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

DATE January 2013  
JOB CODE  
FLSA NON-EXEMPT  
EEO
• 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 D Water Distribution required.
• TCEQ Class C Water Distribution within two years of employment.
• TCEQ Class II Wastewater Collection or higher within two years of employment.
PREFERENCES:
- Background in electrical-mechanical diagnostics and repair
- Experience in SCADA operations
- Electrical or mechanical design

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 A CDL TX State Driver's License within 3 months of employment.
- Must obtain a Class C Water License within 2 years of employment
- Must obtain a Wastewater Collections License I within 2 years of employment.