



PLANT MAINTENANCE MECHANIC

Department: Public Works Department

FLSA Status: Non-Exempt

Reports To: Utilities Superintendent/Chief Treatment Plant Operator or designee

Unit: 2, Full-time Position

SUMMARY OF JOB PURPOSE

This is a journey level class in the Water/Wastewater Division of the Public Works Department, performing operational, preventative maintenance and technical mechanical work. Positions in this class work at the wastewater/water treatment facility and/or on citywide water treatment, distribution and wastewater collection systems.

Under general direction from an assigned supervisor, performs a variety of tasks necessary to maintain the equipment and structures of the water and wastewater treatment plants, related facilities and performs other duties as assigned.

SUPERVISION RECEIVED AND EXERCISED

The Plant Maintenance Mechanic position receives general supervision from the Utilities Superintendent/Chief Treatment Plant Operator and/or Director of Public Works/City Engineer, or designee.

ESSENTIAL FUNCTIONS (include but are not limited to listed tasks)

- 1. Perform regularly scheduled preventive maintenance work on plant and lift station equipment; maintain records of maintenance work done on equipment; disconnect equipment prior to removal.
- 2. Performs corrective maintenance on plant equipment and process systems such as parts replacement, equipment changes, cleaning of tanks and basins.
- 3. Maintains equipment and structures at treatment plants and remote sites, including pumps, wet wells, lift stations, which may require confined space entry.
- 4. Inspects, operates, adjusts, calibrates, and repairs water filtration equipment, water well pumps, water storage tanks, water/sewage pumping stations, wastewater pumps, valves, air compressors, meters, equipment control panels, programmable controllers, emergency generators, wastewater facility equipment.
- 5. Reads, maintains and repairs gauges and meters to ensure the proper operations of water and wastewater systems.
- 6. Performs a variety of plumbing and metal fabrication duties.
- 7. Troubleshoots and diagnoses problems with industrial-type mechanical, electrical,

This job description indicates in general the nature and levels of work, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required. The City of Grass Valley is an EQUAL OPPORTUNITY EMPLOYER.



PLANT MAINTENANCE MECHANIC

hydraulic, and pneumatic equipment; performs a variety of electrical tests, understands, reads and uses blue prints, ladder diagrams, construction and mechanical drawings to isolate and correct problems.

- 8. Lubricates and packs pumps; replaces mechanical seals and other worn or damaged parts on pumping equipment.
- 9. Maintains up-to-date and accurate manuals and reference guides, records and logs of operating conditions of equipment and maintenance work performed by entering data on a computer for tracking repairs and maintenance of completed work orders.
- 10. Maintains repairs parts and supply inventory.
- 11. Uses and maintains a variety of hand tools, power tools, electrical testing devices and hoisting equipment.
- 12. Competently and effectively operates backhoe, front-end loader and sewer Hydro/Vacuum Truck.
- 13. Assists water and wastewater crews when necessary.
- 14. Provides direction to assisting staff, instructs them in proper work procedures and safety precautions.
- 15. Maintains water and wastewater buildings, structures and general facility grounds at remote facilities and lift stations, including weed abatement.
- 16. Maintains tools, vehicles, equipment and work areas in a clean, safe condition.
- 17. Utilizes a computer, to prepare documents, print forms, use the City's work order system, and view SCADA screens.
- 18. Make recommendations with supporting information that evaluates the costeffectiveness of repair versus replacement.
- 19. Conduct safety inspections on assigned vehicles, plant equipment and facilities.
- 20. Perform other related duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

1. Hazardous conditions associated with the water/wastewater treatment plant industry;

This job description indicates in general the nature and levels of work, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required. The City of Grass Valley is an EQUAL OPPORTUNITY EMPLOYER.



PLANT MAINTENANCE MECHANIC

- 2. Applicable local, State and Federal laws, codes and regulations;
- 3. Methods and techniques for record keeping
- 4. Proper English, spelling and grammar;
- 5. Occupational hazards and standard safety practices;
- 6. Operation and maintenance of mechanical equipment such as pumps, valves, electric motors, electric motor variable speed control panels, gear reduction drives, chain driven equipment, micro-processor controllers and other related equipment;

Skills in:

- 1. Inspecting assigned areas for a wide variety of maintenance, repair and assessing risk issues.
- 2. Recognizing, prioritizing and accomplishing needed tasks.

Ability to:

- 1. Evaluate existing systems and procedures for improvement.
- 2. Read and interpret maps, sketches, drawings, specifications and technical manuals.
- 3. Read, decipher and understand plans and specifications for infrastructure components and pipelines.
- 4. Negotiate, oversee, and administer minor contracts/purchases.
- 5. Operate personal computers and related software programs;
- 6. Work independently or professionally in a group setting.
- 7. Perform basic mathematical calculations quickly and accurately.
- 8. Read, interpret and record data accurately.
- 9. Organize, prioritize and follow up on work assignments.
- 10. Work independently and as part of a team.
- 11. Make sound decisions within established guidelines.
- 12. Analyze complex issues, develop and implement appropriate responses.
- 13. Follow written and oral instructions.
- 14. Observe safety principles, work in a safe manner and recognize unsafe conditions including confined spaces.
- 15. Communicate clearly and concisely, both orally and in writing.
- 16. Establish and maintain effective working relationships.
- 17. Use tools necessary in making general repairs and adjustments to motors, pumps, and other equipment.
- 18. Read meters and gauges correctly.

