+</sup> Carter GREEN - Waterline Replacement (Replacing TN0000282 85 30 1,250,000 \$ 3,050,000 1,000,000 1,000,000 20 Oct-19 Jan-20 Jan-21 approximately 25,000 LF of galvanized waterlines.) 3,843 Clifton+ 3,757,500 TN0000119 NA 85 40 Wayne New Water Treatment Plant (Construction of a 707,500 1,000,000 Sep-19 NA 1.5MGD WTP) Planning and Design Loan 85 40 5,103 Spencer<sup>+</sup> Van Buren Water Treatment Plant Improvements 975,000 4,732,500 1,000,000 TN0000655 20 Jul-20 Dec-21 Sep-19 (Construction of a new sedimentation basin, plate settlers, piping, and related appurtenances.) 15,139 Harriman Utility Board Water Loss Reduction (Survey the distribution 500,000 5,232,500 \$ 1,000,000 TN0000287 85 40 Roane/Morgan Sep-19 NA NA system within the service area for leaks; establish district metering zones; and link monitoring to SCADA to readily detect leaks.) Planning Only 5,116 Oliver Springs<sup>+</sup> 85 60 Anderson/Roane/Morga | GREEN - Water Loss Remediation - Planning 500,000 \$ 5,732,500 500,000 1,500,000 TN0000523 5 Jun-19 NA NA and Design 65 30 Grainger Waterline Extension (Extending the Sneedville 195,000 5,927,500 1,500,000 TN0000640 Sep-19 Jan-20 2,215 Grainger County<sup>+</sup> 20 Aug-19 Utility District's existing waterline at the Hancock County/Grainger County line to the Thorn Hill Community.) Design and Construction 65 40 9,629 Camden<sup>+</sup> Benton Waterline Relocation (Replacing the raw water 3,700,000 \$ 9,627,500 \$ 1.500,000 TN0000090 Oct-19 Nov-19 Oct-21 main along Hwy 70 from the Tennessee River to the WTP and along Hwy 70 to the Birdsong WST.) 65 40 32,594 Elizabethton Carter Waterline Replacement (Replacing the existing 1.050,000 \$ 10,677,500 \$ 1.500,000 TN0000221 Sep-19 Oct-19 Sep-21 12-inch and 16-inch diameter cast iron Doe River transmission lines adjacent to Hwv 19E bridge in the Valley Forge Community to provide resiliency against severe flooding.) 65 60 Gibson Water Treatment Plant Improvements 442,179 \$ 11,119,679 \$ 1,500,000 TN0000599 20 Mar-19 Mar-19 Dec-19 10 1,391 Rutherford+ (Construction of a new sedimentation basin) 65 70 9,036 Hartsville-Trousdale Water and Trousdale Distribution System Improvements 1,750,000 12,869,679 1,500,000 TN0000291 Mar-20 Dec-20 11 20 Jan-20 (Construction of a new 2 MG WST, a booster Sewer Utility District<sup>+</sup> pumping station, and associated appurtenances.)

COMPREHENSIVE LIST

	Includes 5 p		_	pproved Growth Plan	+ Small System less th	Total DWSRF an 10,000 population	\$	328,109,220		\$	44,596,000	Tota	al Green Requ	uested				
Rank	Priority Points*	<b>ATPI</b> 70	Population Served 637,216	Local Government Metropolitan Nashville	County Davidson	Project Description  GREEN - Water Storage Tank Upgrade (Installation of new a new concrete tank in the interior of the existing structure; replacing the western chamber with a 15 MG tank with a baffling system; and replacing the disinfection system at the 8th Ave S WST.)	Tota \$	Il Project Amount 17,373,000	Running Total of Total Project Amount Requested (\$) \$ 30,242,679	Gr	reen Component Amount 17,373,000		en Component unning Total (\$) 18,873,000	PWSID# TN000 TN0000494	Expected Term (Years)	Expected Loan Award Date (mm/yy) Aug-19	Const. Start Jul-19	Const. Completion Jan-21
13	65	100	308	Candlewood Lakes POA Water	Hardeman	Distribution System Improvements	\$	200,000	\$ 30,442,679	\$	-	\$	18,873,000	TN0000797	30	Sep-19	Oct-19	Dec-19
14	45	10	6,143	Works, Inc. Huntingdon <sup>+</sup>	Carroll	(Construction of a new raw water well) GREEN - Distribution System Improvements (Replacing existing waterlines on Main Street; extending waterlines to customers along Hwy 77; and replacing existing water meters with AMR meters.)	\$	2,000,000	\$ 32,442,679	\$	780,000	\$	19,653,000	TN0000316	20	Sep-19	Oct-19	Oct-20
15	45	20	9,869	Arthur-Shawanee Utility District <sup>+</sup>	Claiborne	Distribution System Improvements - (Construction of a new 400,000 gal water storage tank in the Powell Valley/Speedwell Area; installation of approximately 7,500 LF of 10-inch diameter PVC supply waterlines; and modifications to the existing pressure reducing station.)	\$	800,000	\$ 33,242,679	\$	-	\$	19,653,000	TN0000022	20	Oct-19	Aug-20	Mar-21
16	45	20	12,510	Fayetteville	Lincoln	Distribution System Improvements (Improvements to the WTP to include solids management, disinfection byproduct control, and disinfection; WST and booster pumping station improvements; and WL replacements and extensions.)	\$	11,687,000	\$ 44,929,679	\$	-	\$	19,653,000	TN0000242	20	Sep-19	Jan-21	Dec-25
17	45	20	30,743	Crossville	Cumberland	Waterline Extension (Installation of approximately 6,000 LF of 10-inch diameter waterlines in the Meadow Park Lake Area.)	\$	585,000	\$ 45,514,679	\$	-	\$	19,653,000	TN0000150	20	Sep-19	Oct-19	Apr-20
18	45	30		First Utility District of Hawkins County	Hawkins	Distribution System Improvements (Construction of a 560 gpm water booster pumping station; installation of approximately 11,000 LF of 12-inch diameter waterlines; and the decommission of the Hord Creek WTP.)	\$	950,000	\$ 46,464,679	\$	-	\$	19,653,000	TN0000109	20	Sep-19	Nov-19	Dec-19
19	45	40	1,922	Collinwood <sup>†</sup>	Wayne	Distribution System Improvements (Construction of a new WST and upgrading undersized waterlines.)	\$	1,078,000	\$ 47,542,679	\$	-	\$	19,653,000	TN0000127	20	Jan-20	Mar-20	Sep-20
20	45	40	7,674	Smith Utility District <sup>+</sup>	Smith/DeKalb	Waterline Replacement (Replacing existing waterlines with 8-inch or 10-inch PVC or HDPE waterlines along Main Street in Gordonsville.)	\$	2,265,000	\$ 49,807,679	\$	-	\$	19,653,000	TN0000636	20	Mar-20	Jun-20	Dec-20

