

CITY OF CEDAR RAPIDS POSITION PROFILE	JOB CODE #/TITLE: AF166 Water Plant Electronics Technician
POSITION #/TITLE: 0597, 0731 Water Plant Electronics Technician	Adopted: 07-97 Revised: 12-13

POSITION DESCRIPTION

Dept /Division: Utilities/Water	Manager Level: Non-Manager
Salary Plan/Description: AFS/AFSCME	Salary Grade: 30
Reports To Position #/Job Code #/JC Title: 1370/NB299/Water Plant Maintenance Specialist	Dotted-line Reports To Position #/Job Code #/JC Title:
FLSA Status: Non-Exempt	City Overtime Status (Employee Type): Non-Exempt (Exception Hourly)
Physical Demand Rating: Heavy	Work Environment: Uncontrolled
Pre-employment Testing: Drug and health screening after contingent offer.	Position Testing: Knowledge & Skills Test, Pre-Employment Qualifications
Personal Protective Equipment: Eye, Head, Reflective Vest, Hearing, Respirator, Protective Clothing	

General Statement of Duties

Provides senior level technical services in electronic maintenance to sustain the operation of two water treatment plants, water distribution system, and hydroelectric facility with an emphasis on troubleshooting and problem-solving.

Distinguishing Features of the Class

Work is performed under general supervision, with the ability to exercise discretion in selection of work method and schedule.

Examples of Essential Work (Illustrative Only)

Maintains and repairs Programmable Logic Controllers (PLC), flow meters, on-line water quality analyzers, computers and controls, Supervisory control and Data Acquisition systems (SCADA), closed circuit television systems, automated filter controls and associated equipment;
 Installs, maintains, calibrates, and repairs a variety of electric and electronic measuring instruments, radio communications and equipment at the treatment plants and at remote field locations;
 Repairs, replaces, and maintains recorders, transmitters, transducers and various kinds of laboratory test equipment as necessary;
 Supplies and maintains necessary spare electronic components in plant inventory
 Uses computers, software, and peripheral devices to keep water treatment processes operating
 Designs, tests and implements basic electronic systems used in water treatment processes
 Advises superiors on instrumentation malfunctions and maintenance needs;
 Updates prints, schematics, technical manuals, and preventive maintenance records;
 Responds to after-hours emergencies;
 Wears and properly uses safety equipment including personal protective and fall prevention equipment, self-contained breathing apparatus (SCBA), respiratory protection and gas detection equipment;
 Performs all work duties and activities in accordance with City policies, procedures and safety practices;
 Attends work regularly at the designated place and time;
 Supports continuous process improvement initiatives;
 Performs related work as required.

Required Knowledge and Abilities

Extensive knowledge of process control and monitoring equipment to include PLC's, SCADA and telemetry systems, pressure and flow meters, transducers, radio control systems, recorders and other related equipment;

Knowledge of function and operation of specific instruments and electrical and electronic equipment used in a water treatment and distribution processes to include well fields;

Knowledge of OSHA permit-required confined space entry protocol, respiratory protection standards, right-to-know laws, CPR, AED, and First Aid;

Skills in methods and techniques of maintenance and repair of electrical and electronic instruments used in wells, water treatment, and distribution systems;

Ability to properly utilize the following equipment and tools: electronic testing equipment, recording voltmeter, oscilloscope, ohmmeter, calculator, mechanical hand tools, hydraulic and pneumatic test equipment, watt meter, capacitor analyzer, signal tracer, and frequency counter;

Ability to properly use the following safety and personal protective equipment: respirators, gas detectors, fall protection equipment and self-contained breathing apparatus (SCBA);

Ability to perform confined space entry, using permit-required protocol;

Ability to work under general supervision and exercise some discretion in work method and schedule;

Ability to work cooperatively and to maintain effective working relationships to accomplish job responsibilities;

Ability to quickly learn and put to use new skills and knowledge brought about by rapidly changing information and/or technology;

Ingenuity and inventiveness in the performance of assigned tasks.

Acceptable Experience and Training

Three years of experience in maintenance and repair of electrical or electronic equipment; successful completion of high school level course work in reading and math, and two years of vocational electronic training. Must hold the position of Water Plant Instrument Technician for a minimum of two years and meet testing requirements and other qualifications.

Required Special Qualifications

Valid Iowa Driver's License. State of Iowa certificate in water treatment within six months of appointment.

Essential Physical Abilities

Requires the following, with or without reasonable accommodation:

- Clarity of speech and hearing which permits the employee to communicate effectively;
- Sufficient vision which permits the employee to operate equipment and tools;
- Sufficient manual dexterity which permits the employee to operate equipment.