This job description indicates in general the nature and levels of work, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required. The City of Grass Valley is an EQUAL OPPORTUNITY EMPLOYER.



PLANT MAINTENANCE MECHANIC

- 19. Establish and maintain positive working relationships with representatives of state/local agencies, City management, staff and the public.
- 20. Perform planned maintenance and emergency work under confined space conditions.
- 21. Climb stairs and ladders.
- 22. Perform janitorial and heavy maintenance work.
- 23. Respond quickly and competently in emergencies.
- 24. Carry out the mission of the City and the department and adhere to the City's and the department's organizational values.

QUALIFICATIONS

To perform this job successfully, the incumbent must be able to perform essential duties satisfactorily. Reasonable accommodations may be made to enable incumbents with disabilities to perform the essential functions. The requirements listed are representative of the knowledge, skill and/or ability required.

EDUCATION AND EXPERIENCE

A typical way to obtain the knowledge and skills is:

- 1. To have a high school diploma or GED and three (3) years of recent, full-time general mechanical or maintenance supervisory experience; which includes experience in the maintenance of pumps, electric motors, electric motor control panels, gear reduction drives and chain driven equipment.
- 2. An Associates degree or higher in a related field from an accredited college or university or a Mechanical Technologist Grade I Certificate from the California Water Environmental Association may substitute for one (1) year of general mechanical experience.

CERTIFICATES, LICENSES AND REGISTRATIONS

- 1. Must have a valid Class C California Drivers License with an acceptable driving record and pass an appropriate background check prior to hire date.
- 2. A California class B driver's license shall be obtained within 6 months of appointment.
- 3. Grade I water or wastewater certificate desirable.

LANGUAGE SKILLS

Ability to read, analyze, and interpret general business periodicals, technical procedures, or governmental regulations; write business correspondence and procedure manuals; effectively

This job description indicates in general the nature and levels of work, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required. The City of Grass Valley is an EQUAL OPPORTUNITY EMPLOYER.



PLANT MAINTENANCE MECHANIC

present information and respond to questions from managers, employees, and the general public.

MATHEMATICAL SKILLS

Ability to perform mathematical concepts such as: fractions, percentages, ratios, and proportions to practical situations;

REASONING ABILITY

Ability to apply common sense and understanding to carry out instructions furnished in written, oral, or diagram form. Resolve problems involving several known variables in standardized situations using standard industry and departmental processes and/or procedures.

PHYSICAL DEMANDS

While performing the duties of this job the employee is regularly required to stand for extended lengths of time (i.e. flagging operations), walk, sit for extended lengths of time (i.e. operating equipment), drive, use hands and fingers, handle or feel, reach with hands and arms, grasp, hold, and manipulate tools (i.e. planting and maintaining landscape materials); talk and hear. The employee is routinely required to climb (i.e. ladders and stairs), balance and maintain equilibrium on ceiling beams, rocks, exposed pipelines, etc. and stoop, kneel, crouch, crawl or stand on tip toes for extended lengths of time, and must routinely lift and/or carry up to 75 pounds alone, and up to 100 pounds with assistance. Specific vision ability required by this job includes close vision, color vision, peripheral vision, depth perception and ability to adjust focus with or without ocular aids. The employee must be able to work in variable temperatures and weather conditions and near traffic with varying noise levels and with varying types of equipment and vehicles. Must be able to work in confined spaces such as sewer manholes, attics, etc. The employee must have the ability to work around and tolerate unpleasant odors and objectionable substances common to the field.

After acquiring a Class B license, you are subject to Department of Transportation Physical Regulations.

WORKING ENVIRONMENT

While performing the duties of this job the incumbent is regularly exposed to outside elements of wet and/or humid conditions, rain, snow and heat; moving mechanical parts; fumes or airborne particles and toxic or caustic chemicals. Requires the ability to work outdoors in all weather. The incumbent is occasionally exposed to risk of electrical shock and vibration; and steady level of loud noise.

GENERAL

This job description indicates in general the nature and levels of work, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required. The City of Grass Valley is an EQUAL OPPORTUNITY EMPLOYER.



PLANT MAINTENANCE MECHANIC

The City reserves the right to revise or change classification duties and responsibilities as the need arises. This description does not constitute a written or implied contract of employment.

I have read and understand the contents of this job description, and I have received a copy of this job description for my records.

Print Name:

Signature:	:	

Date:

Adopted: February 16, 2016 (Local 39 Approval 2/05/2016) Revised:

C:\Users\mikeb.WWTP\Documents\City Hall\job descriptions-salary ranges\151215MSB_Plant Maintenance Mechanic.doc

This job description indicates in general the nature and levels of work, skills, abilities and other essential functions (as covered under the Americans with Disabilities Act) expected of the incumbent. It is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities required of the incumbent. Incumbent may be asked to perform other duties as required. The City of Grass Valley is an EQUAL OPPORTUNITY EMPLOYER.