



**CITY OF SANTA CRUZ
WATER DISTRIBUTION OPERATOR-IN-TRAINING/II/III**

Reports to	Water Distribution Crew Leader III/IV
Supervises	Non-supervisory
Bargaining Unit	Service

BASIC FUNCTION

Under supervision, performs a variety of semi-skilled and skilled assignments in the construction, maintenance, and repair of City water distribution systems, streets and sidewalks; and performs related work as assigned.

DISTINGUISHING CHARACTERISTICS

The Water Distribution Operator series is alternately staffed with Water Distribution Operator-in-Training (OIT), II, and III. Operators in this series perform a broad range of duties in the basic construction, maintenance, and repair of the water distribution system. Incumbents generally work as a member of a crew but may be given independent assignments and may, under direction, lead a small crew of trainees or temporary workers and assist with training. All positions in this classification require a willingness to perform on-call duty assignment and call-back work as required.

The OIT is the entry-level position and does not require certification. However, incumbents in both the OIT and II positions are required to get certifications within eighteen months to remain in the series. An OIT is required to obtain a Water Distribution Operator D2 certification with the California Department of Public Health (CDPH) within 18 months of date of hire and will be automatically promoted to a II, but not before passing the 6 month probationary period. At the II level, an incumbent is required to obtain a D3 certification within 18 months of promotion or date of hire and will be automatically promoted to a III. Once promoted to the III level, an incumbent who would like to advance may pursue further certification at his or her own discretion but is not required to do so by the Water Department.

Water Distribution Operator-in-Training (OIT) is the non-certified entry and training level of the Water Distribution Operator series. Under direct and continuous supervision and in a training capacity, incumbents are assigned routine semi-skilled maintenance tasks while learning the basic construction and maintenance trades related to water distribution systems. Incumbents learn to perform a broad range of duties in the basic construction, maintenance, and repair of the water distribution system working as a member of a crew. The OIT position is distinguished from the next higher level of Water Distribution Operator II in that the latter serves as the intermediate training class and first journey level of the series. Incumbents in this class are assigned routine tasks to be performed independently or on a work team.

City of Santa Cruz
Water Distribution OIT II/III

Water Distribution Operator II is the intermediate training and first journey level position within the Water Distribution Operator series. Incumbents work under general supervision performing a broad range of duties in the basic inspection, construction, and maintenance of the City's water distribution system and facilities. Incumbents generally work as a member of a small crew but may be given independent assignments. Water Distribution Operator II is distinguished from the next higher level of Water Distribution Operator III by the latter serving as the full journey level class within the series and performing assigned routine and complex tasks independently or as part of a work crew with general supervision. The II is distinguished from the OIT classification by the requirement of a CDPH Grade 2 Water Distribution Operator certification.

Water Distribution Operator III is the fully trained journey level classification in the series and is distinguished from the Water Distribution Operator II by the requirement of certification as a Grade 3 Water Distribution Operator. Incumbents perform a broad range of duties in the basic construction, maintenance, and repair of the water distribution system. Incumbents generally work as a member of a crew but may be given independent assignments and, under direction, lead a small crew of trainees or temporary workers and assist with training.

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

- Installs, connects, relocates, and replaces water mains, service lines, valves, pumps, meter boxes, and fire hydrants; cuts and fits pipes and makes taps.
- Repairs leaks on water mains.
- Notifies customers of water shutdowns.
- Exercises valves by hand or with hydraulic equipment; marks valves to indicate direction of opening and number of turns to open.
- Flushes water system through valves and hydrant.
- Paints valves, pumps, piping and building interiors and exteriors.
- Measures and records the location of valves, hydrants and blow-offs.
- Under direction, may: flow test hydrants; locate and mark existing water mains, meters, valves, and other facilities for City crews and independent contractors using a sonic and/or magnetic pipe locator; and, perform various water quality field tests.
- Constructs and repairs sidewalks, curbs, gutters, and retaining walls.
- Shovels, rakes and spreads dirt, sand, gravel, asphalt, and other materials.
- Participates in digging, widening and backfilling trenches and other excavations.
- Loads, unloads, and operates pick-ups and trucks to transport maintenance supplies, materials, and equipment.
- Places traffic control flags, signs and cones to direct traffic around work sites; may direct traffic.
- Uses general carpentry and mechanical hand tools such as brooms, rakes, shovels, ladders, hammers, screwdrivers, pliers, saws, drills, wrenches, and related equipment.
- Operates equipment such as air compressors, pneumatic hammers, powder activated hammers, chain saws, concrete saws, pipe cutters, sprayers, compactors, forklifts, rollers, and related equipment.
- Performs routine maintenance and repair of hand and power tools.

**City of Santa Cruz
Water Distribution OIT II/III**

- Safely operates equipment and tools used.
- Removes, repairs, and patches asphalt and concrete surfaces.
- Tactfully responds to questions and comments from the public.
- May prepare and keep written records and make material and equipment requests.
- May occasionally perform simple fabrication and repair of equipment, tools, parts, and accessory items using arc and gas welding.
- May, under direction and on an irregular basis, operate equipment such as backhoes, front-end loaders, and trucks.
- May, in the absence of a supervisor, contact City Departments or other agencies when shared jurisdiction over a repair is apparent.
- Performs other related duties as assigned.

