CLASS SPECIFICATION

SAN DIEGO CITY CIVIL SERVICE COMMISSION

INSTRUMENTATION AND CONTROL SUPERVISOR – 1522

DEFINITION:

Under direction, to plan, supervise, and participate in the work of subordinate staff who install, test, adjust, modify, and maintain the most complex fixed and portable electronic and telemetry systems and equipment; design, modify, and make programming and software improvements on computerized system control and data acquisition operations; analyze problems and make necessary repairs on electronic instrumentation control systems required to interface with process control computers; to instruct Instrumentation Control Technicians and other subordinate staff in the more difficult and complex aspects of their work assignments; and to perform related work.

* EXAMPLES OF DUTIES:

- Supervises, plans, schedules, assigns, and participates in the work of skilled subordinate staff who design, install, test, adjust, modify, and maintain digital and logic circuitry and microprocessor-controlled devices and elements, such as programmable logic controllers, process control equipment, telemetering devices, recorders, sensors, alarms, and controllers on a wide variety of water and wastewater treatment process instruments and devices;
- Operates computer terminals, portable programming units, and other complex electronic test equipment, to analyze and troubleshoot instrumentation and control systems, instrumentation interface with process control computers, and process control problems;
- Designs, modifies, and tests complex relay ladder logic instruction sequences in the form of computer programs which direct logic controllers to monitor and control water or waste water treatment processes;
- Trains subordinate staff in new and current procedures of maintenance and troubleshooting of a wide variety of electronic equipment, control systems, and components;
- Checks job requirements and requisitions material;
- Performs mathematical computations for calibrating instruments and determining values of inputs and outputs in computer programs;
- Reviews, plans, and coordinates work with vendors, control computer hardware and software specialists, and plant operating and engineering personnel in determining process parameters, technical specifications for new and existing installations, and other technical matters regarding digital unit process control systems;
- Enforces safety regulations;
- Keeps records and prepares reports;
- Reviews and evaluates the work performance of subordinates;
- Performs related work.

* EXAMPLES OF DUTIES performed by employees in this class. The list may not include all required duties, nor are all listed tasks necessarily performed by everyone in this class.

<u>MINIMUM QUALIFICATIONS</u>:

Please note: the minimum qualifications stated below are a guide for determining the education, training, experience, special skills, and/or license which may be required for employment in the class. These are re-evaluated each time the position is opened for recruitment. Please refer to the most recent Job Description for updated minimum qualifications: https://www.governmentjobs.com/careers/sandiego/classspecs.

Two years of full-time experience performing duties at a level equivalent to an Instrumentation and Control Technician with the City of San Diego (a position that installs, tests, adjusts, modifies, and maintains digital and analog circuitry, microprocessor-controlled devices, programmable logic controllers, variable frequency devices, electric valve actuators, process control equipment, telemetry devices, sensors, and controllers on a wide variety of water and wastewater treatment process instruments and devices; writes, modifies, and tests complex relay ladder logic or function block instruction sequences in the form of computer programs to monitor and control water or wastewater treatment processes; operates computer terminals, portable programming units, or other complex electronic test equipment to analyze and troubleshoot instrumentation and control systems; performs mathematical computations to calibrate instruments and determine values of inputs and outputs in computer programs; and maintains records of work performed). Qualifying experience must include experience in electronic instrumentation and control equipment, process control equipment, and programmable logic controllers.