COMPREHENSIVE LIST

sk	Imaludaa 5 m	mainta fa	u havina an an	proved Growth Plan	+ Small System less tl	Total DWSRF	\$	328,109,220			\$	44,596,000	Tot	al Green Requ	iested				
Rank	Priority Points*	АТРІ	Population Served	Local Government	County	Project Description	Tota	l Project Amount	Total	nning Total of Project Amount Requested (\$)	Gree	en Component Amount		en Component unning Total (\$)	PWSID# TN000	Expected Term (Years)	Expected Loan Award Date (mm / yy)	Const. Start	Const. Completion
21	45	40	10,602	Lewis County	Lewis	Water Line Extension (Installation of approximately 44,480 LF of waterlines in the Indian Creek and Big Swan Creek Road Areas.)	\$	1,453,340	\$	51,261,019	\$	-	\$	19,653,000	TN0000304	25	Feb-20	Apr-20	Dec-20
22	45	40	19,704	Lawrenceburg	Lawrence	Waterline Replacement (Replacing approximately 7,500 LF of existing 2-inch diameter galvanized waterlines in the Hood Hills Area; upgrading the Crockett Pump Station; and construction of a 300,000 gal elevated WST.)	\$	2,850,000	\$	54,111,019	\$	-	\$	19,653,000	TN0000392	20	Sep-19	Mar-20	Sep-21
23	45	50	18,668	Lafayette	Macon	WTP Expansion (Expanding the existing WTP from 2MGD to 4MGD to include the construction of a flocculation basin, tow sedimentation basins, a mixed media filter, and 2MG clear well; and expansion of the existing building.)	\$	4,500,000	\$	58,611,019	\$	-	\$	19,653,000	TN0000373	20	Jan-20	Apr-20	Jun-21
24	45	50	36,842	Oak Ridge	Anderson/Roane	GREEN - New Water Treatment Plant (Construction of a 16MGD membrane filtration WTP.)	\$	18,414,703	\$	77,025,722	\$	6,200,000	\$	25,853,000	TN0000522	30	Jan-20	Mar-20	Mar-22
25	45	50	36,842	Oak Ridge	Anderson/ Roane	Distribution System Improvements	\$	4,000,000	\$	81,025,722	\$	-	\$	25,853,000	TN0000522	30	Jan-20	Mar-20	Mar-22
26	45	50	81,325	Cleveland	Bradley	Pump Station Upgrades (Upgrades to the Dempsey Street Water Booster Pump Station.)	\$	737,700	\$	81,763,422	\$	-	\$	25,853,000	TN0000117	20	Sep-19	Oct-19	Jan-20
27	45	50	81,325	Cleveland	Bradley	WTP Improvements (Construction of a new high service pump station adjacent to the Cleveland Filter Plant.)	\$	6,982,100	\$	88,745,522	\$	-	\$	25,853,000	TN0000117	20	Apr-20	Apr-20	Mar-21
28	45	60		Loretto <sup>+</sup>	Lawrence	Waterline Extension (Installation of approximately 13,200 LF of waterlines.)	\$	2,325,000	\$	91,070,522	\$	-	\$	25,853,000	TN0000408	20	Sep-19	Mar-20	Sep-21
29	45	60	19,262	Ocoee Utility District	Bradley/Polk	New Water Treatment Plant (Construction of a 2.0 MGD WTP and 500,000 gal clearwell to replace existing Wildwood WTP.)	\$	6,000,000	\$	97,070,522	\$	-	\$	25,853,000	TN0000525	30	Jul-20	Mar-20	Feb-21
30	45	60	19,262	Ocoee Utility District	Bradley/Polk	WTP Improvements (Construction of a new 200,000 gal clearwell to replace existing clearwell at the Carpenter Springs WTP.)	\$	800,000	\$	97,870,522	\$	-	\$	25,853,000	TN0000525	30	Jul-20	Mar-20	Sep-20
31	45	70	637,216	Metropolitan Nashville	Davidson	GREEN - Water Storage Tank Replacement (Construction of a new 2.5MG 38th Ave WST)	\$	8,120,000	\$	105,990,522	\$	8,120,000	\$	33,973,000	TN0000494	20	Aug-19	Jul-19	Oct-20

COMPREHENSIVE LIST

Total DWSRF \$ 328,109,220 44.596.000 Total Green Requested \*Includes 5 points for having an approved Growth Plan + Small System less than 10,000 population **Running Total of** Expected Total Project Amount Green Componen Loan Award Expected Green Component Running Total PWSID# Priority Population Term Date Const. Const. ATPI **Local Government Project Description Total Project Amount** Rank Points\* Served County Amount TN000.. (Years) (mm / yy) Start Completion 637,216 Metropolitan Nashville Davidson Waterline Replacement (Replacing 7,000,000 \$ 112,990,522 33,973,000 45 TN0000494 Aug-19 Aug-19 Aug-20 approximately 14,340 LF of 2-inch thru 8-inch diameter cast iron waterlines with 8-inch diameter waterlines in the 12th Ave S Area.) 33 2,336 Bell Buckle<sup>+</sup> Bedford New Water Storage Tank (Webb School Water \$ 113,876,522 33,973,000 TN0000044 45 90 886,000 \$ Sep-19 Apr-19 Aug-19 Storage Tank) 308 Candlewood Lakes POA Water GREEN - Water Meter Replacement 34,151,000 TN0000797 34 45 100 Hardeman 178,000 \$ 114.054.522 178,000 30 Sep-19 Oct-19 Dec-19 Works, Inc. (Installation of AMR meters and associated appurtenances.) 35 25 12,630 Erwin Utilities Authority Unicoi GREEN - Water Meter Replacement 116,054,522 2.000.000 36.151.000 TN0000231 20 Jan-20 Jul-20 Dec-21 (Installation of AMR meters and leak detection equipment within the Erwin Utilities service 36 25 40 15.139 Harriman Utility Board Roane/Morgan Water Meter Replacement (Replacing 116,754,522 36,151,000 TN0000287 20 Sep-19 Oct-19 Sep-20 approximately 2,048 meters that will be compatible with AMI systems.) 120,254,522 \$ 37 25 40 95,501 Jackson Energy Authority Madison GREEN - Water Meter Replacement 3,500,000 \$ 3,500,000 39,651,000 TN0000299 20 Sep-19 Sep-19 Sep-21 (Replacing approximately 37,000 existing water meters with AMR/AMI meters.) 38 Madison 1,600,000 \$ 121,854,522 \$ 39,651,000 TN0000299 25 40 95,501 Jackson Energy Authority Distribution System Improvements 20 Sep-19 Sep-19 Sep-21 (Construction of a new WST and raw water 39 3,130 Alexandria+ DeKalb GREEN - Water Meter Replacement (Replace 121,874,522 \$ 20,000 39,671,000 25 50 Jan-20 NA NA approximately 900 water meters with AMR meters) Planning and Design Only 40 25 50 81,325 Cleveland Bradley New Water Storage Tank (Construction of the 122,864,522 \$ 39,671,000 TN0000117 20 Sep-19 Oct-19 Apr-20 new .5MG Cherokee Gateway Boulevard WST) TN0000033 41 25 60 9,039 Atoka+ Tipton New Water Treatment Plant 3,600,000 126,464,522 39,671,000 20 Oct-20 Jan-21 Jan-23 1,400,000 \$ 127,864,522 \$ 42 25 60 35,609 Lebanon Wilson New Water Storage Tank (Construction of a 1.0 \$ 39,671,000 TN0000393 20 Sep-19 Jul-20 Aug-19 MG WST at Seay Hill) Water Storage Tank Improvements TN0000469 43 25 70 6,426 Minor Hill Utility District<sup>+</sup> Giles 400,000 \$ 128,264,522 39,671,000 20 Mar-20 Mar-20 Jun-20 (Improvements to the tank mixing system at the Anthony Hill WST) 44 25 70 6,426 Minor Hill Utility District<sup>+</sup> Giles Water Storage Tank Improvements 400,000 \$ 128,664,522 39,671,000 TN0000469 Mar-20 Mar-21 Jun-21 20 (Improvements to the tank mixing system at the Kedron WST) 45 25 70 6,426 Minor Hill Utility District<sup>+</sup> Giles Water Storage Tank Improvements 400,000 \$ 129,064,522 \$ 39,671,000 TN0000469 20 Mar-20 Mar-21 Jun-21 (Improvements to the tank mixing system at the Minor Hill WST) 46 25 80 1,536 Huntland<sup>+</sup> Franklin GREEN - Water Meter Replacement 400,000 129,464,522 400,000 40,071,000 TN0000317 30 Sep-19 Jan-20 Apr-21 (Replacing existing water meters with AMR

