



DATE	January 2020
JOB CODE	WTRSYSTEC
FLSA	NON-EXEMPT
EEO	

JOB TITLE: Water System Technician
 DEPARTMENT/DIVISION: Public Works/Water Utilities
 REPORTS TO: Maintenance Crew Leader III (P.W. Utilities)

SUMMARY: Responsible for the repair of and preventative maintenance of pumps, motors, valves, motor control systems and related equipment necessary for maintaining the water/wastewater system.

ESSENTIAL JOB FUNCTIONS:

- Inspects, maintains, troubleshoots, and/or repairs:
 - Pumps, motors, valves, controls, transmitters, and electrical systems for water distribution systems;
 - Wastewater lift station equipment;
 - Monitors grease build-up, operation of submersible pumps, SCADA transmissions;
 - Chlorine and ammonia injection systems used in the treatment of water;
 - Obstruction lights on elevated towers;
 - Wireless data communication systems to include site security, and data information transmission and communications
 - Metering circuits, telemetry and other electronic instrumentation
 - Fresh water and wastewater distribution systems, which requires entering confined spaces;
 - Ground storage tanks.
 - Work order log and prioritizes reports from work orders
- Installs:
 - Motor starters, electrical motors, pump control circuits, level controls, automation controls circuits, instrumentation equipment, motorized valve operators, relays, transformers and lighting equipment
- Reviews and logs:
 - Voltage readings of motor controls;
 - Infrared temperature readings of bearings, shafts, coils, and couplings on all motors, pumps, and motor controls located at pump stations;
- Pressure readings on fire hydrants in residential areas
- Analyzes and recommends materials and/or equipment needs

SUPERVISORY/BUDGET RESPONSIBILITIES:

- Assist in the budget process related to conditions of assets

- Assist in the training of new employees in areas such as: reading gauges, charts, pump and motor controls, valve operations, computer controls, standard safety procedures, meters, etc.

KNOWLEDGE, SKILLS, AND ABILITIES:

- Knowledge of wireless data transfer systems;
- Knowledge of wireless communications and protocols;
- Knowledge of confined space entry techniques;
- Knowledge of the operation, maintenance, and repair of water/wastewater systems
- Knowledge of OSHA and the Texas Commission of Environmental Quality regulations applicable to water and wastewater systems
- Knowledge of the safety hazards and necessary precautions associated with assignments
- Knowledge of the principles and operating characteristics of pumps, motors, and monitoring equipment
- Knowledge of instrumentation diagnostics and repairs
- Skilled in maintaining pumps, motors, and SCADA systems;
- Skilled in maintaining water tank systems;
- Skilled in performing electrical testing and diagnostics;
- Skilled in performing preventative maintenance on applicable water and wastewater systems;
- Skilled in detecting, diagnosing, and correcting defects and malfunctions in any component of the water and wastewater system
- Skilled in reading and interpreting blueprints, diagrams, and sketches
- Skilled in the application of protective coatings to outdoor and indoor equipment in compliance with manufacturers' instructions
- Skilled in the preventive maintenance tasks on equipment as specified by manufacturers to include oil changes, greasing, fluid reservoir checks and adjusting alignment of couplings
- Ability to work long hours of time under stress during emergency situations
- Ability to work flexible hours and be on call one week at a time as scheduled
- Ability to climb ladders and work at various heights above ground up to 250 feet
- Ability to maintain accurate records of expenditures, tests, and repairs of water and wastewater systems

MINIMUM QUALIFICATIONS:

- High School Diploma or GED
- Two years of experience in the operation, maintenance, and repair of water and wastewater systems, to include one year of experience in maintaining and repairing related equipment.
- Work requires a valid State of Texas Driver's License.
- TCEQ Class C Water Distribution within thirty months of employment.
- TCEQ Class II Wastewater Collection or higher within thirty months of employment.

PREFERENCES:

- Background in electrical-mechanical diagnostics and repair
- Experience in SCADA operations
- Electrical or mechanical design
- Class A CDL TX State Driver's License

WORKING CONDITIONS:

- Frequent climbing to heights of 250 feet, balancing, reaching, sitting, standing, walking, stooping, kneeling, crouching, crawling, talking, seeing, hearing, smelling, and manual dexterity.
- Occasional lifting and carrying of over 100 pounds with assistance.
- Work is typically performed in an outdoor environment, with potential exposure to adverse weather conditions.
- Work is occasionally performed in close quarters, high and precarious places, and near moving mechanical parts.
- Potential exposure to risk of electrical shock, vibration, fumes, airborne particles, and infectious diseases.
- Ability to work long periods of time under stress during emergency situations
- Work flexible hours and be on call one week at a time

CONDITIONS OF EMPLOYMENT:

- Must pass pre-employment drug test.
- Must pass criminal history check.
- Must pass motor vehicle records check.
- Must obtain a Class C Water License within 30 months of employment
- Must obtain a Wastewater Collections License II within 30 months of employment.