

# City of Watsonville



## Job Description

**JOB TITLE:** Utilities Maintenance Mechanic I, II, III

**DATE**

**APPROVED:**

**DEPARTMENT:** Public Works and Utilities

**SUPERSEDES:**

**REPORTS TO:** Utilities Maintenance Supervisor

**SUPERVISION:** None

**EMPLOYEE UNIT:** OE3

**FLSA:**

### JOB SUMMARY:

To perform a wide variety of mechanical, electrical, and plumbing repair and maintenance of various machinery and equipment belonging to the City's utilities including wastewater, water, materials processing, stormwater, and sewer pump station machinery and equipment, and related facilities.

### DISTINGUISHING CHARACTERISTICS

#### **Utilities Maintenance Mechanic I:**

This job class functions at an entry-level of classification and requires technical knowledge and skill at the semi-skilled level related to the operation, maintenance, and repair of basic machinery and equipment.

#### **Utilities Maintenance Mechanic II:**

This job class functions at a journey level of classification and requires advanced technical knowledge and the skill level related to the operation, maintenance, and repair of complex machinery and equipment, and may train and monitor the work of others in the accomplishment of specific projects as assigned. The job class exercises responsibility for performing a wide variety of maintenance tasks at the skilled level.

#### **Utilities Maintenance Mechanic III:**

This job class is the advanced journey level classification of the Utilities Maintenance Mechanic series in which incumbents are expected to independently perform the full scope of assigned duties under general direction. Incumbents lead Utilities Maintenance Mechanics I/II's, Utility Electrical/Instrumental Tech I/II's, temporary workers, and/or contractors. This classification is distinguished from the next lower classification of Utilities Maintenance Mechanic II in that the latter performs the less complex mechanical maintenance work. This classification is distinguished from the next higher classification of supervisors who have a wider scope of programmatic duties, supervisory responsibilities, and project management.

**EXAMPLES OF ESSENTIAL DUTIES for Utilities Maintenance Mechanics I / II – Duties may include, but are not limited to, the following:**

- Performs journey level maintenance and repair work to mechanical and electrical equipment and instrumentation systems in the City's utilities and related facilities
- Detects malfunctions in machinery and equipment; makes appropriate repairs and adjustments
- Inspects pumps, valves, and related mechanical apparatus for proper operation; makes mechanical and electrical repairs to pumps, motors, compressors, engine generators, filters, valves, flights, clarifiers, boilers, meters, condensers, and other similar equipment
- Lubricates and adjusts machinery and equipment
- Performs a wide variety of preventative maintenance work in connection with the upkeep and repair of machinery and equipment including, but not limited to, rough carpentry, concrete, plumbing, and pipefitting, hydraulics, pneumatics, welding, and metal fabrication
- Maintains detailed and accurate records related to maintenance and repair operations
- Prepares and paints equipment as necessary
- Installs, maintains, and repairs electrical lighting and power circuits, fixtures, controls, motors, and other related electrical equipment
- Maintains and troubleshoots instrumentation systems
- Assists in fabrication used to maintain Wastewater and Water facilities and equipment
- Safely and effectively repair and maintain process equipment and related components with a basic understanding of process equipment purpose and function
- Perform related duties similar to the above in scope and function as required

**EXAMPLES OF ESSENTIAL DUTIES for the Utilities Maintenance Mechanic III - Duties may include, but are not limited to, the following:**

- Develops and carries out an on-going inspection and preventive maintenance program to ensure 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 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 machinist tools to fabricate, rebuild, strengthen, and maintain various parts and pieces of plant equipment
- Fabricate, assemble, and install 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 accurate work records and preventative maintenance records and computer-directed preventative maintenance records as required
- Uses 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
- May be required to perform duties related to confined space entry and rescue
- Performs other related duties as assigned

