10-8-2019
FLSA: Non-Exempt

Lead Maintenance Technician

DEFINITION:

Leads, assigns, organizes, inspects and participates in the work of personnel involved in the installation, modification, operation, maintenance, and repair of mechanical and electrical equipment and machinery used in the operation or water production and distribution and sewer systems; tests, troubleshoots, locates and calibrates, operates, repairs and performs preventive maintenance on electrical and electronic systems, components and devices.

SUPERVISION RECEIVED AND EXERCISED:

Receives direction from assigned supervisory or management staff. Exercises technical and functional direction over and provides training to lower-level staff.

CLASS CHARACTERISTICS:

This is the advanced journey level in the Maintenance Technician series. Incumbents at this level are expected to perform the full range of duties as the Maintenance Technician II and distinguished from other classes within the series by the level of responsibility assumed, complexity of duties assigned, independence of action taken, providing technical and functional supervision over assigned staff and by the amount of time spent performing the duties. Performs the most difficult and responsible types of duties assigned to classes within this series, including knowledge and maintenance of electrical systems, meters, PLC (Program Logic Computer) and telemetry appurtenances. The work involves preventive and corrective maintenance program development and implementation, assistance in contract oversight, and ensuring that the District meets all regulatory agency requirements.

EXAMPLES OF ESSENTIAL FUNCTIONS (Illustrative Only):

Reasonable accommodations may be made, on a case-by-case basis, to enable individuals with disabilities to perform the essential functions of the job.

- Participates and provides day-to-day leadership and direction to lower-level staff in performing a wide variety of skilled tasks in the installation, operation, repair, calibration, troubleshooting, optimization, and maintenance of District water and wastewater collection systems, water distribution systems, including PLC, variable frequency drives, analyzers, remote terminal units, SCADA systems, software-controlled units and equipment, telemetry systems and associated components up to 600 volts.
- Participates in and trains assigned staff engaged in the installation, operation, maintenance and repair of small and large motor, booster pumps, deep wells, pump control valve, disinfection equipment, and related equipment and machinery including mechanical, electromechanical, hydro-chemical systems, and hydraulic power.
- Trains and verifies the work of assigned staff for accuracy, proper work methods, techniques, and compliance with applicable standards, codes, regulations, and specifications; adheres to safe work practices and procedures pursuant to Federal, State, Local, and District requirements; regularly monitors performance and provides coaching for performance improvement and development subject to management concurrence.

- Carries out the District's safety program; educates employees on rules, regulations, safe work habits and potential hazards presented by their work environment.
- Provides day-to-day leadership and works with staff to ensure a high performance, customer-oriented work environment that supports achieving the department's and the District's mission, strategic plan, objectives and values.
- Performs duties of Chief Operator Treatment Plant as designated by State regulations.
- Utilizing Lucity (CMMS-Computerized Maintenance Management System) plans, schedules, assigns, coordinates and supervises the work of staff engaged in the installation, maintenance, operation and repair of pumps, valves, pipes, shafts, gears and equipment, machinery and related appurtenances used in the production, treatment, storage, transmission and distribution of potable and reclaimed water, and the collection and transmission of wastewater; ensures the timely completion of preventive and predictive maintenance programs. Interprets and modifies work order for proper completion of requested task verifying validity and necessity of requests.
- Participates in the preparation of operating budget recommendations, monitors the purchase of materials and work activities and expenditures to control costs; orders necessary parts to maintain equipment or construct replacement parts; coordinates repair and maintenance work with supervisors, managers and outside agency technical staff.
- Plans, lays out, inspects and supervises the work of crews engaged in the rehabilitation and upgrading of pump and lift stations.
- Prepares calibration, special studies, and work reports as necessary; provides technical advice and support to District engineers, technicians, SCADA personnel, supervisors, managers and outside agency technical personnel; works closely with control systems design and engineering teams.
- Subject to weekend work and 24-hour call out on a seven-day basis; responds to emergency situations as necessary.
- Responds to inquiries and complaints from other divisions and departments. Attends meetings with other departments and District staff.
- Researches new operational methods, techniques and equipment and recommends their application.
- Plans and lays out jobs from drawings, sketches or verbal instructions; maintains records in the form of drawings and specifications for industrial and water works equipment and machinery; plans, designs, and implements mechanical modifications to pump stations, lift stations, reservoirs, wells, disinfection systems and related mechanical systems and facilities.
- Reviews or prepares drawings and specifications for contract work and inspects work performed to determine compliance to standards and requirements.
- Develops, reviews and updates written maintenance instructions and schedules.
- May participate in long-term planning to assess future needs.
- Performs related duties as assigned.

MINIMUM QUALIFICATIONS:

Any Combination of education and/or experience that provides the required knowledge, skills, and abilities to perform the essential functions of the position. A typical combination includes:

EDUCATION AND EXPERIENCE:

Requires high school graduation or equivalent, with the ability to read and follow safety procedures and job-related instructions as required and six (6) years journey-level experience in water/sewer/utility works or similar industry. Requires demonstrated ability to direct assigned crews.

