



DATE	July 2023
JOB CODE	
FLSA	NON-EXEMPT
EEO	

JOB TITLE: Water System Technician
 DEPARTMENT/DIVISION: Public Works/Water Utilities
 REPORTS TO: Water Quality/Production Supervisor

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 and mixers, 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 and Elevated 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;
 - Vibrational analysis data
- Participates in inspecting water utilities sites for authorized entry, vandalism, leaks around tanks, and potential hazards on grounds. Performs routine cleaning and grounds maintenance activities at water pump stations and wastewater lift stations.
- Test run generators for water and wastewater sites, request repairs if necessary.
- Analyzes and recommends materials and/or equipment needs.
- Oversees contractors for water and wastewater system maintenance.

- Responds to emergency and on call situations.
- Performs other duties as assigned

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.
- Able to step in temporarily as Crew Leader III in the event of Crew Leader III's absence.

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
- Ability to weld

MINIMUM QUALIFICATIONS:

- High School Diploma or GED

- Two years of experience in the operation, maintenance, and repair of mechanical equipment, to include one year of experience in maintaining and repairing related equipment.
- OR
- An equivalent combination of education, experience and training that provides the required knowledge, skills and abilities.

PREFERENCES:

- Background in electrical-mechanical diagnostics and repair
- Experience in SCADA operations
- Electrical or mechanical design
- TCEQ issued water and/or wastewater licensing
- 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 possess a valid motor vehicle driver license.
- Must pass pre-employment drug test.
- Must pass criminal history check.
- Must pass motor vehicle records check.
- TCEQ Class D Water Distribution within twelve months of employment.
- TCEQ Class C Water Distribution within thirty months of employment.
- TCEQ Class I Wastewater Collection or higher within twelve months of employment.
- TCEQ Class II Wastewater Collection or higher within thirty months of employment.