

Position Title:	Water Quality Specialist
Department:	Water & Wastewater
Reports To:	Director of Water & Wastewater and Water & Wastewater Treatment Supervisor
FLSA Status:	Non-Exempt (hourly)
Date Prepared:	August 6, 2026

Position Summary

The Water Quality Specialist serves as the primary owner of the Department's customer- and industry-facing compliance programs—including industrial pretreatment, cross-connection control, and fats, oils, and grease (FOG)—while managing all standardized regulatory reporting to TDEC, the EPA, and other governing agencies. In addition to program oversight, the position provides analytical and administrative support to the Water and Wastewater Departments and customers by performing water and wastewater analyses in accordance with state and federal EPA guidelines.

Essential Duties and Responsibilities

1. Industrial Pretreatment Program

- Administer all duties of the industrial pretreatment program in accordance with 40 CFR Part 403 and applicable TDEC requirements, including program documentation, procedures, and recordkeeping.
- Maintain the industrial user inventory; identify, classify, and periodically re-evaluate significant industrial users (SIUs) and other permitted or controlled dischargers among the Department's industrial accounts.
- Draft, issue, renew, and modify industrial user permits, discharge authorizations, and local limits documentation; coordinate local limits evaluations as required.
- Plan and conduct industrial user inspections, sampling events, and compliance monitoring; coordinate sample analysis with EU laboratory and the Department's state-licensed water quality laboratory.
- Review industrial self-monitoring reports, baseline monitoring reports, and periodic compliance reports; track compliance status and initiate enforcement response in accordance with the enforcement response plan.
- Prepare and submit the annual pretreatment report and all other pretreatment-related submittals to TDEC/EPA; maintain audit-ready program files.
- Serve as the primary point of contact for industrial customers on discharge requirements, permit conditions, and compliance assistance.

2. Cross-Connection Control Program

- Manage the Department's cross-connection control program in accordance with TDEC drinking water regulations and the Department's adopted cross-connection control plan.
- Manage and oversee the cross-connection program contractor, including scope of work, schedules, data deliverables, quality of testing records, and contract performance.
- Inspect residential, commercial, industrial, and institutional sites to identify actual and potential cross-connections; document findings and determine the appropriate backflow prevention assembly or method for each hazard.
- Work directly with customers to communicate requirements, coordinate installation of required backflow prevention assemblies, and verify completed installations and passing test results.

- Maintain the cross-connection/backflow assembly inventory and testing database, including annual test schedules, notifications, and compliance tracking.
- Coordinate cross-connection review for new services and new construction in cooperation with the team.
- Support the Department's sanitary survey readiness by keeping cross-connection program records complete, current, and audit-ready.

3. FOG (Fats, Oils, and Grease) Program

- Manage the FOG program to protect the collection system, lift stations, and the wastewater treatment plant from grease-related impacts.
- Maintain an inventory of food service establishments and other FOG contributors; establish and track grease interceptor/trap sizing, installation, and maintenance requirements.
- Conduct site inspections of food service establishments; review pumping/maintenance manifests and records; document findings and follow up on corrective actions.
- Provide customer education and compliance assistance to food service establishments and commercial customers.
- Coordinate with the team on grease-related line maintenance trends, hot-spot identification, and root-cause follow-up using CCTV and cleaning data.
- Recommend updates to the sewer use ordinance or FOG policy provisions as needed to support program effectiveness.

4. Regulatory Reporting Standardization

- Develop, document, and maintain a standard, schedule, and process for all recurring regulatory reporting to TDEC, EPA, and all other required agencies, covering drinking water and wastewater programs (e.g., DMRs/NetDMR, MORs, CCR, annual pretreatment report, cross-connection program reporting, and other required submittals).
- Maintain a master regulatory reporting calendar identifying each report, responsible preparer, data sources, internal review steps, submittal method, and due date.
- Coordinate data inputs to ensure reports are complete, accurate, and submitted on time.
- Establish document control and records-retention practices for all regulatory submittals; maintain audit-ready files supporting sanitary surveys, TDEC audits, and EPA program reviews.
- Monitor regulatory developments affecting Department reporting obligations and brief the Director on upcoming changes and their operational implications.

5. Safety, Hazard Communication & Environmental Compliance

- **Hazard Communication & Plans:** Maintain and annually review the facility's Hazard Communication Plan in accordance with OSHA standards (29 CFR 1910.1200) and Global Harmonized System (GHS) guidelines.
- **Chemical Tracking & Tier II Submittals:** Manage Safety Data Sheets (SDSs) across departmental areas and prepare annual online Tier II reports for facilities storing greater than or equal to 10,000 pounds of hazardous chemicals.
- **Safety Protocols:** Ensure field operations strictly adhere to safety protocols and Personal Protective Equipment (PPE) standards.

6. Customer Service, Outreach & Water Quality Investigations

- **Technical Contact:** Serve as the primary point of contact for commercial, industrial, and residential customers regarding discharge regulations, backflow compliance, and general water quality.
- **Water Quality Complaint Resolution:** Investigate residential drinking water complaints by partnering with operators on site visits, collecting field samples, documenting findings, and following up to ensure customer satisfaction.
- **Public Outreach & Notifications:** Prepare public notices, educational materials, and official notifications regarding water quality parameters, holiday schedules, or operational changes.

7. Administrative Coordination, Data Tracking & Procurement

- **Environmental Data Tracking:** Maintain perpetual weather records by logging daily precipitation, temperature, and weather data for electronic submittal to NOAA.
- **SOPs & Operational Forms:** Draft Standard Operating Procedures (SOPs) and generate operational forms to support plant and collection system management.
- **Procurement & Logistics:** Solicit annual quotes from vendors and private contractors and track departmental logs for accounting invoice processing.

