



CITY OF SANTA CRUZ
WASTEWATER FACILITIES LEAD MECHANICAL TECHNICIAN

Reports to	Wastewater Facilities Mechanical Supervisor
Supervises	Provides lead duties for mechanical technicians and other classifications, as assigned
Bargaining Unit	Service

BASIC FUNCTION

Under general supervision, performs more complex mechanical maintenance work in the Public Works Wastewater Systems division on the City's wastewater treatment plant system and remote facilities

DISTINGUISHING CHARACTERISTICS

The Wastewater Facilities Lead Mechanical Technician is the advanced journey level, lead classification of the mechanical technician series in which incumbents are expected to independently perform the full scope of assigned duties under general direction. Incumbents lead Wastewater Facilities Mechanical Technician I/II's, Utility Maintenance Technicians, other staff, temporary workers, and/or consultants. This classification is distinguished from the next lower classification of Wastewater Facilities Mechanical Technician II in that the latter performs the less complex mechanical maintenance work. This classification is distinguished from the next higher classifications of supervisors or managers who have a wider scope of duties and supervise people and manage projects rather than spending a majority of time performing the maintenance work.

The Wastewater Facilities Lead Mechanical Technician is required to obtain a California Water Environment Association (CWEA) Plant Maintenance (PM) Mechanical Technologist Grade 3 certification within one year of date of hire.

TYPICAL DUTIES *(May include, but are not limited to, those duties listed below.)*

- Develops and carries out an on-going inspection and preventive maintenance program to insure adequate mechanical operation of the treatment and pumping facilities.
- Troubleshoots equipment as referred by work orders or verbal directions; determines necessary repairs; makes recommendations to supervisor regarding actions needed; and performs such work as feasible and appropriate.
- Removes, repairs, and completely overhauls pumps, motors, sludge centrifuge gear drives, mechanical bar-screens, chlorinators, gas compressors, boilers, valves, blowers, and other types of equipment related to water or wastewater treatment plants and pumping facilities.
- Services and maintains motors and the plant's internal combustion engines.
- Performs basic mechanical maintenance and troubleshooting on a variety of electrical equipment related to pumping systems, including motors, manual and automatic control centers, panel-boards and switch indicators and remote control equipment; troubleshoots and performs minor mechanical repairs on electric motors, coordinating work with electrical technicians as required.

- Utilizes a variety of mechanical, welding, plumbing, and machinists' tools to fabricate, rebuild, strengthen, and maintain various parts and pieces of plant equipment.
- Fabricates, assembles, and installs special structures and equipment from blueprints, schematics, drawings, or construction diagrams, including rough and finished carpentry work as needed for repair or remodel.
- Performs maintenance on large pipes, valves, and related fittings with diameters up to 54 inches.
- Maintains work records and preventative maintenance records and computer directed preventative maintenance records as required.
- Uses a computerized maintenance management system (CMMS) or other computerized monitoring and operating systems.
- Participates in and provides lead work direction to small crews of maintenance workers in maintenance work assignment.
- Participates and leads in skills and safety training programs; learns and implements safety rules, regulations, and emergency procedures.
- May order supplies and materials as required for completion of various work assignments; prepares and maintains related documents and records.
- Performs related duties as assigned.

WORKING CONDITIONS

Position requires prolonged sitting, standing, walking on level and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping and making repetitive hand movement in the performance of daily duties. The position also requires both near and far vision when inspecting work and operating assigned equipment. The need to lift, carry and push tools, equipment and supplies weighing up to 100 pounds is also required. Additionally, the incumbent in this outdoor position works in all weather conditions, including wet, heat and cold. May use chemicals and cleaning products which may expose the employee to fumes, dust and air contaminants. The nature of the work may also require the incumbent to climb ladders, use power tools and noise producing tools and equipment, drive motorized vehicles and heavy equipment, work in heavy vehicle traffic conditions and enter confined spaces. Some positions require the incumbent to work both in and around oceanic surf to perform assigned duties. Depending on assignment, the incumbent may be required to respond to after hours emergency call outs and to wear a uniform. An incumbent may perform assigned duties while wearing respiratory protection equipment. Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

MINIMUM QUALIFICATIONS

Knowledge:

- Techniques, tools and materials used in the maintenance and repair of industrial machinery and equipment including large capacity pumps, motors, valves, gear boxes, centrifuges, compressors, boilers and generators.
- Standard safety procedures related to plant equipment maintenance.
- Electrical operation and troubleshooting of pumps, motors, and generators, to determine problems and service equipment.

Abilities:

- Lead and provide work direction to a small crew of employees.
- Perform the most complex maintenance tasks on wastewater treatment equipment.
- Learn more complex principles, practices, techniques, and regulations pertaining to plant maintenance work.
- Learn to make sound decisions, assimilate, and communicate that information in a manner consistent with the essential job function.
- Maintain, adjust, and repair industrial machinery and equipment.
- Operate hand and power tools used in mechanical maintenance work.
- Recognize unusual or dangerous operating conditions and make sound judgments within established guidelines.
- Read schematics, blueprints, drawings, and construction diagrams.
- Perform mathematical calculations.
- Follow oral and written instructions.
- Communicate effectively orally and in writing.
- Complete and maintain accurate records.
- Establish and maintain effective working relationships with others.
- Work effectively as a member of a crew.
- Lead a small crew of employees.
- Act in a courteous and tactful manner with members of the public.
- Observe safety principles and work in a safe manner.
- Safely handle hazardous materials.
- Perform assigned duties while wearing respiratory protection equipment.
- Operate a boom truck, dump truck and other similar equipment.

OTHER REQUIREMENTS

- Must successfully complete the city's respirator fit testing protocols; may be required to be clean shaven.
- Willingness to work flexible hours, including holidays, evenings, weekends, and overtime as assigned.

- Willingness to perform call back work and standby duty as required; must remain available to be contacted by phone or pager and be able to report to work within a thirty (30) minute period when standing duty.
- Willingness to wear a uniform.
- Successful completion of training as a forklift operator within one year of appointment.

EDUCATION AND EXPERIENCE

Any combination of education and experience that provides the knowledge, skills, and abilities shown above may be qualifying. A typical way to obtain the required qualifications is to possess the equivalent of the following:

- High school degree or G.E.D. equivalent,
- Some experience performing fabrication welding with arc and gas welding and cutting equipment, and either
- 6 years of experience in mechanical maintenance work which included the maintenance and repair of industrial machinery and equipment, or
- 4 years of related experience, with 2 of those years in vocation while holding a CWEA PM Mechanical Technologist Grade 2 certification.

Additional higher level education may be substituted for experience for applicants that do not have any CWEA certification.

LICENSES/CERTIFICATES

- Possession at time of hire and continued maintenance of a Class C driver's license and a good driving record.
- Must possess at time of appointment a CWEA PM Mechanical Technologist Grade 2 certification (or 6 years of related experience may be substituted).
- Must obtain and maintain within 12 months of date of hire a CWEA PM Mechanical Technologist Grade 3 certification.
- Possession and continued maintenance of First Aid and CPR certification within one year.

Classification No.: 249
Date of Issue: 2/10 (minor revision)
Supersedes: 11/09

Career Ladder

- Wastewater Facilities Mechanical Supervisor
- *Wastewater Facilities Lead Mechanical Technician*
- Wastewater Facilities Mechanical Technician II
- Utility Maintenance Technician or Wastewater Facilities Mechanical Technician I