

## WATER TREATMENT MAINTENANCE WORKER I/II/III

*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**

Under supervision (Water Treatment Plant Maintenance Worker I) or general supervision (Water Treatment Plant Maintenance Worker II), performs a variety of semi-skilled and unskilled work in the maintenance and repair of water treatment plants infrastructure including distribution facilities, raw water pumping plants, chemical feed systems, potable water storage tanks, and sludge handling plant; operates and maintains a variety of heavy equipment and hand and power tools and equipment; and maintains a variety of records. Advancement to the "III" level is based on demonstrated proficiency in performing the full range of assigned duties, possession of required certifications, and is at the discretion of management staff based on operational needs.

### **DISTINGUISHING CHARACTERISTICS**

**Water Treatment Plant Maintenance Worker I** - This is the entry level class in the Water Treatment Plant Maintenance Worker series performing routine and less complex water treatment plant maintenance duties while learning City policies and procedures. Positions at this level are not expected to function with the same amount of program knowledge or skill level as positions allocated to the Water Treatment Plant Maintenance Worker II level and exercise less independent discretion and judgment in matters related to work procedures and methods. Work is usually supervised while in progress and fits an established structure or pattern. Exceptions or changes in procedures are explained in detail as they arise. As experience is acquired, the employee performs with increasing independence and responsibility and is expected to be performing at the "II" or journey level within the prescribed time frame. Advancement to the "II" level is based on demonstrated proficiency in performing the full range of assigned duties, possession of required licenses and/or certifications, and is at the discretion of higher level supervisory or management staff.

**Water Treatment Plant Maintenance Worker II** - This is the full journey level class within the Water Treatment Plant Maintenance Worker series. Employees within this class are distinguished from the Water Treatment Plant Maintenance Worker I by the performance of the full range of duties as assigned including the more complex operation and maintenance duties, operating a variety of equipment, and providing training to less experienced Water Treatment Plant Maintenance Workers. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise, and are fully aware of the operating procedures and policies of the work unit. Work is normally reviewed only on completion and for overall results. Positions in this class are flexibly staffed and are generally filled by advancement from the Water Treatment Plant Maintenance Worker I level, or when filled from the outside, require prior experience. Advancement to the "II" level is based on management judgment and/or license/certification or testing that validates the performance of the full range of job duties.

**Water Treatment Plant Maintenance Worker III-** This class is flexibly staffed and generally filled by advancement from the Water Treatment Plant Maintenance Worker II level, or when filled from the outside, requires prior experience. Advancement to the "III" level is based on management judgment and license/certification that fulfills the requirements, and a need for a Maintenance Worker III.

**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.*

1. Perform preventative and corrective maintenance on equipment at the water treatment plants, booster pump stations, water storage tanks, raw water pump stations and reservoir, reclamation plant, and sludge handling plant; install piping, valves, and other equipment.
2. Service, lubricate, adjust, and repair chemical feed systems.
3. Inspect and monitor generator equipment; perform minor repairs as necessary.
4. Perform preventive maintenance on HVAC systems.
5. Assist in the inspection, maintenance, repair, and adjustment of pumps, motors, mixers, engines, compressors and other electrical and mechanical equipment.
6. Lubricate, adjust, and replace bearings; repack and adjust pump packing and seals.
7. Assist in repairs of electrical controls and electronic equipment.
8. Perform maintenance on hydraulic and pneumatic equipment.
9. Fabricate parts and fittings as needed to perform maintenance on treatment facilities.
10. Inspect wireless communication and cathodic protection on all tanks.
11. Take samples and make lab tests as necessary.
12. Operate a variety of vehicles, boats, equipment, and tools including light trucks, forklifts, tractors, drill presses, welding equipment, and hand and power tools; clean, maintain, and calibrate assigned equipment.
13. Respond to citizen inquiries and complaints and determine appropriate corrective action; coordinate activities with other City staff in resolving complaints.
14. Perform a variety of routine building and grounds maintenance tasks including watering, mowing, edging, painting, and housekeeping; spray pesticides and herbicides as necessary.
15. Make basic decisions that will protect the integrity of the Water Treatment Plant, its equipment and distribution system.
16. Plan and organize parts for assigned jobs; perform all work in accordance with sound safety practices and using appropriate safety devices and equipment.
17. Prepare and maintain records of basic operations, maintenance, and work performed.
18. Perform related duties as required.

**The following additional representative duties are applicable to the Water Treatment Plant Maintenance Worker III classification:**

1. Assist Water Treatment Plant management with planning of daily work assignments
2. Lead and train maintenance staff on duties that require a higher skill level.
3. Model a positive work ethic.
4. Responsible for planning and ordering parts and supplies.
5. Responsible for municipal reservoir and dam management.
6. Responsible for the operation and maintenance of the Water Treatment Plant generators.
7. Responsible for diesel storage tanks and fuel systems for the generators at the water treatment plant, police department and the marina.
8. Performs electrical repairs on controls and equipment up to 480 volts.
9. Perform journey level welding using arc welding and/or acetylene.