### **Minimum Qualifications for Utilities Maintenance Mechanic I / II:**

#### **Knowledge of:**

- Maintenance requirements of pumps and pumping systems
- Electrical motor controls, lighting and power circuits
- Principles of instrumentation systems
- Plumbing, pipefitting, and mechanical repair work
- Proper welding and metal fabrication procedures
- Basic engine principles and basic engine maintenance
- Cal-OSHA safety standards

#### **Ability to:**

- Detect malfunctions in machinery and make necessary repairs and adjustments
- Perform general maintenance and repair to electrical and mechanical equipment and instrumentation systems
- Weld and fabricate metalwork
- Interpret and work from technical sketches and blueprints
- Safely use and care for a variety of tools and special equipment
- Safely perform duties in potentially hazardous situations
- Understand oral and written instructions
- Meet the physical requirements necessary to safely and effectively perform required duties
- Grasp with right and left hands
- Use fine hand manipulation
- Perform manual labor involving frequent bending, pulling, pushing, lifting, and climbing
- Carry weights up to 50 lbs.
- Maintain good public relations with people contacted during work assignments
- Establish and maintain effective work relationships with those contacted in the performance of required duties
- Perform assigned duties while wearing respiratory protection equipment

### **Minimum Qualifications for Utilities Maintenance Mechanic III:**

#### **Knowledge of:**

- Techniques, tools, and materials used in the maintenance and repair of industrial machinery and equipment including large capacity pumps, motors, valves, gearboxes, centrifuges, compressors, boilers, and generators
- Multi-position welding with acetylene and arc welders
- Heating, cutting and bending materials
- Material estimation
- Electrical operation and troubleshooting of pumps, motors, and generators, to determine problems and service equipment
- Cal-OSHA safety standards

#### **Ability to:**

- Lead and provide work direction to a small crew of employees
- Perform the most complex maintenance tasks on wastewater, water, and stormwater equipment
- Learn more complex principles, practices, techniques, and regulations pertaining to plant maintenance work
- Make sound decisions, assimilate, and communicate that information in a manner consistent with the essential job functions
- Maintain, adjust, and repair industrial machinery and equipment
- Operate hand and power tools used in mechanical maintenance work
- Interpret and explain policies, safety practices, and standard operational procedures
- 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
- 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 trucks, 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 thirty (30) minute period when standing duty
- Willingness to wear a uniform

**Utilities Maintenance Mechanic I:**

Any combination of training and experience, which would provide the required knowledge and abilities, is qualifying. A typical way to obtain the knowledge and abilities would be:

- High school diploma or equivalent, and two years of mechanical experience that includes the routine maintenance of standard drive equipment such as motors and pumps
- Classroom training with CWEA or other equivalent agencies

**Utilities Maintenance Mechanic II:**

Any combination of training and experience which would provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

- High School graduation or tested equivalent and three years of experience as a Utilities Maintenance Mechanic I with the City of Watsonville or three years of journey-level experience in mechanical maintenance work which included the maintenance and repair of industrial machinery and equipment

**Utilities Maintenance Mechanic III:**

Any combination of training and experience, which would provide the required knowledge and abilities, is qualifying. A typical way to obtain the knowledge and abilities would be:

- High School graduation or tested equivalent and minimum two years of experience as a Utilities Maintenance Mechanic II with the City of Watsonville

**LICENSES/CERTIFICATES:****Utilities Maintenance Mechanic I:**

- Possession of a valid Class C California Driver's License and a safe driving record
- Possession of a CWEA Mechanical Technologist Certificate Grade I within 12 months of hire

**Utilities Maintenance Mechanic II:**

- Possession of a valid Class B California driver's license and a safe driving record
- Possession and maintenance of a CWEA Mechanical Technologist Certificate Grade II at time of hire
- Possession and maintenance of forklift certification

**Utilities Maintenance Mechanic III:**

- Possession and maintenance of a Class B driver's license and a good driving record
- Possession and maintenance of First Aid and CPR certification within one year of hire
- Possession and maintenance of a Crane Operator Certification
- Possession and maintenance of a CWEA Mechanical Technologist Grade 3 certification at time of hire