COMPREHENSIVE LIST

ate.				10 10	+ Small System less that	Total DWSRF	\$	328,109,220		\$	44,596,000	Total Gre	en Req	uested				
Rank 47	Priority Points* 25	ATPI 100	Population Served	Local Government Water & Wastewater Authority of Wilson County	County Wilson/Trousdale	Project Description  GREEN - Water Meter Replacement (Installation of approximately 7,800 AMI meters with leak detection; pressure sensors, and software integration.)	Total \$	Project Amount 3,000,000	Running Total of Total Project Amount Requested (\$) \$ 132,464,522	Gree	en Component Amount 3,000,000	Green Com Running (\$) \$ 43,0		PWSID# TN000 TN0000191	Expected Term (Years)	Expected Loan Award Date (mm / yy) Jul-19	Const. Start Jun-19	Const. Completion Jun-21
48	65	10	5,366	Jellico <sup>+</sup>	Campbell	GREEN - Water Treatment Plant Improvements (Replace blowers, intake pumps, and high service pump motors at the existing WTP; and rehabilitate concrete basins and install new equipment, pumps, and misc piping at the old WTP.)	\$	1,725,000	\$ 134,189,522	\$	1,350,000	\$ 44,42	21,000	TN0000330	20	Nov-19	Oct-20	Dec-21
49	65	30	973	Trezevant <sup>+</sup>	Carroll	WTP Improvements (Rehabilitation of the wells, replace aeration equipment, and installation of new high service pumps, controls, and electrical components.)	\$	628,000	\$ 134,817,522	\$	-	\$ 44,4	21,000	TN0000710	20	Jan-20	Mar-20	Sep-20
50	65	50	61,926	Columbia	Maury/Williamson	Water Treatment Plant Upgrades and Distribution System Improvements	\$	170,388,040	\$ 305,205,562	\$	-	\$ 44,43	21,000	TN0000128	20	Mar-20	Sep-19	Jun-27
51	65	60		Munford <sup>+</sup>	Tipton	Water Treatment Plant Improvements (Rehabilitation of ground water well #4)	\$	110,390	\$ 305,315,952	\$	-	\$ 44,4	21,000	TN0000490	20	Oct-19	Nov-19	Dec-19
52	45	10	6,143	Huntingdon <sup>+</sup>	Carroll	Distribution System Improvements (Replacing existing waterlines on Main Street; extending waterlines to customers along Hwy 77; and replacing existing water meters with AMR meters.) Planning and Design	\$	150,000	\$ 305,465,952	\$	-	\$ 44,4	21,000	TN0000316	20	Sep-19	NA	NA
53	45	30	10,602	Hohenwald	Lewis	Water Line Extension (Installation of approximately 44,480 LF of waterlines in the Indian Creek and Big Swan Creek Road Areas.)	\$	1,500,000	\$ 306,965,952	\$	-	\$ 44,4	21,000	TN0000304	20	Feb-20	Apr-20	Dec-20
54	45	50	98	Hiwassee Utilities Commission	Bradley/McMinn	WTP Improvements (Converting the disinfection system from chlorine to sodium hypochlorite; construction of a new chemical storage building; improvements to the compressed air system; and the installation of new control valves and instrumentation.)	\$	2,620,000	\$ 309,585,952	\$	-	\$ 44,4	21,000	TN0000831	20	Oct-19	Mar-20	Feb-21
55	45	50	2,916	Carthage <sup>+</sup>	Smith	Waterline Replacement (Installation of approximately 1,000LF of 6-inch diameter waterlines.)	\$	135,000	\$ 309,720,952	\$	-	\$ 44,4	21,000	TN0000095	20	Oct-19	Dec-19	Mar-20
56	45	60	9,384	Munford <sup>+</sup>	Tipton	Water Treatment Plant Improvements (Rehabilitation of the sand filters.)	\$	79,415	\$ 309,800,367	\$	-	\$ 44,4	21,000	TN0000490	20	Jan-20	Mar-20	Jun-20
57	45	60	35,609	Lebanon	Wilson	Waterline Replacement (Installation of approximately 6,600 LF of 16-inch diameter Williams St/Baddour Pkwy water transmission main.)	\$	2,100,000	\$ 311,900,367	\$	-	\$ 44,4	21,000	TN0000393	20	Mar-20	Jul-20	Feb-21

COMPREHENSIVE LIST

						Total DWSRF	\$	328,109,220		\$ 44,596,000	To	tal Green Req	uested				
	*Includes 5	points fe	or having an ap	pproved Growth Plan	+ Small System less tha	n 10,000 population											
Rank	Priority Points*	АТРІ	Population Served	Local Government	County	Project Description	Total	Project Amount	Running Total of Total Project Amount Requested (\$)	Green Component Amount		en Component unning Total (\$)	PWSID# TN000	Expected Term (Years)	Expected Loan Award Date (mm / yy)	Const. Start	Const. Completion
58	45	70	50,155	Smyrna	Rutherford	Waterline Relocation (Nissan Drive/Jefferson	\$	6,500,000	\$ 318,400,367	\$ -	\$	44,421,000	TN0000639	20	Jun-20	Sep-20	Oct-21
						Pike along SR266 to the 840 Interchange)											
59	45	80	8,229	Walden Ridge Utility District <sup>+</sup>	-	Distribution System Improvements (Construction of a new pump station, repairs to existing pump station, and installation of approximately 4,500 LF of 12-inch DIP water main, and installation of a 16-inch water main to connect to an existing 12-inch waterline.)	\$	6,000,000	\$ 324,400,367	\$ -	\$	44,421,000	TN0000635	20	Apr-20	May-20	Jan-22
60	25	10	·		,	Water Treatment Plant Improvements (Renovation of the clearwell at the Powell Street WTP.)	\$	700,000	\$ 325,100,367		\$	44,421,000	TN0000080	20	Oct-20	Jun-20	Dec-20
61	25	30			•	New WST (Construction of a 1.5MG ground WST.)	\$	2,833,853	\$ 327,934,220	\$ -	\$	44,421,000	TN0000201	20	Sep-20	Feb-21	Oct-22
62	25	70	1,536	Huntland <sup>+</sup>		GREEN - Water Meter Replacement (Installation of AMR meter throughout distribution system.)	\$	175,000	\$ 328,109,220	\$ 175,000	\$	44,596,000	TN0000317	15	Jan-20	Apr-20	Jun-20

