

**North Marin Water District**

**ELECTRICAL / MECHANICAL TECHNICIAN**

*This class description is only intended to present a summary of the range of duties and responsibilities associated with the positions. Descriptions **may not include all** duties performed by individuals within the class. In addition, descriptions outline the minimum qualifications necessary for entry into the class and do not necessarily convey the qualifications of incumbents within the position.*

**DEFINITION**

Under supervision, installs and maintains water and wastewater electronic, electrical and mechanical equipment, and participates in water distribution system operations as required.

**DISTINGUISHING CHARACTERISTICS**

The **Electrical/Mechanical Technician** is a journey-level class responsible for performing a full array of duties in the installation and maintenance of the District's water and wastewater systems and requires a general familiarity with all operating facilities of the District. This class is distinguished from the Electrical/Mechanical Apprentice classification in that the **Electrical/Mechanical Technician** takes on a higher level of performance of the skilled tasks of the Electrical/Mechanical group and demonstrates the ability to work independently.

**SUPERVISION RECEIVED**

Receives direct supervision from the Senior Electrical/Mechanical Technician and general supervision from Maintenance Supervisor. Generally is not required to exercise supervision but may assist in training of E/M Apprentice.

**ESSENTIAL DUTIES** (include but are not limited to the following)

Performs journey-level skilled and semi-skilled work installing, adjusting, repairing and maintaining electronic, electrical, and mechanical equipment, including pumps and motors, instruments and controls, PLC's, communications equipment, cathodic protection equipment, automatic and power operated valves, building HVAC, treatment plant equipment, lighting and other electrical and mechanical equipment as required. Maintains proficiency in water distribution system operations, and performs same when assigned. Assists in implementing preventive maintenance programs through the use of Computerized Maintenance Management software, carries out predictive, preventative and unplanned maintenance tasks, participates in training programs to maintain journey-level skills and assists in basic training for apprentice electrical/mechanical technicians. Performs tasks of a semi-skilled or unskilled nature as required, such as digging conduit trenches, facilities' access road maintenance, cleaning/painting structures and equipment, and other duties as may be assigned.

Understands and observes safety rules, enforces same when acting as lead man. Maintains proficiency in the use of electrical safety procedure and personal protection equipment, and in the use of other specialized safety equipment. Is on call at all times for emergencies and is required to participate in the District's on-call rotation for distribution system operation pursuant to District Policy 26: On-call and Stand-By Duty.

Approved	DM
Date	9/22/20

**QUALIFICATIONS** (the following minimum qualifications are necessary for the entry into the class)

Education/Experience

Possess sufficient experience and education to successfully perform the duties of a **Electrical/Mechanical Technician**. A typical way of obtaining the required qualifications is to possess the equivalent of four years of experience maintaining, repairing and installing water/wastewater electrical/mechanical systems or the performance of related work, possession of a high school diploma (or its equivalent) and have skills equivalent to or have at least one year experience and/or current participation in an electrical journeyman apprenticeship program.

Knowledge/Skill/Ability

Demonstrated knowledge of electrical and mechanical equipment used throughout the District's facilities; including, switchgear, motor control centers, variable speed drives, softstarters, uninterruptable power supplies, electric motors, control panels, pumps and pump station plumbing, pressure regulators, cathodic protection, supervisory control and data acquisition (SCADA), programmable logic controllers, HVAC, lighting, local area network, software installation and maintenance, and use of personal computers. Developed understanding of NFPA 70, National, State and Local electrical codes, Cal OSHA Safety guidelines as they apply to electrical and mechanical safety. Good physical condition with the ability to perform the bending, lifting and twisting tasks required to perform the distribution systems maintenance operations of the department. Work weekends, holidays and remain available in the event of an emergency. Maintain effective working relationship with those contacted in the course of work.

License/Certificate

Possession of a valid class C California driver's license.

Obtain a Class A drivers license within the first year of employment.

Possession of a California Department of Health Services Grade D1 Water Distribution Operator Certificate or ability to obtain said certification within 6 months of appointment to position or at the next available Department of Drinking Water scheduled exam date.

**WORKING CONDITIONS/PHYSICAL REQUIREMENTS**

Work in an environment that may be hazardous and unpleasant in a variety of weather conditions; Possess sufficient stamina to perform strenuous work for extended periods of time; walk and stand on level, uneven, or slippery surfaces for long periods of time; ascend and descend ladders, stairs, scaffolds, or poles; safely transport, lift and handle bulky objects weighing up to fifty (50) pounds; kneel, squat, stoop, turn, bend, twist, and lift upper body in the performance of daily work activities; utilize the senses of smell and hearing to detect odors and recognize noises associated with assessing mechanical equipment conditions; possess near and far vision for conducting visual checks of facilities and seeing details while working on equipment; Exposure to raw and treated sewage, hazardous chemicals or contaminants, electrical and mechanical hazards, sharp and dull objects, domestic and wild animals, insects, poison oak and in general may come in contact with a variety of potentially dangerous working situations that require a combination of good judgment, field knowledge of potential problems, problem identification and solutions; operate safety devices and equipment and apply proper safety procedures in hazardous environments; exposure to noise-producing tools and equipment; tolerate physical presence at heights of up to 75 feet on outdoor catwalks and exterior walkways of large structures; observe appropriate safety procedures and work to applicable codes and guidelines; make appropriate use of related safety equipment as required; follow NFPA 70E guidelines for protection from Arc Flash / Arc Blast and properly utilize electrical personal protective equipment; perform safe confined space entry; within CALOSHA

guidelines, withstand periods of physical exposure to the presence of fumes, odors, dust and pollen without incapacitating adverse effect; may be required to be clean shaven in order to wear respiratory protection equipment. Unforeseen circumstances may result in being on-call.

**OTHER REQUIREMENTS**

Per California Government Code, Title 1, Division 4, Chapter 8, Section 3100, "all public employees are hereby declared to be disaster service workers subject to such disaster service activities as may be assigned to them by their superiors or by law."