



Job Description

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job.

Job title	Senior Mechanical Maintenance Technician
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GENERAL PURPOSE

Under direction, plans, schedules, leads, and participates in the work of skilled staff engaged in the installation, maintenance, repair, and servicing of mechanical equipment and machinery used in the operation of large, state-of-the-art water, reclaimed water, and wastewater treatment stations and facilities; provides technical assistance to staff by inspecting and evaluating work being performed; identifies problem areas and directs remedial action to be taken; and performs related duties as required.

DISTINGUISHING CHARACTERISTICS

The Senior Mechanical Maintenance Technician is the advanced-level classification in the Mechanical Maintenance Technician series responsible for performing the most complex work assigned to the series. Incumbents regularly work on tasks which are varied and complex, requiring considerable discretion and independent judgment. Positions in the classification rely on experience and judgment to perform assigned duties. Assignments are given with general guidelines and incumbents are responsible for establishing objectives, timelines, and methods to complete assignments. Work is typically reviewed upon completion for soundness, appropriateness, and conformity to policy and requirements.

This class is distinguished from the Mechanical Maintenance Supervisor in that the latter is a full supervisory class with accountability for ongoing decision-making responsibilities associated with the work.

Employees in this classification are subject to on-call, which may include rotating-duty schedule, weekends and 24-hour emergency call out with little or no notice.

SUPERVISION RECEIVED AND EXERCISED

Receives direction from the Mechanical Maintenance Supervisor. Exercises technical and functional direction over and provides training to lower-level staff.

TYPICAL DUTIES AND RESPONSIBILITIES

The duties listed below are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to this position.

- Plans, schedules, lays out, inspects, leads, and participates in the inspection, diagnoses, troubleshooting, maintenance, repair, and servicing of plant and shop equipment, components, facilities, and machinery used in the operation of large state-of-the-art water, reclaimed water, and wastewater treatment stations and facilities.
- Assists in the preparation of budgetary estimates of staff, equipment, and materials required for projected activities.
- Provides technical assistance to staff; inspects and evaluates work being performed; identifies problem areas and directs remedial action to be taken; may lead the work of others as a project leader.
- Assists in the development of plans, specifications, and contracts for projected maintenance and construction projects.
- Assists in planning and implementing a preventative maintenance program for lift stations, micro-filtration water treatment plants, and reverse osmosis plants; ensures the timely and accurate completion of preventive maintenance activities, maintains detailed record keeping, and tracks work orders utilizing Computerized Maintenance Management Systems (CMMS).
- Researches new operational methods, techniques and equipment and recommends their application; makes suggestions for system design and operational improvements.
- Plans and lays out jobs from blueprints, drawings, sketches, or verbal instructions; maintains records in the form of blueprints, plans, and specifications for industrial and waterworks equipment and machinery; requisitions necessary tools, equipment, and supplies.
- Ensures that section activities are carried out in a safe manner and that established policies, procedures and safety measures are followed.
- Designs, fabricates, replaces, and repairs chemical storage, feed, ultra violet light disinfection and chemical disinfection system components such as chlorine-generation equipment, storage tanks, generators, analyzers, evaporators, chlorinators, distribution lines and valves, and eductor or injector pumps.
- Installs, maintains, and repairs equipment, including natural gas compressors and microturbines used for power generation, hydraulic and pneumatic systems, booster

pumps, disinfection equipment, hydro mechanical systems, and related equipment and apparatus.

- Performs a wide variety of advanced level maintenance and repair tasks to plant machinery, equipment, and mechanical systems.
- Designs and fabricates a variety of brackets, supports, and other metal structures using torches, welding, and other fabrication equipment.
- May assume office duties in the absence of the Mechanical Maintenance Supervisor.
- Observes and complies with all District and mandated safety rules, regulations, and protocols.
- Performs related duties as assigned.