# Appendix 7 Training Activities (July 1, 2019-June 30, 2020)

Attached as separate document

## Appendix 7 - Communities Unlimited Inc. Training Activities

#### **CLASSES COMPLETED 2019-2020 Annie Chido**

2/19/2019	Decentralized	Murfreesboro	6
2/20/2019	Decentralized	Knoxville	2
7/9/2019	Distribution and Infrastructure	Murfreesboro	24
9/17/2019	Rules, Regulating, Reporting	Lafollette	2
9/25/2019	Rules, Regulating, Reporting	Dover	2
9/26/2019	Maintenance	Dover	2
9/29/2019	Rules, Regulating, Reporting	Athens	2
11/13/2019	Maintaining Compliance	Clarksville	24
3/11/2020	Operator Responsibility	Lenoir City	21

#### WATER SYSTEMS SERVED 2018 - 2020

Water System	Location	Pop Served
Graysville WS	Graysville, TN	1880
Copper Basin UD	Turtletown, TN	2778
City of Copperhill	Copperhill, TN	1315
Sewanne UD	Sewanne, TN	5634
Town of Oliver Springs	Oliver Springs, TN	7345
Deerfield Resort	LaFollette, TN	1088
Clearfork UD	Clairfield, TN	1807
Roane Central UD	Harriman, TN	6236
City of Tellico Plains	Tellico Plains, TN	5899
Bays Mountain MHP	Rockford, TN	85
Cherokee Hills UD	Copperhill, TN	309
Moe's Campground	Dover, TN	45
Doalnara Society	Dover, TN	123
Fat Daddy's Marina	Dover, TN	67
Bell Buckle Water System	Bell Buckle, TN	2462
Camp Marymount	Fairfield, TN	250
Eagle Bay Marina	Waverly, TN	99
Hohenwald WS	Hohenwald, TN	9739
Indian Creek Youth Camp	Liberty, TN	250
Ramer WS	Ramer, TN	297
Spencer WS	Spencer, TN	5103

Water System	Location	Pop Served
Wartrace Water Works	Wartrace, TN	3236
Mason's Boat Dock	Waverly, TN	175
Valley View Camp	Greenbrier, TN	160
Wayne County Water System 1-4	Waynesboro, TN	308
Wooten Woods Nature Camp	Only, TN	50
Bluebird Hills Mobile Home WS	Waverly, TN	97
Crazy Horse Canoe Rental	Waynesboro, TN	100
Sunny Ridge Campground	Springville, TN	117

29 Systems

57,054 Total population

#### **MTAS Utility Training**

Course	Date	# of Participants
Spring Hill - EOA01	8/23/2019	9 3
EOA03 Finance for Elected Officials - Spring Hill	8/23/2019	9 3
EOA05 Ethics and Open Meetings - Spring Hill	8/23/2019	9 3
EOA02 Introduction to Charters - Spring Hill	8/24/2019	9 3
EOA04 Council at Work - Spring Hill	8/24/2019	9 3
Introduction to Grant Writing - Jackson	3/10/2020	) 17
Introduction to Grant Writing - Knoxville	4/7/2020	18
Introduction to Grant Writing - Franklin	5/6/2020	20
2020 Capital Assets	5/7/2020	18
2020 Capital Assets	5/12/2020	18

#### **TDEC DWR Training: July 1, 2019 - June 30, 2020**

DATE NUMBER SUBJECT LOCATION

7/10/2019	5	EPA Region 4 State Directors Meeting	Atlanta, GA
7/10/2019		TAUD Regulatory Update (presented)	Lawrenceburg, TN
7/17/2019		ASDWA Summer Board Meeting	Boulder, CO
8/6/2019		AWOP National Meeting	Cincinnati, OH
8/19-21/2019		KY-TN Water Professionals Conference (took part in)	Louisville, KY
			,
8/19/2019		TN Drinking Water Update @ WPC Conf (presented)	Louisville, KY
8/21/2019		Laboratory Issues presentation @ WPC Conf (presented)	Louisville, KY
9/5/2019		AWOP KY/TN DBP PBT session #2	Stanford, KY
9/5/2019	9	AWIA Risk Assessment Webinar (took part in)	Columbia, TN
9/12/2019	50	TAUD Region Meeting - Region 2 & 3	Petros, TN
9/16/2019	45	TN Engineers Conference Drinking Water presentation	Franklin, TN
10/2/2019	15	TAUD Regulatory Update (presented)	Lawrenceburg, TN
10/22/2019	45	TAUD Regulatory Update (presented)	Murfreesboro, TN
10/25/2019	8	Duck River Purveyors Group (facilitator/host)	Columbia, TN
10/29/2019	1	2019 ASDWA annual meeting and board meeting	Tampa, FL
11/5/2019	1	AWOP Region 4 Meeting & Workshop	Charleston, SC
11/15/2019	1	AWIA Webinar (took part in)	Columbia, TN
12/3-6/2019	~40	EPA Sanitary Survey Training (took part in)	Murfreesboro, TN
12/11/2019	50	TAUD Region Meeting - Region 2 & 3	Kodak, TN
12/13/2019	3	AWOP KY/TN DBP PBT session #3	Somerset, KY
1/8/2020	15	TAUD Regulatory Update (presented)	Lawrenceburg, TN
1/22/2020	60	TAUD Regulatory Update (presented)	Fayetteville, TN
1/23/2020	50	TAUD Drinking Water Update (presented)	Murfreesboro, TN
2/5/2020	50	Introduction to AWOP - East TN	Knoxville, TN
2/7/2020	6	Duck River Water Purveyors Group (facilitator/host)	Columbia, TN
2/26/2020	75	Region 10 TAUD Meeting Regulatory Update	Chattanooga, TN
3/5/2020	75	TAUD Tech Conference SDWA Update	Knoxville, TN
3/11/2020	1	EPA Region 4 State Directors Meeting	Ponte Verde, FL

DATE	NUMBER	SUBJECT	LOCATION
3/9-13/2020	2	AWOP Region 4 Quarterly Meeting & Workshop	Winston-Salem, NC
3/24/2020	25	Laboratory QA Webinar (presented)	Columbia, TN
3/26/2020	1	ASDWA Spring Board meeting	virtual
3/26-27/20	30	TAUD Updates (presented and participated)	E. TN region virtual
4/20/2020	36	TAUD SDWA update	virtual
5/18/2020	50	TAUD EOP update	virtual

