



Job Description

Title:	Waste Water Treatment Plant Maintenance Mechanic		Adopted:	07/2007
Salary Level:	25		FLSA Status:	Non-exempt
Supervisor:	Waste Water Treatment Plant Supervisor	Supervises:	None	
Job Family:	None	Bargaining Unit:	Miscellaneous Employees	

JOB SUMMARY:

Under general supervision to perform skilled work in the maintenance, repair, operation, and upkeep of water and wastewater treatment plants wells, lift and booster stations, and storm drain stations and to perform other related duties as assigned

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Participate in the operation, repair, maintenance, and upkeep of the City's wastewater and water plants including lift stations, pump station, and storm drain pumping stations.
- Maintain a regular inspection schedule of primary and secondary wastewater treatment systems, water treatment process and plant facilities.
- Perform general and complex maintenance and repair tasks on plant equipment and facilities in the servicing of the City's wastewater and water plants; perform carpentry, masonry and electrical duties as required; and maintain a clean shop area.
- Perform general and complex maintenance and repair of pumps, motors, drive systems and chemical feeders.
- Troubleshoot and diagnosis problems with industrial-type mechanical, electrical, hydraulic, and pneumatic equipment; perform a variety of electrical tests; read blue prints, construction drawings, mechanical drawings in troubleshooting breakdowns.
- Lubricate and pack pumps, replace work or damaged parts, and troubleshoot pumping machinery.
- Clean and check valves, bubbling lines, regulators, compressors, and filters.
- Replace bearing, sheaves, pulleys, seals, and belts as necessary.
- Test generators for efficient and proper operation.
- Calibrate feeder systems and other plant equipment such as flow meters, pumps, valves and samplers.
- Perform a variety of preventive maintenance tasks on pumping and electrical equipment and machinery using and maintaining a variety of tools and equipment including pipe cutters and threaders, welding equipment, drills and grinders.
- Maintain the Biolac System.
- Safety lock and tag out electrical equipment and other machinery to be tested. Test equipment after repair.
- Use and repair portable pumping equipment.
- Design and manufacture in the fabrication of a variety of tools, pumps, valves and piping systems.
- Maintain up-to-date and accurate manuals and reference guides; records and logs of operating conditions of equipment and work performed by entering data on a personal computer for tracking repairs, parts and completed work orders. Assists with the plant inventory program.
- Research source vendors, obtain price quotes for purchasing parts needed for maintenance and repair work; order and restock supplies.

OTHER JOB-RELATED DUTIES

- May maintain grounds and weed abatement at field facilities.

Waste Water Treatment Plant Maintenance Mechanic - Continued

- Perform related duties as assigned.
- May operate tractors and backhoe as required.

QUALIFICATIONS

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

ABILITY TO

- Operate a variety of electrical, and mechanical equipment used in the City's water and wastewater pumping and lift stations.
- Read and interpret blueprints, construction drawings, and maps.
- Identify mechanical problems and take appropriate corrective action.
- Train other personnel and mechanical maintenance.
- Establish and maintain effective working relationships with those contacted in the course of work.
- Operate a variety of hand tools; electrical testing tools; industrial mechanical equipment; automotive forklifts; generators; electrical and pneumatic tools; crane and pump trucks.
- Communicate effectively and tactfully in both oral and written form.

KNOWLEDGE OF

- Principles, practices, methods, equipment, materials, and tools used in pump machinery maintenance and repair.
- Safe and efficient work practices when working with electrical and mechanical equipment.
- Usage of safety apparatus and general safety practices used in the course of the job.
- Planning, scheduling and evaluating methods and techniques necessary in maintaining wastewater facility, water treatment plant, storm drain stations, lift and collection systems, and water booster stations.
- Basic fundamentals of oxy-acetylene tanks, gauges, implements, AC-DC ARC welding equipment.

EDUCATION and/or EXPERIENCE

High School Diploma or equivalent; two years of experience in the maintenance and repair of mechanical and electrical machinery with specific knowledge of hydraulic pump repair. Specialized training in mechanics or a related field is desirable.

CERTIFICATES, LICENSES, REGISTRATIONS

- Possession valid California driver's license by date of hire and a Class "B" license within 6 months of hire.
- Possess, or acquire within two years of employment, a valid certification of a Mechanical Technology Level I certification from the California Water Environment Association.

OTHER REQUIREMENTS

Positions in this class may perform duties that involve a potential risk of occupational exposure to blood borne pathogens. Positions in this class shall be counseled by a qualified physician regarding U.S. Public Health Service Infection Control policies and procedures and offered the Hepatitis-B Vaccination.

Positions in this class may be required to be in the Respiratory Protection Program. If so, must be clean shaven at all times in order to wear respiratory protection or other safety equipment.

Waste Water Treatment Plant Maintenance Mechanic - Continued

TOOLS AND EQUIPMENT USED

Power and hand tools, air tools, electrical trade tools, metal cutting tools, welder, lathe, carpentry tools, concrete trade tools, millwright tools to align pumps and couplers. Occasionally required to wear respiratory protection equipment.

LANGUAGE SKILLS

Ability to read and comprehend simple instructions, short correspondence, and memos. Ability to write simple correspondence. Ability to effectively present information in one-on-one and small group situations.

MATHEMATICAL SKILLS

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to draw and interpret bar graphs.

REASONING ABILITY

Ability to apply common sense understanding to carry out instructions furnished in written, oral, or diagram form. Ability to deal with problems involving several concrete variables in standardized situations.

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. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is frequently required to use hands to finger, handle, feel or operate objects, tools, or controls; and reach with hands and arms above shoulders. Occasionally required to walk or sit; climb stairs, ladders, structures up to 25 feet high and balance in high or narrow places; stoop, kneel, crouch, or crawl; twist and turn frequently working in confined spaces. Frequently lift and/or move up to 60 pounds; occasionally lift, push, pull weights up to 100 pounds. Specific vision abilities required by this job include close vision, color vision, and the ability to adjust focus to see in confined space entries, perform visual equipment inspections, read blueprints and maintenance/repair instructions, and read meters and gauges. Hear well enough to converse in person, converse on a telephone, hear a two-way radio, detect mechanical problems and operational signal tones, and hear in a noisy environment. The noise level in the work environment is moderately noisy.

WORK ENVIRONMENT

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

While performing the duties of this job, the employee is frequently works near moving mechanical parts or in confined awkward spaces; in outside weather conditions; occasionally exposed to wet and/or humid conditions, fumes, toxic or caustic chemicals and obnoxious odors. Frequently works near and around hazardous chemicals such as chlorine, sulfur dioxide and ammonia.