



CENTRAL MARIN SANITATION AGENCY

1301 Andersen Drive | San Rafael, CA 94901 | 415.459.1455 | FAX: 415.459.3971

JOB DESCRIPTION: MECHANICAL TECHNICIAN (Trainee, I-III)

SUMMARY

Under general supervision, learns and performs preventive, corrective, and unscheduled maintenance; repairs and replaces a variety of equipment or components in various facilities on stationary and mobile equipment, found in water, wastewater, or similar industrial businesses; performs related work as required.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Duties may include but are not limited to the following:

- Inspects a variety of stationary and mobile mechanical equipment, buildings and grounds, and appurtenances.
- Utilizes electronic devices such as computers, laptops, data tablets, and cellular phones in the performance of daily work activities.
- Installs, repairs, replaces, and performs preventive maintenance on equipment.
- Troubleshoots equipment problems, and recommends time, equipment, and materials required to make repairs; performs emergency repairs as required.
- Repairs, overhauls, or replaces malfunctioning, damaged or worn parts, materials, and equipment.
- Cleans, services, and paints equipment, machinery, vehicles, structures, buildings, pipelines, storage tanks, and any additional items.
- Services, adjusts, and tunes a variety of equipment such as engines, motors, pumps, valves, control systems, boilers, heat exchangers, and chemical feed systems.
- Uses plasma, gas, and/or arc welding equipment to cut, heat, weld, or braze.
- Uses and performs maintenance on a variety of hand and power tools, and safety equipment, if certified to do so.
- Reads and interprets construction plans, specifications, diagrams, manuals, and other documentation.
- Designs equipment installations and modifications; makes required mathematical calculations; prepares schematics and diagrams for documenting installations; determines materials and quantities required.
- Assists in maintaining an inventory of equipment, tools, and supplies; requisitions materials as required.
- Confers with Operations staff to determine equipment problems; suggests methods of minimizing such problems in an operational setting.
- Maintains accurate records and files of work performed and materials and supplies used.
- Observes appropriate safety procedures and works to applicable codes and guidelines.
- Attends training and safety sessions as assigned.
- Performs confined space entries and self-rescue.

- May direct the work of less experienced or seasonal workers on a project or day-to-day basis.

SUPERVISORY RESPONSIBILITIES

This job has no supervisory responsibilities.

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, skills, and/or abilities required.

EDUCATION/EXPERIENCE/CERTIFICATION

High school diploma or general education degree (GED). The Agency recognizes that there are various avenues for obtaining qualifying experience to meet Mechanical Technician eligibility requirements. An equivalent combination of experience may be substituted for California Water Environment Association (CWEA) Mechanical Technologist certification above the Mechanical Technologist one certification level.

Mechanical Technician Trainee - Some related work experience desirable.

Mechanical Technician I - Possession of a Grade I Mechanical Technologist (MT) certificate issued by CWEA at date of hire, OR ability to obtain a Grade I MT certificate within 18 months of hire, and a minimum of one year of facilities maintenance experience making repairs on a variety of mechanical equipment, structures, and appurtenances.

Mechanical Technician II - EITHER possession of a Grade II Mechanical Technologist certificate issued by CWEA, OR a minimum of three years of facilities maintenance experience making repairs on a variety of mechanical equipment, structures, and appurtenances.

Mechanical Technician III - EITHER possession of a Grade III Mechanical Technologist certificate issued by CWEA, OR a minimum of six years of facilities maintenance experience making repairs on a variety of mechanical equipment, structures, and appurtenances.

INTERPERSONAL SKILLS

Ability to interact with others (co-workers, supervisors, subordinates, vendors, member agencies, and the general public) in a professional manner; to accept constructive criticism from supervisors, equals, and subordinates; to work as a team member or independently as needed; to prioritize assignments and meet deadlines; to prevent personal problems from adversely affecting or impacting work or that of others; to arrive at work as scheduled and to work the shift hours as scheduled.

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 to customers, clients, and other employees of the organization.

MATHEMATICAL SKILLS

Mechanical Technician Trainee - Ability to add and subtract two-digit numbers and to multiply and divide with 10's and 100's. Ability to perform these operations using United States customary units for weight, temperature, volume, distance, and currency.

Mechanical Technician I - Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, percentages, and to create and/or interpret graphs and trends.

Mechanical Technician II - Ability to calculate figures and amounts such as discounts, interest, commissions, proportions, percentages, area, circumference, and volume. Ability to apply concepts of basic algebra and geometry.

Mechanical Technician III - Ability to work with mathematical concepts such as probability and statistical inference, fundamentals of plane and solid geometry, and trigonometry. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical situations.

REASONING ABILITY

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

CERTIFICATES, LICENSES, REGISTRATIONS

Must possess a valid California class C driver's license, have a satisfactory driving record, and continue to meet CMSA driving standards. Failure to maintain these standards may result in loss of employment.

PHYSICAL DEMANDS

Mobility to work in a standard office and wastewater treatment plant setting, use standard office equipment including a computer and specialized test equipment, tools, and instrumentation; stamina to work confined spaces, around machines, and to climb and descend ladders; vision to read printed materials and a computer screen; color vision to distinguish different colors of wiring; and hearing and speech to converse in person and over the telephone.

While performing the duties of this job, the employee is regularly required to use hands to finger, handle or feel, reach with hands and arms, and talk or hear in person or on the telephone or radio. Hearing is frequently required for equipment operation analysis. The employee is frequently required to stand, walk, sit, and climb or balance and stop, kneel, crouch, or crawl. The employee is occasionally required to smell odors to determine process or equipment problems.

The employee must regularly lift and/or move up to 10 pounds, frequently lift and/or move up to 25 pounds, occasionally lift and/or move up to 50 pounds, and rarely be required to safely lift

and/or move a manhole cover or similar items up to 100 lbs.

Specific vision ability required by this job includes close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus. Examples of the physical demands for this position, including their activity and duration, are available upon request from the Administration Department.

WORK ENVIRONMENT

The work environment characteristics described here are representative of those that an employee encounters while performing the essential functions of this job.

In performing inspections of and working on Agency equipment, employee may be exposed to inclement weather conditions, fumes, odors, dust, noise, and potentially toxic conditions. May be required to work overtime and off-shift hours, including weekends, on a project or emergency basis.

While performing the duties of this job, the employee is frequently exposed to wet and/or humid conditions; to moving mechanical parts; fumes or airborne particles; and outdoor weather conditions. The employee is occasionally exposed high, precarious places; toxic or caustic chemicals; construction project site conditions; extreme heat; risk of electric shock; and vibration.

The noise level in the work environment is usually moderate with occasional exposure to loud equipment.

Employee may be required to perform standby duty on a rotating basis. May be required to be available to work off-shift hours, including weekends, on a project or emergency basis.

SPECIAL REQUIREMENTS

There are no special requirements for this job.

RIGHT TO WORK DOCUMENTATION

Before being hired, all new employees will be required to show documentation as proof of authorization to work in the United States.

Job Title:	Mechanical Technician (Trainee, I-III)
Department:	Maintenance
Reports To:	Maintenance Supervisor
FLSA Status:	Non-Exempt
Revised Date:	October 2022