### TAUD Training Activities

Activity	# Days	Start Date	Location	CE Approved	# Hours CE	# of Attendees
Emergency Operations	1	7/1/2019	JEA Training Facility, 320 Highway 45 By-Pass, Jackson, TN 38301	any	6	16
Introduction to Variable Speed/Frequency Drive	1	7/2/2019	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any	6	11
Emergency Operations	1	7/3/2019	Clarksville Gas and Water, 2215 Madison Street, Clarksville, TN 37043-5237	any	6	5
Water Treatment Operations Week 1 Jackson	5	7/8/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any wt	12	0
Cross Connection Renewal	1	7/9/2019	Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any	6	11
Cross Connection Basic	3	7/10/2019	Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any	12	7
Practical Math for Wastewater Operators	3	7/16/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	12	4
Fundamentals of Collection Systems	5	7/22/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any cs	6	22
Water Treatment Operations Week 1 Murfreesboro	5	7/22/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	0
CPR/AED/Basic First Aid Class	1	7/23/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any	6	16
TOSHA Basic Safety For Utilities	1	7/24/2019	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any	6	13
Fundamentals of Water Treatment	5	7/29/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	8
Water Treatment Operations Week 1 Alcoa	5	7/29/2019	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804, USA	any wt	12	0
Practical Math for Distribution Operators	3	7/30/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any ds	6	6
Practical Math for Water Treatment Plant Operators	3	8/13/2019	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804	any wt	12	5
Introduction to Variable Speed/Frequency Drive	1	8/14/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	15
Advanced Variable Speed/Frequency Drive	1	8/15/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	0
Water Treatment Operations Week 2 Jackson	5	8/19/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any wt	12	0
Emergency Operations	1	8/20/2019	Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any	6	0
ntroduction to Pumps and Motors	1	8/20/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	11
Chemical Feed Pumps and Motors	1	8/21/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	12
Emergency Operations	1	8/21/2019	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any	6	20
Emergency Operations	1	8/22/2019	Johnson City Fire Hall, 106 Gray Commons Circle, Gray, TN 37615-5405	any	6	11
Emergency Pumps and Motors	1	8/22/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	13
Fundamentals of Wastewater Treatment Systems	5	8/26/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	12	11
Fundamentals of Water Distribution	5	8/26/2019	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804, USA	any ds	6	16
Fundamentals of Water Distribution	5	8/26/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any ds	6	19
Fundamentals of Water Treatment	5	8/26/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any wt	12	9
Cross Connection Renewal	1	8/27/2019	Hallsdale-Powell Utility, 3745 Cunningham Road, Knoxville, TN 37918	any	6	12
Cross Connection Basic	3	8/28/2019	Hallsdale-Powell Utility, 3745 Cunningham Road, Knoxville, TN 37918	any	12	16
TOSHA Health Hazards For Industry	1	9/4/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	0
Wastewater Issues and Regulation Update	1	9/4/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	6	7
Collection Systems Issues and Update	1	9/5/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any cs	6	0
TOSHA Basic Safety For Utilities	1	9/5/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	11
Water Treatment Operations Week 2 Alcoa	5	9/9/2019	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804, USA	any wt	12	0
Cross Connection Renewal	1	9/10/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	15
Cross Connection Basic	3	9/11/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	8
TOSHA Basic Safety For Utilities	1	9/11/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any	6	30
Water Treatment Operations Week 2 Murfreesboro	5	9/16/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	0
.ockout/Tag Out	0.5		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	3	0
Global Harmonizing System & Hazard Communication	0.5		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	3	0
DSHA 10-Hour Safety	1.5		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	10	0
DSHA Record Keeping	0.5		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	3	0
Cross Connection Renewal	1		JEA Facility, 604 South Royal Street, Jackson, TN 38301	any	6	19
Water Loss 2 day Class	2		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	12	11
Confined Space	1		Johnson City Fire Hall, 106 Gray Commons circle, Gray, TN 37615	any	6	14
Cross Connection Basic	3		JEA Facility, 604 South Royal Street, Jackson, TN 38301	any	12	13
Trench Excavation Competent Person	1		Johnson City Fire Hall, 106 Gray Commons Circle, Gray, TN 37615-5405	any ds or cs	6	10

Activity	Activity # Days Start Date Location					# of Attendees
Water Quality After the Meter and Customer Complaints	1	9/26/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	6	13
Membrane Water Treatment Class	3	10/2/2019	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804, USA	any wt	12	6
Cross Connection Renewal	1	10/8/2019	PET Dairy Building, 1113 Konnarock Rd., Kingsport TN 37664	any	6	10
Practical Math for Distribution Operators	3	10/8/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ds	6	5
Cross Connection Basic	3	10/9/2019	PET Dairy Building, 1113 Konnarock Rd., Kingsport TN 37664	any	12	16
Introduction to Disinfection Byproducts	1	10/17/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129			7
Water Quality After the Meter and Customer Complaints	1	10/22/2019	Kingsport Center for Higher Education, 330 W Market St, Kingsport TN 37660			19
Basic Microbiology For Drinking Water Personnel	1	10/22/2019	Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any wt or ds	6	0
Cross Connection Renewal	1	10/22/2019	MLGW Training Facility, 4949 Raleigh-LaGrange Rd, Memphis, TN 38128-6016	any	6	4
Cross Connection Basic	3	10/23/2019	MLGW Training Facility, 4949 Raleigh-LaGrange Rd, Memphis, TN 38128-6016	any	12	3
Basic Microbiology For Drinking Water Personnel	1	10/24/2019	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any wt or ds	6	0
Knoxville Distribution System Cram	3	11/4/2019	City of Maryville Operations Center, 332 Home Ave., Maryville, TN 37801	any ds	6	42
Knoxville Water Treatment Cram	3	11/4/2019	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804	any wt	12	18
Murfreesboro Distribution System Cram	3	11/4/2019	Consolidated Utility District, 709 New Salem Road, Murfreesboro, TN 37129-3358	any ds	6	57
Murfreesboro Wastewater Treatment Cram	3	11/4/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	12	38
Murfreesboro Water Treatment Cram	3	11/4/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	28
Knoxville Collection System Cram	3	11/4/2019	First Utility District of Knox County, 122 Durwood Road, Knoxville TN	any cs	6	28
Knoxville Wastewater Treatment Cram	3	11/4/2019	City of Maryville Municipal Building, 400 West Broadway Ave, Maryville, TN 37801	any ww	12	14
Murfreesboro Collection System Cram	3	11/4/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any cs	6	50
Bacteriological Sampling	1	11/19/2019	Clarksville Gas & Water, 2215 Madison St, Clarksville, TN 37043, USA	any wt or ds	6	0
Cross Connection Renewal	1	11/19/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	16
Bacteriological Compliance	3	11/19/2019	Clarksville Gas & Water, 2215 Madison St, Clarksville, TN 37043, USA	any wt or ds	18	0
Bacteriological Monitoring and Reporting	2	11/20/2019	Clarksville Gas & Water, 2215 Madison St, Clarksville, TN 37043, USA	any wt or ds	12	0
Cross Connection Basic	3	11/20/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	19
Bacteriological Sampling	1	12/3/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	6	5
Bacteriological Compliance	3	12/3/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	18	17
Bacteriological Monitoring and Reporting	2	12/4/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	12	0
Basic Microbiology for Drinking Water Personnel	1	12/10/2019	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any wt or ds	6	0
Basic Microbiology For Drinking Water Personnel	1	12/12/2019	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	6	0
Cross Connection Renewal	1	1/7/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	13
Cross Connection Basic	3	1/8/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	6
Fundamentals of Water Distribution	5	1/13/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ds	6	0
Bacteriological Compliance	3	1/13/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	18	0
Cross Connection Renewal	1	1/14/2020	Clarksville Gas and Water, 2215 Madison St., Clarksville, TN 37043-5237	any	6	11
Cross Connection Basic	3	1/15/2020	Clarksville Gas and Water, 2215 Madison St., Clarksville, TN 37043-5237	any	12	0
Nastewater Issues and Regulation Update	1	1/21/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	6	28
Collection Systems Issues and Update	1	1/22/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any CS	6	38
Safe Drinking Water Act Update	1	1/23/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	6	43
fundamentals of Collection Systems	5	1/27/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any cs	6	11
undamentals of Water Treatment	5	1/27/2020	Blountville Utility District Office, 3010 TN-126, Blountville, TN 37617, USA	any wt	12	0
Cross Connection Renewal	1	1/28/2020	JEA Facility, 604 South Royal Street, Jackson, TN 38301	any	6	9
ross Connection Basic	3	1/29/2020	JEA Facility, 604 South Royal Street, Jackson, TN 38301	any	12	6
Practical Math for Distribution Operators	3	2/4/2020	Alcoa Water Filtration Plant, 302 Sam Houston School Road, Maryville, TN 37804	any ds	6	0
Practical Math for Wastewater Operators	3	2/4/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	12	5
Cross Connection Renewal	1	2/4/2020	MLGW Training Facility, 4949 Raleigh-LaGrange Rd, Memphis, TN 38128-6016	any	6	0
Cross Connection Basic	3		MLGW Training Facility, 4949 Raleigh-LaGrange Rd, Memphis, TN 38128-6016	any	12	0
ntroduction to GPS Data Collection	0.5	2/12/2020	Knoxville Utilities Board, 4505 Middlebrook Pike, Knoxville TN 37921-5599	any ds or cs	3	0
Fundamentals of Water Treatment	5	2/17/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	13