KNOWLEDGE OF:

- Principles of lead work supervision, including work planning, assignment, and training in work procedures and safety; District personnel rules, polices and labor contract provisions; principles and practices of effective supervision.
- Principles of preventative maintenance.
- Occupational hazards and standard safety practices necessary in area of work assigned.
- Proficiencies found in the Maintenance Technician II job description.
- Principles and practices of administration, including goal setting, policy and procedure development and implementation, evaluation and work standards.
- Basic engineering principles relative to hydraulics and fluid mechanics; principles, methods, techniques, tools and equipment used in the installation, maintenance and repair of electrical and mechanical equipment and machinery common to a large water works system; safety practices, safe work methods and safety regulations pertaining to the work.
- Safe Drinking Water Act and relevant state and Federal regulations; computer applications related to the work; codes, ordinances and regulations pertaining to the work.
- Principles, methods, techniques, tools, and equipment used in the installation, operation, maintenance (predictive, preventive, and corrective) and repair of industrial/mechanical equipment and machinery used in the operation of water distribution, water treatment plant equipment and wastewater collection systems, including underground wastewater collection lines.
- Proper water quality sampling techniques for physical and micro-biological sampling; chemical storage and dosing.
- Methods and techniques of configuring communication between devices such as Programmable Logic Controllers (PLC), Remote Telemetry Units (RTU), and field devices, and the tools used in installing, monitoring, servicing, and repairing various electronic equipment.
- Basic construction knowledge as it related to facilities and components maintenance.
- Mathematical principles.
- Pertinent Federal, State, and local laws, codes and safety regulations.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs such as Excel spreadsheets relevant to work performed.
- Record-keeping principles and procedures.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.

ABILITY TO:

- Direct plan, organize, estimate, coordinate, assign, review, train, develop, and evaluate the work of staff.
- Troubleshoot and diagnose maintenance problems and determine materials and supplies required for repair; respond effectively to emergency situations.
- Exercise sound independent judgment within established guidelines.
- Coordinate work assignments with other divisions, departments or agencies; communicate effectively, orally and in writing.
- Test, operate, diagnose, program, modify, calibrate and repair a wide variety of electrical and electronic instrumentation devices, motors, machinery and equipment.
- Install, operate, diagnose, maintain, and repair a wide variety of industrial/mechanical equipment, systems, and machinery used in the operation of water production and distribution and sewer collection systems.
- Monitor, operate, and adjust plant control processes to maintain water quality standards.
- Collect a variety of samples and conduct appropriate tests.
- Design, fabricate, replace, and repair system equipment and components.

- Use precision and diagnostic instruments in assigned areas of responsibility.
- Operate a diverse range of tools and equipment in trade areas such as electrical, pipefitting, mechanical, cranes, and rigs.
- Read and interpret plans, specifications, manuals and blueprints.
- Operate a variety of vehicles and equipment in a safe and effective manner.
- Maintain accurate records and prepare appropriate reports.
- Make accurate arithmetic computations.
- Work weekends and 24-hour call out on a seven-day basis.
- Organize own work, set priorities, and meet critical time deadlines.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Effectively use computer systems, software applications, particularly Microsoft Excel, relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted during work.

LICENSES AND CERTIFICATIONS:

Required

- Possession of a valid driver's license along with a driving record acceptable to the District and the District's insurance carrier.
- Possession of a California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 1 (D1) certification.
- Possession of a California State Water Resource Control Board (SWRCB) Water Treatment Plant Operator Grade 2 (T2) certification.
- Possession of California Water Environment Association (CWEA) Electrical / Instrumentation Technician Grade 2 (E/I II).

Desirable

- California Water Environment Association (CWEA) Collection System Operator Grade 1 (C1) certification desirable.
- California State Water Resources Control Board (SWRCB) Water Distribution Operator Grade 2 (D2) certification desirable.
- California State Water Resource Control Board (SWRCB) Water Treatment Plant Operator Grade 3 (T3) certification desirable.

Failure to obtain and maintain required license(s)/certification(s) may result in disciplinary action up to and including dismissal from the position.

TOOLS AND EQUIPMENT USED:

Trucks, and power tools, scientific instruments, computers, grinders, drills, air compressors, log books, charts, graphs, radios, VFD's and PLC.'s, telephones, cell phones, two-way radio; traffic control devices; personal computers, word processing, and other office support systems and various related hand, electronic, and/or power tools used in utility operations maintenance, data gathering, and/or record keeping.

PHYSICAL DEMANDS:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job in compliance with the Americans with Disabilities Act (ADA) requirements. Reasonable accommodations may be made, on a case-by-case basis, to enable individuals with disabilities to perform the essential functions.

Must possess mobility to work in the field; strength, stamina, and mobility to perform medium to heavy physical work; to sit, stand, and walk on level, uneven, or slippery surfaces; frequently reach, twist, turn, kneel, bend, stoop, squat, crouch, grasp and make repetitive hand movement in the performance of daily duties; possible entry into confined spaces and the use of confined entry equipment, to climb and descend ladders, to operate varied hand and power tools and construction equipment, and to operate a motor vehicle and visit various District sites; and vision to inspect and operate equipment. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards. Finger dexterity is needed to operate and repair tools and equipment. Employees must possess the ability to lift, carry, push, and pull materials and objects averaging a weight up to 50 pounds and frequently more than 75 pounds to a maximum of 100 pounds, all cases with the use of proper equipment and/or assistance from other staff.

Requires the ability to get and maintain an air tight seal with Self-Contained Breathing Apparatus for confined space entry.

ENVIRONMENTAL CONDITIONS:

Employees work in the field and are exposed to loud noise levels, cold and hot temperatures, inclement weather conditions, road hazards, vibration, confining workspace, chemicals, vermin, insects, and parasites, mechanical and/or electrical hazards, and hazardous physical substances and fumes. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

Works with hazardous chemicals such as but, not limited to, sodium hypochlorite, and various acids. Exposed to fumes and odors from sewer wet wells. Frequently works in confined spaces above and below ground, including wet and dry wells, storage tanks, vaults, and manholes. The incumbent works near moving mechanical parts; on slippery and uneven surfaces; and the risk of electric shock. The noise level in the work environment is frequently loud. May be required to wear a confined space entry breathing apparatus. Works at computer workstation on regular basis.