

CITY OF CUMMING
DEPARTMENT OF UTILITIES
WATER POLLUTION CONTROL DIVISION
MAINTENANCE CREW MEMBER

GENERAL NATURE OF WORK

This is skilled technical work in the maintenance and repair of the electrical and mechanical components of the City's Advanced Water Reclamation Facility and outlying facilities. An employee in this position is responsible for conducting preventive and predictive maintenance on all pumps, motors, drives, shafts, valves, variable frequency drives (VFDs), Supervisory Control And Data Acquisition (SCADA) system, generators and transfer switch gear, electrical control panels, motor starters, breakers, fuses, etc. Duties are performed under the direct supervision of the Water Pollution Control Division Maintenance Crew Leader.

EXAMPLES OF WORK

- Monitors all Wastewater Pumping Stations and visits these outlying facilities daily to ensure their continual proper operation.
- Monitors SCADA system and brings operational problems to the attention of the Maintenance Crew Leader.
- Performs maintenance on each of the outlying pump stations such as cleaning wetwell and trash basket. Monitors generator fuel, oil and coolant levels. Mows grass and uses soil sterilizer as needed.
- Assists with maintenance activities such as greasing motors and bearings, changing gearbox oil, and rotating bearings as per manufacturer's recommendations.
- Checks condition of all plant equipment and motors periodically throughout assigned shift, which includes but is not limited to: Checks oil levels, RPM, temperature, and PSI. Checks for vibration and unusual noise.
- Works directly with the pump manufacturer regarding the proper operation and maintenance of the pumps, electrical control panel components, standby power generation system, and switch gear. Works with the pump manufacturer during annual maintenance event.
- Maintains proper corrosion control measures for components of Advanced Water Reclamation Facility (AWRF) and for the components of each pump station. This may include painting and/or sealing surfaces, and coating surfaces with coal tar as needed.

- Works with the Maintenance Crew Leader to keep **City of Cumming Wastewater Pumping Station Specifications** up to date.
- Works directly with contractors who are installing and building pump stations. Monitors the progress of new stations and ensures that the actual facility meets the design specifications and matches approved plans. Brings inconsistencies to the attention of the Maintenance Crew Leader.
- Is present at each new pump station's initial start-up. Approves proper rotation of pumps when started and ensures that pumps are easily removed from the wet well with the on-site crane. Approves proper operation of the stand-by generation system including transfer switchgear.
- Maintains proper documentation of maintenance performed on each piece of equipment with the City's Preventive Maintenance Computer Program. Records activities such as but not limited to changing oil, greasing bearings, repairing equipment, temperature, vibration problems, and new equipment installed.
- Hauls bio solids generated by the Advanced Water Reclamation Facility (AWRF) to the ultimate disposal site (landfill).
- Maintains the landscaping at each pump station site. This includes but is not limited to clearing fence lines, planting Leland Cypress trees or other barrier plants as required. Ensuring that all trash is removed from the site daily, i.e. the trash removed from the trash basket system. Cleans other trash from off the site and around the general vicinity of the site.
- Is available for on-call status when needed. Responds to calls from the AWRF, or pump stations for assistance with repair issues. Carries a beeper at all times which receives telephone calls from the auto-dialers within the system.
- Maintains City owned vehicles as per manufacturer's recommendations.
- Performs regular housekeeping on facility buildings and chemical feed area. This includes but is not limited to sweeping, mopping, waxing, buffing, painting, washing, and vacuuming.
- Records information received from telephone conversations regarding odor complaints and sewer leaks. Reports sewer leak information in a timely manner to the Distribution and Collection Division and the Daily Operations Supervisor.
- Maintains good public relations with water and sewer customers.
- Complies with all safety rules, regulations, and requirements of the City of Cumming and the Water Pollution Control Division.
- Completes other duties as assigned.

NECESSARY KNOWLEDGE, SKILLS, AND ABILITIES

- Basic knowledge of pumps, motors, hydraulics, pump curves, impeller operation, pump seals, flow monitoring, wastewater pump stations, wastewater collection systems, electrical control panels, variable frequency drives, motor starters, breakers, float balls, systems, multi-trode system, and cranes.

- Knowledge of radio transmission principles, computer system, MODBUS programming language, 4-20 milliamp systems, analog contacts, and internet connections as they relate to the City's SCADA System.
- Knowledge of electronics and mechanics.
- Basic knowledge of biology and chemistry.
- Knowledge of laboratory procedures and sample collection procedures and holding times.
- Knowledge of computer technology including but not limited to word processing, spread sheets, SCADA, and data entry.
- Ability to read, write, and perform mathematical calculations.
- Ability to read meters, charts, and graphs and to compile accurate data for facility records and reports.
- Ability to perform preventive maintenance on diesel fuel engines, gasoline engines, natural gas engines, and propane engines.
- Skills in interpersonal communication, both written and oral.
- Ability to work under general to limited supervision.
- Ability to understand and follow oral and written instructions.
- Knowledge of Federal, State, and Local rules, regulations, and standards governing waste water treatment.
- Knowledge of policies and procedures of the City of Cumming and the Water Pollution Control Division.
- Thorough knowledge of City safety rules and procedures.
- Exemplary attendance is required.

DESIRED EDUCATION, TRAINING, AND EXPERIENCE

Graduation from a standard high school, vocational school, or equivalency supplemented by additional courses in electronics and mechanics and one to three years of training as an electrician and/or mechanic, or an equivalent combination of training and experience.

NECESSARY SPECIAL REQUIREMENTS

Must hold or be able to acquire within one year, a Georgia Wastewater Collection System Operator's License. Must possess a valid driver's license.

Minimum Physical Requirements

Must be able to exert up to 100 pounds of force occasionally and up to 50 pounds of force frequently. Physical demand requirements are at levels of those for very heavy work.

FSLA Status: Non-Exempt

Classification: Entry Level

This job description does not constitute an employment agreement between the employer and the employee and is subject to change by the employer without notice as the needs of the employer and/or requirements of the job change.

REVISED: 12/22