Activity	# Days Start Date Location					# of Attendees
Cross Connection Renewal (overflow)	1	2/17/2020	TN American Water Building, 1490 Riverside Drive, Chattanooga, TN 37406-4326	any	6	12
Cross Connection Renewal	1	2/18/2020	TN American Water Building, 1490 Riverside Drive, Chattanooga, TN 37406-4326	any	6	22
Cross Connection Basic	3	2/19/2020	TN American Water Building, 1490 Riverside Drive, Chattanooga, TN 37406-4326	any	12	15
Wastewater Issues and Regulation Update	1	2/19/2020	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any ww	6	38
Collection Systems Issues and Update	1	2/20/2020	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any cs	6	48
Fundamentals of Wastewater Treatment Systems	5	2/24/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	12	11
Cross Connection Program Administration	1	2/26/2020	Johnson City Fire Hall, 106 Gray Commons Circle, Gray, TN 37615	any	6	0
Cross Connection Program Administration	1	2/27/2020	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any	6	11
Water Loss: Assessment and Solutions	1	2/27/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt or ds	6	0
Technology Conference	2	3/4/2020	Crowne Plaza Knoxville Downtown University, 401 W Summit Hill Dr SW, Knoxville, TN 37902	any	12	207
Flagger Certification Course	0.5	3/10/2020	Union City	any ds or cs	4	9
Confined Space	1	3/12/2020	Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any	6	14
Trench Excavation Competent Person	1	3/13/2020	Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any dc or cs	6	0
Fundamentals of Water Distribution	5	4/27/2020	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any ds	6	22
Fundamentals of Water Treatment	5	4/27/2020	JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any wt	12	5
Cross Connection Renewal	1	3/17/2020	PET Dairy Building, 1113 Konnarock Rd., Kingsport TN 37664	any	6	24
Practical Math for Distribution Operators	3	3/17/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ds	6	9
Cross Connection Basic	3	3/18/2020	PET Dairy Building, 1113 Konnarock Rd., Kingsport TN 37664	any	12	6
CPR/AED/Basic First Aid Class	1	5/26/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	0
Safe Drinking Water Act Update (Webinar)	1	3/24/2020	Blountville Utility District Office, 3010 TN-126, Blountville, TN 37617, USA	any wt or ds	6	50
Membrane Water Treatment Class	3	3/25/2020	Hendersonville Water Treatment Plant, 125 Indian Lake Rd., Hendersonville, TN 37075	any wt	12	0
Safe Drinking Water Act Update (Webinar)	1	3/25/2020	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any wt or ds	6	39
Wastewater Issues and Regulation Update (Webinar)	1	4/22/2020	Knoxville Utilities Board, 4505 Middlebrook Pike, Knoxville TN 37921-5599	any ww	6	26
Collection Systems Issues and Update (Webinar)	1	4/23/2020	Knoxville Utilities Board, 4505 Middlebrook Pike, Knoxville TN 37921-5599	any cs	6	35
Safe Drinking Water Act Update (Webinar)	1		Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any wt or ds	6	26
Safe Drinking Water Act Update (Webinar)	1		Cookeville Water Quality Control, 1860 South Jefferson Ave, Cookeville, TN 38506	any wt or ds	6	26
Cross Connection Basic	3		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	4
Confined Space Advanced (MOST)	2		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	0
Cross Connection Renewal	1		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	11
Cross Connection Program Administration	1		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	6
Practical Math for Water Treatment Plant Operators	3		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	4
Cross Connection Program Administration	1		Eastside Utility District, 3018 Hickory Valley Road, Chattanooga,TN 37416	any	6	0
Cross Connection Renewal (Webinar)	1		Hallsdale-Powell Utility, 3745 Cunningham Road, Knoxville, TN 37918	any	6	15
Introduction to GPS Data Collection	0.5		JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any ds or cs	3	0
Cross Connection Basic	3		Hallsdale-Powell Utility, 3745 Cunningham Road, Knoxville, TN 37918	any	12	0
Safe Drinking Water Act Update (Webinar)	1		Lawrenceburg Utility Systems, 1607 N Locust Ave, Lawrenceburg, TN 38464, USA	any wt or ds	6	10
Safe Drinking Water Act Update (Webinar)	1		JEA Training Center, 320 Highway 45 By-Pass, Jackson, TN 38301	any wt or ds	6	68
Confined Space (Webinar)	1		JEA Training Facility, 320 Highway 45 Bypass, Jackson, TN 38301	any	6	21
Trench Excavation Competent Person	1		JEA Training Facility, 320 Highway 45 Bypass, Jackson, TN 38301	any ds or cs	6	0
Bacteriological Compliance	3		Eastside Utility District, 3018 Hickory Valley Road, Chattanooga,TN 37416	any wt or ds	18	0
Bacteriological Sampling	1		Eastside Utility District, 3018 Hickory Valley Road, Chattanooga, TN 37416	any wt or ds	6	0
Bacteriological Monitoring and Reporting	2		Eastside Utility District, 3016 Fickory Valley Road, Chattanooga, TN 37416	any wt or ds	12	0
Knoxville Collection System Cram	3		Alcoa Public Works Operation Center, 725 Universal Street, Alcoa TN 37804	any wt or us	6	0
·	3		· · · · · · · · · · · · · · · · · · ·		6	0
Knoxville Distribution System Cram	3		City of Maryville Operations Center, 332 Home Ave., Maryville, TN 37801	any ds		0
Knoxville Wastewater Treatment Cram			City of Maryville Municipal Building, 400 West Broadway Ave, Maryville, TN 37801	any ww	12 12	0
Knoxville Water Treatment Cram	3		Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804	any wt		
Murfreesboro Collection System Cram	3		TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any cs	6	0
Murfreesboro Distribution System Cram	3	5/4/2020	Consolidated Utility District, 709 New Salem Road, Murfreesboro, TN 37129-3358	any ds	6	0