ENVIRONMENTAL AND WORKING CONDITIONS

Position requires sitting, standing, walking on level, uneven and slippery surfaces, reaching, twisting, turning, kneeling, bending, stooping, squatting, crouching, grasping and making repetitive hand movements in the performance of daily duties. The position also requires both near and far vision when operating assigned equipment. Acute hearing is required in both the office and the field. The ability to lift, carry and push tools, equipment and supplies weighing up to 75 pounds is also required. Additionally, the incumbent in this outdoor position works in all weather conditions, including wet, heat, and cold. The incumbent may be exposed to fumes, dust chemicals, and air contaminants. The nature of the work may also require the incumbent to climb ladders, use power and noise producing tools and equipment, drive motorized vehicles and work in heavy vehicle traffic conditions.

Some of these requirements may be accommodated for otherwise qualified individuals requiring and requesting such accommodations.

MINIMUM QUALIFICATIONS

Knowledge:

Water Distribution Operator OIT/II/III:

- Proper use and care of common hand tools.
- Basic mathematical principles, including fractions, decimals, proportions, measurements, and volume and area calculations.
- Safety procedures for operating equipment and power tools.

Water Distribution Operator II/III:

- Basic techniques, equipment, and materials used in the construction, maintenance, and repair of water distribution systems.
- Basic mechanical and hydraulic principles.
- Water distribution operation, including piping, sources of supply, water quality, disinfection, water-related electricity, and the operational principles of pumps and motors.

City of Santa Cruz
Water Distribution OIT II/III

- Water distribution mathematics, including water terms and definitions, water measurements, water pressure, formulas, units, and conversion factors.
- Safety principles related to traffic control, confined space entry, and trenching and shoring.

Water Distribution Operator III:

- Providing guidance and direction to lower level workers in the necessary on-the-job training required for mandatory state certified water distribution operations.

Abilities:

Water Distribution Operator OIT/II/III:

- Safely perform heavy manual labor (which involves frequent bending, pulling, pushing, lifting, and carrying of up to approximately 75 pounds).
- Follow oral and written instructions.
- Read, interpret, and record data.
- Perform mathematical calculations.
- Learn the more complex principles, practices, techniques, and regulations pertaining to water distribution operations.
- Observe safety principles and work in a safe manner.
- Work effectively independently and as a member of a crew.
- Establish and maintain effective working relationships and act in a courteous and tactful manner with those contacted in the course of work.

Water Distribution Operator II/III:

- Safely handle hazardous materials.
- Operate power tools and equipment to perform a variety of semi-skilled tasks.
- Perform basic maintenance and repair on tools and equipment.
- Read and interpret basic sketches, drawings, specifications, technical manuals, and regulations.
- Recognize unusual or dangerous operating conditions and make sound judgments within established guidelines.

OTHER REQUIREMENTS

- Must reside within a 30-minute response time by the end of probationary period.
- Successful completion of training as a forklift operator and training in trenching and shoring techniques within one year of appointment.
- Willingness to perform on-call duty assignment and call-back work as required.
- Successful completion of training as a forklift operator within one year of appointment.
- Willingness to wear a uniform.

EDUCATION AND EXPERIENCE

The following education and experiences are required for each of the following positions:

Water Distribution Operator OIT

- High school or GED
- Some paid or unpaid manual labor experience

Water Distribution Operator II

- High school or GED
- One 36 contact hour (3-unit) course of specialized training covering the fundamentals of water supply principles
- 1 year of maintenance experience related to operation, maintenance, and repair of water distribution systems

Water Distribution Operator III

- High school or GED
- Two 36 contact hour (3-unit) courses of specialized training that includes at least one course covering the fundamentals of water supply principles
- 2 years of maintenance experience related to operation, maintenance, and repair of water distribution systems

Substitutions for one year of the experience required for Water Distribution Operator III:

A.A. or certificate in water or wastewater technology or distribution that includes at least 15 units of physical, chemical, or biological science.

or

B.A. or B.S. or Masters Degree in biology, chemical engineering, chemistry, civil engineering, environmental engineering, microbiology, public health, or sanitary engineering.

or

A certified operator may substitute on a day-for-day basis, up to one additional year of operator experience working as a distribution operator with experience gained while working with lead responsibility for water quality or quantity related projects or research (such as wastewater treatment).

LICENSES/CERTIFICATES

Water Distribution Operator-in-Training/II/III

- Possession of a valid California class C driver’s license and a safe driving record at time of hire. Possession and continued maintenance of a valid California class B driver’s license with tanker endorsement within 6 months of appointment.¹

Water Distribution Operator II

- Possession and continued maintenance of a Grade 2 Distribution Operator certificate issued by the California Department of Public Health.

Water Distribution Operator III

Possession and continued maintenance of a CDPH Grade 3 Distribution Operator certificate.

and

One year of operator experience working as a certified D2 operator, D3 or higher operator, or temporary D3 operator for a D2 system or higher,

and

One or more additional years of operator experience working as a distribution operator

DESIRABLE QUALIFICATIONS

- Certification in First Aid and C.P.R.

Classification No.: 244/245/246

Date of Issue: 04/08

Supersedes: New

Update: 06/10

Career Ladder

Deputy Director/Operations Manager

Superintendent of Distribution

Water Distribution Supervisor V-Chief Distribution Officer

Water Distribution Supervisor IV

Water Distribution Crew Leader IV

Water Distribution Crew Leader III

Senior Water Distribution Operator

Water Distribution Operator III

Water Distribution Operator II

Water Distribution Operator-in-Training

¹ The salary for this classification includes compensation for the CA class B driver’s license with tanker endorsement; therefore, no separate, additional pay applies.