# TAHOE-TRUCKEE SANITATION AGENCY Class Specification

**Job Title: Electrical and Instrumentation Supervisor** 

Department: Maintenance FLSA Status: NON EXEMPT Revised as of: 09/2023

## **DEFINITION**

Plans, organizes, directs and supervises the installation, operation, maintenance and repair of a wide variety of electrical, and instrumentation equipment used in wastewater treatment facility operations within the Maintenance Department; and performs a variety of technical tasks relative to assigned area of responsibility.

## **DISTINGUISHING CHARACTERISTICS**

The Electrical and Instrumentation Supervisor position performs full supervisory responsibilities including planning, assigning and evaluating the work of subordinates.

## **SUPERVISION RECEIVED AND EXERCISED**

Reports directly to, and receives general direction from the Maintenance Manager. Exercises direct supervision over assigned technical staff.

**EXAMPLES OF DUTIES:** the duties specified below are representative of the range of duties assigned to this class, and are not intended to be an inclusive list.

- Develops and implements goals and objectives related to assigned section; establishes schedules and methods for the installation, operation, maintenance and repair of a wide variety of electrical and instrumentation equipment; implements policies and procedures.
- Plans, prioritizes, assigns, supervises, reviews and evaluates the work of staff involved in electrical and instrumentation installations, maintenance and repair.
- Evaluates operations and activities; recommends improvements and modifications; prepares various reports on operations and activities.
- Assists Maintenance Department Manager in developing and administering section budget; prepares cost estimates for budget recommendations; submits justifications for equipment, materials and supplies; monitors and controls expenditures.
- Recommends to Maintenance Department Manager the selection of staff; provides or coordinates staff training; works with employees to correct deficiencies; implements discipline procedures; evaluates employee performance; drafts and conducts performance evaluations.
- Assesses, schedules, and assigns predictive and preventive maintenance tasks; troubleshoots
  electrical and instrumentation equipment and systems; estimates time, cost, labor and material
  needs, and orders necessary equipment and materials.

- Inspects locations where work is being performed, both on-site and off-site; ensures conformity with repair requisitions, submittals, plans, diagrams and specifications; determines special equipment needs and assesses and identifies solutions to problems; accurately diagnoses electronic, electromechanical and instrumentation malfunctions.
- Prepares bid specifications and requisitions; assists in the preparation of plans; reviews bid documents to ensure accuracy.
- Performs confined space entries to operate and maintain electrical and instrumentation equipment, if needed.
- Works collaboratively with the Safety Compliance Coordinator to identify hazards and ensure safe work procedures and processes are in place and followed.
- Coordinates instrumentation and electrical work with other Agency departments and other entities as needed; and assists staff with implementing changes.
- Operates a forklift to transport, load and unload materials, supplies and equipment, as needed.
- Answers questions and provides information to the public; investigates complaints and recommends corrective action as necessary to resolve complaints.
- Represents the Agency with dignity, integrity, and the spirit of cooperation in all relations with staff and the public.
- May be assigned to temporally assume the duties of the Maintenance Manager during their absence.
- Builds and maintains positive working relationships with co-workers, other Agency employees and the public using principles of good customer service.
- Performs related duties as assigned.

#### **QUALIFICATIONS**

#### **Knowledge of:**

- Principles and practices of electrical and instrumentation equipment and their operation.
- Methods for the design, preparation and review of plans and specifications for installation, maintenance, operation, testing and repair of electrical and instrumentation equipment and processes used for a wastewater treatment facility.
- Methods and procedures for instrumentation communications systems including signaling, analog, digital and fieldbus and related technologies used for a wastewater treatment facility.
- Equipment, tools and materials used in the installation, operation, maintenance and repair of a
  wide variety of recording and metering devices, control apparatus, radio and cellular
  telemetering equipment, recording and data logging devices, communication systems, variable
  frequency drives and other electrical and instrumentation equipment used in the wastewater
  treatment facility operations.
- Methods and procedures for diagnosing industrial electrical, electronic, electromechanical, and instrumentation malfunctions.
- Methods and procedures related to asset management.
- Methods and procedures of competitive bidding processes including how to review and prepare accurate equipment plans and specifications.
- Principles and practices of supervision, training and evaluating performance.
- Principles and practices of budget monitoring.

- Principles and practices of safety management.
- Pertinent local, State and Federal laws, ordinances and rules including NFPA 70E standards for electrical workplace safety.
- Modern office practices, methods, and computer equipment including relevant software programs and fax machines, copiers, printers, telephones, voicemail and e-mail systems, etc.
- Oral and written communication skills; business English including vocabulary, spelling, and correct grammatical usage and punctuation.
- Safe work practices.
- May be required to work unusual hours, shifts, and be available for standby and callback duty.
- Principles and practices of customer service.