Activity	# Days	Start Date	Location	CE Approved	# Hours CE	# of Attendees
Murfreesboro Wastewater Treatment Cram	3	5/4/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ww	12	0
Murfreesboro Water Treatment Cram	3	5/4/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any wt	12	0
Arc Flash/Electrical Safety Training	1	5/14/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	0
EXPO	1	5/21/2020	James Ward Agricultural Center, 925 E. Baddour Parkway East, Lebanon, TN 37087	any	6	0
Introduction to GPS Data Collection	0.5	5/27/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37130	any ds or cs	3	0
Trench Excavation Competent Person (Hybrid)	1	5/27/2020	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any ds or cs	6	34
Confined Space (Hybrid)	1	5/28/2020	Lenoir City Center 7698 Creekwood Park Blvd. Lenoir City, TN 37772	any	6	29
Emergency Operations (Webinar)	1	5/28/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	14
Fundamentals of Water Distribution (Hybrid)	5	6/1/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ds	6	10
Cross Connection Renewal	1	6/2/2020	MLGW Training Facility, 4949 Raleigh-LaGrange Rd, Memphis, TN 38128-6016	any	6	0
Cross Connection Basic	3	6/3/2020	MLGW Training Facility, 4949 Raleigh-LaGrange Rd, Memphis, TN 38128-6016	any	12	1
Arc Flash/Electrical Safety Training	1	6/11/2020	Jackson Energy Authority, 320 Highway 45 By-pass, Jackson, TN 38301	any	6	0
Flagger Certification Course	0.5	6/19/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ds or cs	4	20
Crane Safety/Qualified Rigger & Signal Person	2	6/15/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	0
Confined Space (Hybrid)	1	6/17/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	22
Trench Excavation Competent Person (Hybrid)	1	6/18/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any ds or cs	6	23
Fundamentals of Water Distribution	5	6/22/2020	Alcoa Water Filtration Plant, 302 Sam Houston School Rd, Maryville, TN 37804, USA	any ds	6	0
Cross Connection Renewal	1	6/23/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	6	12
Cross Connection Basic	3	6/24/2020	TAUD Training Station, 840 Commercial Court, Murfreesboro, TN 37129	any	12	4
Emergency Operations (Webinar)	1	6/29/2020	JEA Training Facility, 320 Highway 45 By-Pass, Jackson, TN 38301	any	6	16

Fleming Training Center

		raining Cen			
Class Name		End Date	Enrollments	Number of Days	Location
4200 - Small Water Systems CE Seminar	7/9/2019			1	Fleming Training Center
4210 - Small Water Systems CE Seminar @ Johnson City	7/9/2019			1	Johnson City Environmental Field Office
4220 Small Water Systems CE Seminar @ Knoxville	7/9/2019			1	Knoxville Environmental Field Office
4270 - Small Water Systems CE Seminar @ Jackson	7/9/2019			1	Jackson Environmental Field Office
4201 - Water Treatment CE Seminar - Day 1	7/10/2019			1	Fleming Training Center
4211 Water Treatment Day 1 @ Johnson City	7/10/2019			1	Johnson City Environmental Field Office
4221 - Water Treatment Day 1 CE Seminar @ Knoxville	7/10/2019			1	Knoxville Environmental Field Office
4271 - Water Treatment Day 1 CE Seminar @ Jackson	7/10/2019			1	Jackson Environmental Field Office
4202 - Water Treatment CE Seminar - Day 2	7/11/2019			1	Fleming Training Center
4212 - Water Treatment Day 2 CE Seminar @ Johnson City	7/11/2019			1	Johnson City Environmental Field Office
4222 - Water Treatment Day 2 CE Seminar @ Knoxville	7/11/2019			1	Knoxville Environmental Field Office
4272 - Water Treatment Day 2 CE Seminar @ Jackson	7/11/2019			1	Jackson Environmental Field Office
4203 - Distribution Systems CE Seminaı	7/12/2019			1	Fleming Training Cente
4213 Distribution Systems CE Seminar @ Johnson City	7/12/2019			1	Johnson City Environmental Field Office
4223 - Distribution Systems CE Seminar @ Knoxville	7/12/2019			1	Knoxville Environmental Field Office
4273 - Distribution Systems CE Seminar @ Jackson	7/12/2019			1	Jackson Environmental Field Office
2222 - Wastewater Treatment Lab - Week 2	7/15/2019			5	Fleming Training Center
3101 - Introduction to Water Treatment for All Grades	7/15/2019			10	Fleming Training Cente
1207 - Biological / Natural Systems	7/16/2019			3	Jackson Environmental Field Office
3102 - Cross Connection Renewal Workshop	7/16/2019			1	Fleming Training Cente
2103 - Cross Connection Control Basic Workshop	7/17/2019			3	Fleming Training Center
1103 - Distribution Systems	7/22/2019			5	Fleming Training Cente
4101 - Wastewater Treatment CE Seminar - Day 1	7/23/2019			1	Fleming Training Cente
4111 - Wastewater Treatment Day 1 @ Johnson City	7/23/2019			1	Johnson City Environmental Field Office
4121 - Wastewater Treatment Day 1 @ Knoxville EFO	7/23/2019			1	Knoxville Environmental Field Office
4171 - Wastewater Treatment Day 1 @ Jackson EFO	7/23/2019			1	Jackson Environmental Field Office
4102 - Wastewater Treatment CE Seminar - Day 2	7/24/2019			1	Fleming Training Center
4112 - Wastewater Treatment Day 2 @ Johnson City EFC	7/24/2019			1	Johnson City Environmental Field Office
4122 - Wastewater Treatment Day 2 @ Knoxville EFC	7/24/2019			1	Knoxville Environmental Field Office
4172 - Wastewater Treatment Day 2 @ Jackson EFO	7/24/2019			1	Jackson Environmental Field Office
4103 - Collection Systems CE Seminar	7/25/2019			1	Fleming Training Cente
4113 - Collection Systems CE Seminar @ Johnson City EFC	7/25/2019			1	Johnson City Environmental Field Office
4123 - Collection Systems CE Seminar @ Knoxville EFC	7/25/2019			1	Knoxville Environmental Field Office
4173 - Collections Systems CE Seminar @ Jackson EFO	7/25/2019			1	Jackson Environmental Field Office
1203 - Collections Systems	7/29/2019			5	Fleming Training Cente
1009 - Math Fundamentals for Operators-in-Training	8/6/2019			3	Fleming Training Cente
4103 - Collection Systems CE Seminar	8/8/2019			1	Fleming Training Center
1205 - Introduction to Wastewater Treatment Grades 1 & 2	8/12/2019	8/16/2019		5	Fleming Training Cente
2201 - Introduction to Wastewater Treatment All Grades	8/12/2019			10	Fleming Training Cente
3102 - Cross Connection Renewal Workshop	8/13/2019	8/13/2019		1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	8/14/2019	8/16/2019		3	Fleming Training Cente
3110 - Advanced Water Treatment	8/26/2019	8/30/2019		5	Fleming Training Center
3102 - Cross Connection Renewal Workshop	8/27/2019	8/27/2019		1	City of Alcoa Service
2103 - Cross Connection Control Basic Workshop	8/28/2019			3	City of Alcoa Service
4305 - Lab QA/QC CE Seminar	9/5/2019			1	Fleming Training Cente
1014 - Basic Math for All Certifications	9/9/2019			4	Fleming Training Center
3102 - Cross Connection Renewal Workshop	9/10/2019	9/10/2019	7	1	Fleming Training Center

