

CITY OF CEDAR RAPIDS POSITION PROFILE	JOB CODE #/TITLE: AF149 WPC Electronics Tech
POSITION #/TITLE: 0272 Water Pollution Control Electronics Technician II	Adopted: 03-08
	Revised:

POSITION DESCRIPTION

Dept /Description: Utilities/Water Pollution Control	Manager Level: Non-Manager
Salary Plan/Description: AFS/AFSCME	Salary Grade: 34
Reports To Position #/Job Code #/JC Title: 0419/NB199/WPC Electronic Instrument Supv	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: Very Heavy	Work Environment: Uncontrolled
Pre-employment Testing: Drug and health screening after contingent offer.	Position Testing: Health screening; Requires use of SCBAs
Personal Protective Equipment: Eye, Foot, Hand, Head, Foot, Hearing, Fall Protection, Respirator, Gas Monitor	

General Statement of Duties

Provides senior-level technical services in electronic maintenance, with an emphasis on programming, designing, 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. This classification is distinguished from the WPC Electronics Technician by lead responsibilities and programming and design of the WPC electronic instrumentation.

Examples of Essential Work (Illustrative Only)

Performs duties as lead technician when Electronics Instrumentation Supervisor is absent;
 Programs programmable logic controllers (PLC) used as process control computers;
 Updates prints, diagrams, O&M manuals, and other documents in PLC and Supervisory Control and Data Acquisition (SCADA) systems;
 Performs electrical analysis of existing and proposed process control systems;
 Provides technical analysis of operational control processes relating to software and hardware components of the control system;
 Administers system database for PLC program and logic and works in conjunction with Operations Control Specialist to update and maintain database program;
 Maintains and repairs Programmable Logic Controllers (PLC), computers and communications systems at the Water Pollution Control Plant and lift stations;
 Cleans, inspects and calibrates pneumatic, electrical and electronic instrumentation of various kinds;
 Advises superiors on instrumentation malfunctions and maintenance needs;
 Wears and properly uses safety equipment including personal protective, fall protection equipment, self-contained breathing apparatus 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

Comprehensive knowledge of the programming and repair of PLCs;
Good knowledge of SCADA systems;
Good knowledge of communication fiber system and hardware components;
Considerable knowledge of basic electricity, theory and function of electronics and electronic instrumentation;
Specific knowledge of the theory, language and operation of Programmable Logic Controllers (PLC) and computer systems;
Knowledge of OSHA permit-required confined space entry protocol, respiratory protection standards, right-to-know laws, CPR, and First Aid;
Skill in reading, writing, and understanding the specialized vocabulary of wastewater treatment;
Skill in understanding the specialized schematics of computers and electronic instrumentation, and in the methods and techniques of maintenance and repair of electronic instrumentation;
Ability to properly utilize the following equipment and tools: electronic testing equipment, oscilloscope, voltmeter, ohmmeter, calculator, mechanical hand tools, hydraulic and pneumatic test equipment, personal protective equipment, gas detectors, fall protection equipment and self-contained breathing apparatus;
Ability to perform confined space entry, including rescue, using permit-required protocol;
Ability to work under general supervision and exercise 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

Graduation from High School or GED, supplemented with additional course work in electronics maintenance; and
Two years of electronic vocational training; and
Considerable experience in programming, maintenance and repair of electrical, electronic and computer equipment; or
Any equivalent combination of experience and training which provides the knowledge and abilities necessary to perform the work.

Required Special Qualifications

None

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
Sufficient mobility and physical reflexes which permits the employee to perform in a confined space, including rescue.
Sufficient physical abilities which permits the employee to wear and use personal protective equipment.