8. General and Collaborative Duties

- Support continuous-improvement initiatives, including development of standard operating procedures for all assigned programs
- Prepare program status summaries and performance measures for the Director and, as requested, the President & CEO.
- Represent the Department professionally in interactions with customers, contractors, industries, and regulatory agencies.
- Assist with emergency response, sampling, or operational support as assigned; perform other related duties as assigned by the Director.

Knowledge, Skills, and Abilities

- **Regulatory & Compliance Knowledge:** Working knowledge of federal and Tennessee water and wastewater regulations, including 40 CFR Part 403 (pretreatment), TDEC drinking water and NPDES/SOP requirements, and cross-connection control rules.
- **Document & Technical Interpretation:** Ability to read and interpret permits, ordinances, regulations, plumbing/mechanical drawings, and laboratory results.
- **Field Inspections & Monitoring:** Ability to conduct field inspections safely, including at industrial facilities, food service establishments, and construction sites.
- **Data Systems & Software Proficiency:** Strong documentation, recordkeeping, and database skills; proficiency with Microsoft Office and the ability to work with GIS-based and electronic reporting tools (e.g., NetDMR, CROMERR-compliant systems).
- **Communication & Stakeholder Relations:** Effective, professional communication with customers, industries, contractors, and regulators, including the ability to explain requirements clearly and resolve compliance matters constructively.
- **Program & Task Management:** Sound judgment, initiative, and the ability to manage multiple programs, schedules, and deadlines independently.
- **Mathematical & Data Analysis:** Ability to perform basic algebra, unit conversions, rate/ratio computations, and statistical data analysis, including creating and interpreting linear and bar graphs in Excel.
- **Training & Instruction:** Ability to deliver clear, structured training to backup operational personnel using standardized checklists to ensure effective learning and performance.

Minimum Qualifications

- High school diploma or equivalent; associate or bachelor's degree in environmental science, biology, chemistry, engineering technology, or a related field preferred.
- Three (3) or more years of experience in water/wastewater operations, environmental compliance, industrial pretreatment, cross-connection control, or a closely related field; an equivalent combination of education, training, and experience may be considered.
- Valid Tennessee driver's license with an acceptable driving record.

Certifications and Licenses

- Tennessee Backflow Prevention Assembly Tester certification (through the TDEC Fleming Training Center program), or ability to obtain within twelve (12) months of hire.
- Tennessee wastewater and water distribution operator certification appropriate to assigned duties, or ability to obtain within a two (2) to four (4) years, consistent with TDEC operator certification requirements.

- Completion of TDEC/Fleming Training Center cross-connection control coursework and relevant pretreatment training (e.g., EPA Region 4 or KY/TN WEA pretreatment courses) preferred, or ability to complete within a reasonable period after hire.
- Completion of the Clean Water Professionals of Kentucky and Tennessee Pretreatment Certification Program Level I and Level II.

Physical & Environmental Demands

- **Work Environment & Location:** Combination of office work and field inspections at industrial sites, food service establishments, customer premises, and construction sites; exposure to outdoor weather conditions, confined space entry points (observation only unless trained and authorized), traffic, and typical utility hazards.
- **Physical Capabilities & Equipment Operation:** Ability to walk, stand, stoop, climb, and lift up to 50 pounds occasionally; ability to operate a department vehicle and standard inspection/sampling equipment. Precise manual dexterity to operate technical tools, scientific instruments, and computer keyboards.
- **Visual Acuity & Color Perception:** Sufficient vision to read fine gradations on measurement tools, gauges, instruments, and digital displays. Ability to distinguish subtle color gradients, turbidity, clarity, and fluorescence markers required for chemical and biological assessments.
- **Work Schedule:** Occasional work outside normal business hours for sampling events, inspections, or emergency response.

Core SERVICE Competencies

Excellence is the daily discipline of doing the right things the right way, even when no one is watching. It is what you practice on the ordinary days that keep you ready for the extraordinary days. Therefore, Erwin Utilities Authority expects its employees to practice and uphold the following SERVICE values.

- **Safety:** Dedicated to maintaining a safe work environment where everyone takes responsibility for their own safety and that of others. Proactively identifies hazards, adheres to safety protocols, operates equipment according to guidelines, and works collaboratively to prevent accidents and protect team well-being.
- **Efficiency:** Optimizes resources to eliminate waste, manage costs, and reach operational goals in a timely manner. Prioritizes workloads effectively to meet critical regulatory deadlines and streamlines daily workflows.
- **Reliability:** Consistently delivers dependable service and honors commitments made to teammates, management, and customers. Demonstrates punctual attendance, takes full ownership of responsibilities, and provides proactive communication if adjustments are required.
- **Vision:** Embraces innovative ideas, adapts to changing work environments, and contributes to a clear strategic direction that inspires and aligns the team with future goals.
- **Integrity:** Acts with unwavering honesty and transparency, building trust and respect with customers, colleagues, and community stakeholders. Operates with moral discipline and upholds company values in all situations.
- **Collaboration:** Partners effectively across internal departments and with external stakeholders. Builds positive team spirit, listens actively, communicates tactfully, and provides service-oriented support on daily tasks and specialized projects.
- **Excellence:** Maintains a commitment to continuous improvement and reaching the highest standards across all job functions. Executes QA/QC protocols with accuracy, maintains data integrity, and applies root-cause analysis and sound judgment to solve complex problems.