Class Name	Begin Date	End Date	Enrollments	Number of Days	Location
2103 - Cross Connection Control Basic Workshop	9/11/2019	9/13/2019	14	3	Fleming Training Center
3201 - Advanced Wastewater Treatment	9/16/2019			5	Fleming Training Center
4301 CE Seminar - All Certs	9/19/2019	9/19/2019	44	1	Fleming Training Center
2112 - Water Treatment Lab - Week 1	9/23/2019		5	5	Fleming Training Center
3102 - Cross Connection Renewal Workshop	9/24/2019	9/24/2019	9	1	Kingsport Water Services Operations Center
3300 - Backflow Repair Class	9/27/2019			1	Fleming Training Center
1102 - Applied Math for Distribution System Operators	9/30/2019	10/4/2019	0	5	Fleming Training Center
2212 - Wastewater Lab - Week 1	9/30/2019	10/4/2019	12	5	Fleming Training Center
2122 - Water Treatment Lab - Week 2	10/7/2019	10/11/2019	5	5	Fleming Training Center
2222 - Wastewater Treatment Lab - Week 2	10/14/2019	10/18/2019	11	5	Fleming Training Center
3102 - Cross Connection Renewal Workshop	10/15/2019	10/15/2019	8	1	Fleming Training Center
3120 - Water Treatment Review	10/15/2019		12	3	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	10/16/2019	10/18/2019	10	3	Fleming Training Center
1102 - Applied Math for Distribution System Operators	10/21/2019	10/25/2019	22	5	Fleming Training Center
1202 - Applied Math for Collection Systems Operators	10/22/2019	10/25/2019	15	4	Fleming Training Center
1101 - Applied Math for Water Treatment	10/28/2019	11/1/2019	15	5	Fleming Training Center
1201 - Applied Math for Wastewater Treatment Operators	10/28/2019	11/1/2019	12	5	Fleming Training Center
3102 - Cross Connection Renewal Workshop	11/12/2019	11/12/2019	8	1	Fleming Training Center
2001 - Small Water Systems	11/13/2019	11/15/2019	3	3	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	11/13/2019	11/15/2019	16	3	Fleming Training Center
4305 - Lab QA/QC CE Seminar	11/19/2019	11/19/2019	15	1	Chattanooga Environmental Field Office
2103 - Cross Connection Control Basic Workshop	11/20/2019	11/22/2019	8	3	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	12/4/2019	12/6/2019	14	3	Fleming Training Center
4301 CE Seminar - All Certs	12/12/2019	12/12/2019	30	1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	12/17/2019			1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	12/18/2019			3	Fleming Training Center
2001 - Small Water Systems	1/7/2020			3	Fleming Training Center
2201 - Introduction to Wastewater Treatment All Grades	1/13/2020			10	Fleming Training Center
3101 - Introduction to Water Treatment for All Grades	1/13/2020	1/31/2020	17	10	Fleming Training Center
3102 - Cross Connection Renewal Workshop	1/14/2020			1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	1/15/2020	1/17/2020	8	3	Fleming Training Center
4310- Laboratory QA/QC CE Seminar	1/23/2020			1	Fleming Training Center
1103 - Distribution Systems	2/3/2020			5	Fleming Training Center
4204 - Water Treatment/Distribution Systems CE Seminar	2/7/2020			1	Fleming Training Center
2010-Introduction to Laboratory Methods for Operators	2/10/2020			5	Fleming Training Center
3110 - Advanced Water Treatment	2/10/2020			5	Fleming Training Center
3102 - Cross Connection Renewal Workshop	2/11/2020			1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	2/12/2020			3	Fleming Training Center
1009 - Math Fundamentals for Operators-in-Traininւ	2/19/2020			3	Fleming Training Center
3300 - Backflow Repair Class	2/21/2020			1	Fleming Training Cente
1103 - Distribution Systems	2/24/2020			5	Fleming Training Center
3201 - Advanced Wastewater Treatment	2/24/2020			5	Fleming Training Cente
2112 - Water Treatment Lab - Week 1	3/2/2020			5	Fleming Training Center
1203 - Collections Systems	3/9/2020			5	Fleming Training Center
2212 - Wastewater Lab - Week 1	3/9/2020			5	Fleming Training Cente
4301 - All Certs CE Seminar	3/10/2020			1	Fleming Training Center
2122 - Water Treatment Lab - Week 2	3/16/2020	3/20/2020	9	5	Fleming Training Cente

Class Name	Begin Date	End Date	Enrollments	Number of Days	Location
3102 - Cross Connection Renewal Workshop	3/24/2020			1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	3/25/2020			1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	3/26/2020			1	Fleming Training Center
3103 - Coagulation / Flocculation Workshop	4/7/2020			3	Fleming Training Center
4103 - Collection Systems CE Seminar	4/7/2020			1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	4/14/2020			1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	4/15/2020			3	Fleming Training Center
1014 - Basic Math for All Certifications	4/21/2020			4	Fleming Training Center
3102 - Cross Connection Renewal Workshop	4/21/2020			1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	4/22/2020			3	Fleming Training Center
1014 - Basic Math for All Certifications	4/28/2020			4	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	4/28/2020		0	3	Cookeville Environmental Field Office
2103 - Cross Connection Control Basic Workshop	5/1/2020			3	Fleming Training Center
3102 - Cross Connection Renewal Workshop	5/1/2020			1	Cookeville Environmental Field Office
3102 - Cross Connection Renewal Workshop	5/1/2020		0	1	Fleming Training Cente
1102 - Applied Math for Distribution System Operators	5/4/2020	5/8/2020	1	5	Online
1202 - Applied Math for Collection Systems Operators	5/5/2020	5/8/2020	0	4	Fleming Training Center
3102 - Cross Connection Renewal Workshop	5/11/2020	5/11/2020	0	1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	5/12/2020	5/12/2020	0	1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	5/12/2020			1	City of Alcoa Service
2103 - Cross Connection Control Basic Workshop	5/13/2020		0	3	City of Alcoa Service
2103 - Cross Connection Control Basic Workshop	5/13/2020			3	Fleming Training Center
1101 - Applied Math for Water Treatment	5/18/2020			5	Fleming Training Cente
1201 - Applied Math for Wastewater Treatment Operators	5/18/2020			5	Fleming Training Cente
3102 - Cross Connection Renewal Workshop	5/18/2020			1	Fleming Training Cente
3102 - Cross Connection Renewal Workshop	5/19/2020			1	Nashville Environmental Field Office
2103 - Cross Connection Control Basic Workshop	5/20/2020			3	Fleming Training Cente
4310- Laboratory QA/QC CE Seminar	5/20/2020			1	Jackson Environmental Field Office
3102 - Cross Connection Renewal Workshop	5/26/2020			1	Fleming Training Cente
1207 - Biological / Natural Systems	5/27/2020			3	Fleming Training Cente
3102 - Cross Connection Renewal Workshop	5/27/2020			1	Fleming Training Cente
3120 - Water Treatment Review	5/27/2020			3	Fleming Training Cente
3102 - Cross Connection Renewal Workshop	5/28/2020			1	Fleming Training Cente
3300 - Backflow Repair Class	5/29/2020			1	Fleming Training Cente
2205-Introduction to Activated Sludge	6/1/2020			3	Fleming Training Cente
2103 - Cross Connection Control Basic Workshop	6/10/2020			3	Fleming Training Cente
4104 - Wastewater/Collection Systems CE Seminar	6/10/2020			1	Fleming Training Center
2001 - Small Water System	6/16/2020			3	Knoxville Environmental Field Office
3102 - Cross Connection Renewal Workshop	6/16/2020			1	Fleming Training Center
2103 - Cross Connection Control Basic Workshop	6/17/2020			3	Fleming Training Center
3102 - Cross Connection Renewal Workshop	6/22/2020			1	Fleming Training Center
3103 - Coagulation / Flocculation Workshop	6/23/2020			3	Fleming Training Center
3102 - Cross Connection Renewal Workshop	6/26/2020			1	Fleming Training Center
3102 - Cross Connection Renewal Workshop	6/29/2020			1	Fleming Training Center
4101 - Wastewater Treatment CE Seminar - Day 1	6/30/2020	6/30/2020	12	1	Fleming Training Cente