

**VICTOR VALLEY WASTEWATER
RECLAMATION AUTHORITY
JOB DESCRIPTION**

Effective Date: 06/03/08

**TITLE: PLANT MAINTENANCE/MECHANICAL
TECHNOLOGIST – GRADE III**

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*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

SUMMARY DESCRIPTION

Performs semi-skilled and skilled diagnosis and mechanical repair of parts, equipment, and systems to maintain equipment, return existing treatment units to service, and to replace complex treatment units, support systems, and ancillary equipment for the Victor Valley Wastewater Reclamation Authority (VWRA). Participates in the development of creative solutions to complex maintenance problems and operating requirements. Reports to Maintenance Supervisor.

REPRESENTATIVE DUTIES

The following duties are typical for this classification. Incumbents may not perform all of the listed duties and/or may be required to perform additional or different duties from those set forth below to address business needs and changing business practices.

Employee must be willing and able to perform all the duties of Grade I-II Mechanical Technologists, and must be willing and able to:

1. Understand record drawings and manufacturer's instructions.
2. Prepare, receive and review assignments for the mechanical and electrical maintenance of potable water, wastewater, storm drainage, hydraulic power, chemical handling systems and oxygen injection systems.
3. Participate in the work of staff responsible for maintenance of the wastewater treatment plant including repair and installation of all electronic, electric, hydraulic, pneumatic and mechanical equipment.
4. Perform the most difficult preventive mechanical maintenance.
5. Perform the most difficult corrective mechanical maintenance by troubleshooting cause of malfunction using visual inspection and precision measuring and testing instruments and replacing or repairing broken parts.
6. Rebuild equipment by disassembling, cleaning, ordering replacement parts, repairing mechanical malfunctions and reassembling and testing.
7. Plan and implement or assist in the planning and implementation of complex computer based maintenance programs.
8. Estimate materials, equipment and personnel necessary for scheduling any emergency repairs, maintenance, and operation of a unit.
9. Prepare and is responsible for time and equipment reports.
10. Assist with the training of personnel in proper equipment operation and safety aspects.
11. Responsible for adherence to safety orders and compliance with federal and CAL-OSHA regulations in all aspects of work.
12. Inspect work in progress and upon completion.

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13. Assist in the planning, developing and implementing safety and training programs.
14. Perform and instruct staff in the safe, effective and efficient methods of hand and power tool operations and maintenance, electrical system testing and meter calibration.
15. Recognize abnormally operating equipment and use advanced troubleshooting methods and skills to diagnose, analyze and recommend required repairs.
16. Assist in budget preparation with recommendations to include personnel requirements, tools, equipment, contract services, warehouse spare parts and future plant and pump stations capital expenditures for equipment and repairs required.
17. Perform the more complex corrective maintenance by inspecting equipment, checking voltage and amperage, tightening and cleaning equipment and locating potential problems.
18. Maintain a clean and safe work area, and adhere to all safety requirements.
19. Communicate effectively and establish and maintain effective working relationships with others.
20. Maintain grooming standards to properly fit SCBA.
21. Confined space entry.
22. Engineering, research, development of existing equipment.
23. Research, development and engineering to fabricate equipment and tools from scratch.
24. Operate plant emergency generators for monthly test.
25. Assist in plant expansion engineering and in plant expansion equipment startup and vendor rebuild startups.
26. Equipment operator – tractor, forklift, dozer, backhoe, front end loader.
27. Piping layout, fabrication and welding.
28. New construction – wood, steel and concrete, and demolitions.
29. Sandblasting, painting.

QUALIFICATIONS

The following generally describes the knowledge and ability required to enter the job and/or be learned within a short period of time in order to successfully perform the assigned duties.

Knowledge of:

Laws, rules and regulations controlling maintenance of treatment facilities.
Use and operate Self Contained Breathing Apparatus (SCBA).

Ability to:

Understand highly technical manufacturer's manuals and equipment specifications.
Supervise employees and employee teams.
Communicate effectively orally and in writing.
Add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals.
Apply concepts such as fractions, percentages, ratios, and proportions to practical situations.
Occasionally perform the duties of a "lead mechanic" when assigned.
Work without constant supervision for short periods of time.

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Use hands and fingers to handle or operate objects, tools, or controls, and reach with hands and arms.

Talk, hear, see and smell.

Frequently stand, walk, climb or balance, stoop, kneel, crouch, or crawl to operate equipment located in tight quarters and participate in confined space entry and exit procedures, including rescues.

Willing and able to carry cell phone/radio at all times while on duty.

Employee is expected to work regular hours of the approved VVWRA alternate work schedule.

Education and Experience Guidelines - Any combination of education and experience that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education/Experience:

Employee must possess (at a minimum) a high school diploma or general education degree (GED), also desirable to have successfully completed college level coursework in mechanical technology and/or one or more skilled trades. Must possess and maintain in good standing a valid Grade III Mechanical Technologist certificate as issued by the California Water Environment Association, and a valid State of California Class C driver's license.

PHYSICAL DEMANDS AND WORKING ENVIRONMENT

The conditions herein 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 job functions.

Environment: Work is typically accomplished near moving mechanical equipment indoors and outside in varied weather conditions; employee may be frequently exposed to fumes or airborne particles; occasionally exposed to toxic or caustic chemicals, risk of electrical shock, and vibration; work in high locations; work in confined spaces; and often work in a high noise environment

Physical: Incumbents require sufficient physical ability to work in an office setting; stand or sit for prolonged periods of time; frequently lift and/or move up to 50 pounds and occasionally lift and/or move up to 70 pounds; operate assigned equipment and vehicles including SCBA.

Vision: See in the normal visual range with or without correction; vision sufficient to read computer screens and printed documents; and to operate assigned equipment.

Hearing: Hear in the normal audio range with or without correction.