INSTRUMENTATION TECHNICIAN

Class Definition

Under supervision, assists in the installation, alteration, maintenance, repair, and calibration of a variety of process instrumentation equipment used in Water or Wastewater Treatment facilities.

Distinguishing Characteristics

Instrumentation Technician is an entry level class in which incumbents assist with a variety of specialized and skilled duties involving the installation, repair, maintenance, and calibration of water/wastewater related instrumentation. This class differs from Instrumentation Specialist in that the latter is a journey level class in which incumbents perform the full range of duties under a minimum of supervision.

Typical Tasks

(This list is neither inclusive nor exclusive. Consequently, this information may not reflect Essential Functions for this class.)

Assists in documenting procedures and readings of process control instrumentation and related equipment.

Assists in troubleshooting, calibrating, and repairing process control instrumentation and related equipment.

Assists in conducting periodic preventive maintenance inspection of all process control instruments; cleans, lubricates, calibrates, and adjusts as conditions indicate.

Assists in laying out, installing, aligning, and placing into service new metering and recording devices; calibrates as required.

Reads and interprets wiring diagrams, mechanical drawings, manuals and specifications.

Assists in configuring process and instrumentation diagrams, control loop parameters and discrete logic for programmable logic controllers and distributed control systems.

Uses and maintains a variety of hand and power tools and bench test equipment related to instrument installation and maintenance.

Performs related duties as required.

Knowledge, Abilities, and Skills

Knowledge of methods, practices, and equipment used in the maintenance, repair, testing, and
adjusting of a variety of process control and monitoring instruments. Knowledge of applicable safety practices and procedures.

Ability to learn codes, laws, and ordinances pertaining to process instrumentation equipment and water/wastewater treatment.

Ability to maintain and prepare accurate documentation regarding instrument repair work.

Ability to perform on-going preventive maintenance for instrumentation.

Ability to establish and maintain effective working relationships.

Basic skills in diagnosing mechanical, hydraulic, pneumatic, electrical and electronic malfunctions in instrumentation and telemetry systems.

Basic skills in making repairs and overhauls to metering and process control instrumentation and related equipment.

**Minimum Qualifications**

One year of experience as an electronic technician; or one year performing industrial electrical work; or completion of 15 semester units of electronics or closely related course work from an accredited college, university or vocational training program.

An Instrumentation Technician may be promoted to Instrumentation Specialist after one year of experience and upon the recommendation of the appointing authority.

**Special Requirement**

Possession of a valid California Driver's License may be required at time of appointment.

APPROVED: *(Signature on file)*  
Director of Personnel Services  
DATE: 04/29/02  
SE:NK:jl:04/29/02