**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:**

- Operational characteristics of water treatment plants and pumping stations including associated mechanical and electrical equipment and devices.
- Basic theories and fundamentals of mechanical, hydraulic, pneumatic, and electrical principles associated with the repair and operation of plant equipment and pumping stations.
- Materials, methods, techniques, and terminology used in maintenance and repair activities related to the maintenance and repair of water treatment plants and associated equipment.
- Methods, techniques, tools and equipment used to repair, rebuild and fabricate parts.
- Operational characteristics of maintenance and construction equipment and tools used in work activities.
- Proper procedures used in the maintenance and repair of hand and power tools.
- Basic computer skills.
- Basic principles and practices of record keeping.
- Occupational hazards and standard safety practices.
- Principles and practices of customer service.
- Pertinent federal, state, and local codes, laws, and regulations.

**Ability to:**

- Perform a variety of semi-skilled duties involved in the maintenance and repair of the City's water treatment plants and related facilities.
- Read, explain, and follow blueprints, mechanical drawings, and oral and written instructions, particularly from maintenance and service manuals.
- Assist in the installation, maintenance, troubleshooting, and repair of electrical and

mechanical equipment and machinery including pumps, valves, valve operators, piping, and chemical feed equipment.

- Ensure adherence to safe work practices and procedures.
- Prepare and maintain records including time and material use records.
- Respond to plant and pump station maintenance/repair emergencies.
- Safely drive and skillfully operate equipment and machinery including trucks, forklifts, boats, drill presses, welding equipment, and hand and power tools.
- Successfully operate various software programs as required using computers or other types of hand held devices.
- Take coaching, instruction, and feedback with a cooperative and positive attitude.
- Understand and follow oral and written instructions.
- Maintain good housekeeping practices.
- Operate a computer.
- Communicate clearly and concisely, both orally and in writing.
- Establish and maintain cooperative working relationships with those contacted in the course of work, including the ability to interact effectively and courteously with the public, coworkers and vendors.

### **Education and Experience Guidelines**

#### **Water Treatment Plant Maintenance Worker I**

##### **Education/Training:**

Equivalent to the completion of the twelfth grade.

##### **Experience:**

Six months of work experience gained from working at a water treatment plant or in a related public works maintenance field.

##### **License or Certificate:**

Possession of, an appropriate, valid driver's license.

Possession of, or ability to obtain, an appropriate Class B driver's license prior to the completion of probation.

Possession of, or ability to obtain within one year of employment a Grade I Permanent Water Distribution Operator Certificate issued by the State of California Department of Public Health.

#### **Water Treatment Plant Maintenance Worker II**

##### **Education/Training:**

Equivalent to the completion of the twelfth grade.

##### **Experience:**

Two years of water treatment plant maintenance experience comparable to a Water Treatment Maintenance Worker I with the City of Antioch. Employees must demonstrate proficiency on a variety of skills/tasks to the satisfaction of the Division Manager prior to a recommendation being made to flex to the Worker II classification.

##### **License or Certificate:**

Possession of an appropriate, valid Class B driver's license.

Possession of a Grade I Permanent Water Distribution Operator Certificate issued by the State of California Department of Public Health.

### **Water Treatment Plant Maintenance Worker III**

#### **Education/Training:**

Equivalent to the completion of the twelfth grade.

#### **Experience:**

Minimum of two years experience working in the water or wastewater treatment field, comparable to a Water Treatment Plant Maintenance Worker II. The experience must include generator maintenance and repair, journey level welding, and electrical experience working with high voltage. Employees must demonstrate proficiency on a variety of skills/tasks to the satisfaction of the Division Manager prior to a recommendation being made to flex to the Worker III classification.

#### **License or Certificate:**

Possession of an appropriate, valid Class B driver's license.

Possession of a Grade II Permanent Water Distribution Operator Certificate issued by the State of California Department of Public Health.

Possession of California Underground Storage Tank System Operator Certificate issued by the International Code Council

### **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:** Water treatment plant and field setting with travel from site to site; exposure to noise, dust, grease, smoke, fumes, noxious odors, gases, mechanical and electrical hazards, and all types of weather and temperature conditions; work in or around water; work and/or walk on various types of surfaces including slippery or uneven surfaces; occasionally work at heights; incumbents must be willing to work overtime and off hour shifts in emergency situations.

**Physical:** Primary functions require sufficient physical ability and mobility to work in a plant and field setting; to walk, stand, and sit for prolonged periods of time; to frequently stoop, bend, kneel, crouch, crawl, climb, reach, twist, grasp, and make repetitive hand movement in the performance of daily duties; to climb unusual heights on ladders; to lift, carry, push, and/or pull moderate to heavy amounts of weight; to operate assigned equipment and vehicles; and to verbally communicate to exchange information.

FLSA: Non-Exempt

Revised: September 2002; September 2013

**CITY OF ANTIOCH**  
**WATER TREATMENT MAINTENANCE WORKER I/II/III (CONTINUED)**

This class specification identifies the essential functions typically assigned to positions in this class. Other duties not described may be assigned to employees in order to meet changing business needs or staffing levels but will be reasonably related to an employee's position and qualifications. Other duties outside of an individual's skill level may also be assigned on a short term basis in order to provide job enrichment opportunities or to address emergency situations.