## Ability to:

- Organize, implement, and direct the installation, operation, maintenance and repair of a wide variety of electrical systems, recording and metering devices, control apparatus, radio and cellular telemetering equipment, recording and data logging devices, communication systems, variable frequency drives and other electrical and instrumentation equipment used in the wastewater treatment facility operations.
- On an ongoing basis, know and understand all requirements and essential aspects of the job including laws, regulations, rules and codes related to area of assignment; know and observe safety rules and identify hazards; intermittently locate, analyze, detect and diagnose problem equipment and determine solutions; train and explain processes to others; when so assigned, observe performance and provide input into review and evaluation of the work of others; problem solve issues related to area of assignment; remember various processes and requirements and how to operate equipment; intermittently access, review, and interpret and adjust or enter data on work orders, reports and other documents; identify, interpret and communicate technical and numerical information.
- Assist in the development and monitoring of an assigned program budget.
- Interpret and explain pertinent Agency and department policies and procedures.
- Diagnose electrical, electromechanical and instrumentation malfunctions.
- Interpret, understand and explain instrumentation submittals, drawings, sketches, plans and specifications.
- Accurately estimate time, labor and materials for proposed work.
- Assist in the development and monitoring of an assigned program budget.
- Develop and recommend policies and procedures related to assigned operations.
- Understand and carry out oral and written instructions, and prioritize workload to meet deadlines.
- Read, write and comprehend the English language at a level necessary for effective job performance, exercising correct English usage, vocabulary, spelling, grammar and punctuation.
- Communicate effectively, tactfully and positively in both oral and written form.
- Operate and use modern office equipment and technology, including computers and applicable software.
- Maintain regular attendance and adhere to prescribed work schedule to conduct job responsibilities.

- Use safety precautions related to all work performed including that which occurs in hazardous environments such as confined space.
- Adhere to and utilize appropriate Agency safety policies, procedures and practices and utilize appropriate Personal Protection Equipment.
- Function in confined spaces and/or hazardous environment.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Supervise, train and evaluate performance of assigned staff.
- Contribute effectively to the accomplishment of Agency goals, objectives and activities.

# **Experience and Education:**

Any combination of experience and training that would provide the required knowledge and abilities is qualifying. A typical way to obtain the required knowledge and abilities would be:

## **Experience**:

Five years of increasingly responsible journey level experience in the installation, maintenance and repair of electrical and instrumentation equipment within a wastewater treatment facility; and including one year providing technical and/or functional supervision over assigned personnel.

# **Education**:

Equivalent to the completion of the twelfth grade supplemented by college or trade school course work in engineering, electrical, instrumentation and/or control systems or a related field.

## **SPECIAL QUALIFICATIONS**

## **License and Certificate:**

Possession of a valid California or Nevada Class C Driver License is required at time of appointment.

Possession of a CWEA Electrical Instrumentation Technology Grade IV Certification is required within four qualifying test cycles (approximately 12 months) upon meeting testing eligibility requirements.

Possession of, or ability to obtain a forklift certification within six months of appointment.

Possession of, or ability to obtain a confined space certification within six months of appointment.

Persons employed in this classification are required to participate in Agency provided training to acquire basic First Aid and Cardiopulmonary Resuscitation (CPR) certificates during the initial 12 months of employment and continued maintenance of a valid certificate as a condition of employment for this position.

Possession of, or ability to obtain a 40-hour Hazwoper Hazardous Materials Technician Level III certification within six months of appointment.

#### **PHYSICAL REQUIREMENTS**

Position self and intermittently move so as to access, maintain, clean, repair and/or install equipment; intermittently move, traverse and position self around the office, shop or job site while performing work activities and to reach needed items; Work effectively for long periods of time at a desk, table, counter, confined space, in a shop, or while driving vehicle or operating equipment; position self to adjust equipment, use tools to review work of others or to access low or high items; ascend and descend stairs, ladders or step stools to reach equipment or other items and to access areas out of reach; manipulate, operate, activate and adjust equipment and tools; and move or transport weight of 75 pounds or less.

Ability to wear a self-contained breathing apparatus (SCBA) and Full-Face Air Purifying Respirator (APR).

## **WORKING/ENVIRONMENTAL CONDITIONS**

Work is performed in a plant environment subject to typical plant noise and environment conditions. Many duties expose the incumbent to outdoor conditions and exposure to all weather conditions, along with possible exposure to chemicals (dust, gases, liquids, solids, fumes) odors and noise.