REQUIRED QUALIFICATIONS

Knowledge of:

- Principles of providing functional direction and training.
- Principles, methods, techniques, tools, and equipment used in the installation, maintenance (predictive, preventive, and corrective) and repair of industrial/mechanical equipment and machinery used in the operation of large state-of-the-art water, reclaimed water, and wastewater treatment stations and facilities.
- Principles of electronic and industrial electricity as it relates to assigned areas of responsibilities.
- Operational characteristics and use of a diverse range of systems such as process and control, and chemical delivery systems.
- Shop mathematics.
- Basic principles of water hydraulics such as reading pump curves and calculating friction loss.
- Use and operation of a diverse range of tools and equipment used in machine shops.
- Cost estimating and basic techniques of engineering and drafting as they apply to assigned responsibilities.
- Codes, ordinances and regulations pertaining to the trade.
- Principles, methods and techniques of mechanical maintenance, crane operation, rigging, metals identification and welding including techniques and materials.
- Principles and practices of record keeping.
- Operational characteristics of electric, pneumatic, and hydraulic valve actuators.
- District and mandated safety rules, regulations, and protocols.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and District staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.

- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

Ability to:

- Plan, organize, and coordinate the work of assigned staff.
- Effectively provide staff leadership and work direction.
- Assist in the development and implementation of a comprehensive preventive maintenance program.
- Provide technical support for maintenance and construction projects.
- Identify and implement effective courses of action to complete assigned work.
- Read and interpret plans, specifications, manuals, and blueprints.
- Ensure assigned staff compliance with safety regulations and work standards.
- Coordinate work assignments with other sections, divisions, or departments.
- Diagnose and repair a wide variety of industrial/mechanical equipment, systems, and machinery used in the operation of large state-of-the-art water, reclaimed water, and wastewater treatment stations and facilities.
- 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 trades areas such as welding, pipefitting, milling, cranes, and rigs.
- Use a variety of hand tools, such as pipe-threaders, taps, dies, measuring instruments, and laser alignment equipment.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies, and procedures, and standards relevant to work performed.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Effectively use computer systems, software applications 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 in the course of work.

Experience:

Any combination of experience and education that provides the required knowledge and abilities is qualifying, along with the specific licenses/certifications as outlined below:

- Four (4) years of progressively responsible experience in the maintenance and repair of mechanical equipment, systems, and components used in water, reclaimed water, or wastewater treatment facilities, is desirable; two (2) years of which are as a Mechanical Maintenance Technician II with the District is preferred.

Education:

- Equivalent to completion of the twelfth (12th) grade. Specialized or technical training in mechanical equipment and machinery maintenance and repair is desired.

Licenses/Certifications:

- A valid Class A California driver's license, with tank and hazmat endorsements or the ability to obtain one within six months of date of hire, and the ability to maintain insurability under the District's Vehicle Insurance Policy. All District employees required to possess a valid Class A driver's license for the performance of their duties shall be subject to random drug and alcohol testing pursuant to District policy and federal law.
- When assigned to Lift Stations section: Mechanical Technologist I certificate required within 12 months of date of hire; Grade II desired.
- When assigned to Potable Water section: Water Distribution Grade I Certificate required within 12 months of date of hire; Grade II desired.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by employees to successfully perform the essential functions of this class. Reasonable accommodations may be made 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; vision to inspect and operate equipment; and color vision to read gauges and identify appurtenances. The job involves fieldwork requiring frequent walking in operational areas to identify problems or hazards, which may include working on live electrical wires. Finger dexterity is needed to operate and

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repair tools and equipment. Employees must possess the ability to lift, carry, push, and pull materials and objects averaging a weight of 50 pounds or heavier weights, in all cases with the use of proper equipment and/or assistance from other staff.

Employees must wear and use the proper Personal Protective Equipment (PPE).

WORK ENVIRONMENT

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this class. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

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, mechanical and/or electrical hazards, hazardous physical substances and fumes, dust and air contaminants. Employees may interact with upset staff and/or public and private representatives in interpreting and enforcing departmental policies and procedures.

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This job description has been reviewed and approved by all levels of management in cooperation with the union (if applicable):

Approved by:	<i>Board of Directors</i>
Date adopted:	<i>March 29, 2020</i>
Date modified:	<i>January 19, 2024</i>
FLSA determination:	<i>Non-Exempt</i>

Job Description Acknowledgment

I have received, reviewed and fully understand the job description for Senior Mechanical Maintenance Technician. I further understand that I am responsible for the satisfactory execution of the essential functions described therein, under any and all conditions as described.

Employee Name (print): _____ *Date:* _____

Employee Number: _____

Employee Signature: _____