DEFINITION

Under direction of the Plant and Equipment Maintenance Supervisor, is responsible for maintenance of all instrumentation and process control systems in the Department of Water and Wastewater Resources and performs related work as required.

EXAMPLES OF DUTIES

Calibrate, maintain, repair and/or recommend replacement of all low voltage process and system control instrumentation. Perform routine loop adjustments and circuit corrections to ensure optimum performance of systems. Develop instrumentation projects to correct control defects. Develop and implement new control processes for in-house changes in control parameters and systems. Maintain instrument test equipment in good condition and an adequate inventory of necessary parts and equipment.

MINIMUM QUALIFICATIONS

Knowledge of: Calibration, maintenance, and repair of a wide variety of instruments specifically including pneumatic, electrical, electronic, and hydraulic instruments at voltages up to and including 110V; calibration and test instruments used to maintain performance standards of indicators, totalizers, controllers, converters, and meters found in water and wastewater control processes and systems. 4-20 milli-amp systems; 0-5 VDC systems; pressure, level, and signal transducers and bubbler controlled, level sensing systems and their application. Inventory requirements and lead times necessary for parts replacement to maintain the water and wastewater equipment and systems instrumentation at optimum performance.

Ability to: Safely perform highly sensitive calibrations and maintain high standards of quality control and reliability in instrument systems and loops. Perform thorough troubleshooting on critical systems and equipment in constant and hard use, researching instrumentation problems and providing solutions which meet the need for 24-hour reliability. Work independently without skilled technical assistance. Train Operations and Maintenance personnel to recognize, describe and provide timely reports of symptoms of instrument malfunctions. Review and evaluate instrumentation and process control plans prior to construction and/or installation. Read, draw and correct instrumentation and process control diagrams. Interact positively and cooperate with co-workers, respond politely to customers, work as a team member, function under demanding time pressure,
respond in a positive manner to supervision, and attend work and perform duties on a regular and consistent basis.

**Experience:** Three years of journey level experience as an instrument technician in a municipal water and/or wastewater facility or five years of increasingly responsible field and bench experience as an instrument technician in a related field. Three of the required five years must have been at a journey level.

**Education:** Graduation from high school or equivalent. AA/AS degree or two year Vocational degree in electronics, instrumentation or a related field. Four years of related instrumentation training and experience in the armed forces may be substituted for the required degrees and may be counted towards fulfilling four of the required five years of non-water/wastewater facility related experience.

**Physical Requirements:** Moderate and sometimes strenuous exertion required which includes but is not limited to work on ladders, in tunnels and confined spaces, climbing extensive stairs, and lifting, handling and carrying up to 35 lbs. May work in conditions which require exposure to noise, noxious odors, gases, and contact with wastewater.

**Certificates/Licenses:** Possession, or ability to obtain within one year of appointment, of a voluntary certificate as an Instrumentation Technician as issued by the California Water Pollution Control Association. Possession of a valid Class C California Driver's License.

R: 02/07